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**New York
Economic Handbook
1989**

**AGRICULTURAL SITUATION
and OUTLOOK**

**Prepared by
Extension Staff**

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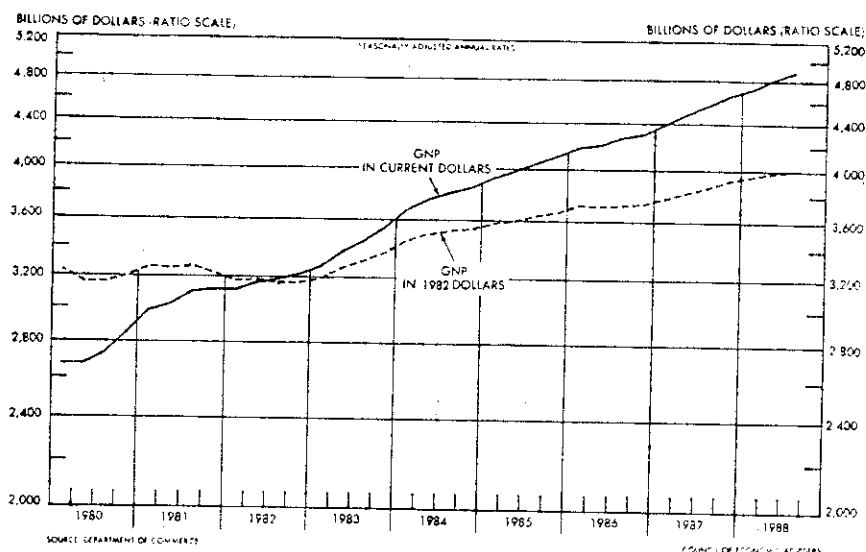
⁴Department of Animal Science.

This publication contains information pertaining to the general economic situation and New York agriculture. It is prepared primarily for use of professional agricultural workers in New York State. USDA reports provide current reference material pertaining to the nation's agricultural situation.

"Current Economic Situation" is a two-page monthly release that carries the latest figures for selected economic indicators and highlights current developments. This release is a supplement to the Economic Handbook and is available to anyone requesting to be on the mailing list by writing to the Department of Agricultural Economics, Cornell University, 445 Warren Hall, Ithaca, New York 14853-7801.

NATIONAL GROWTH AND ECONOMIC ACTIVITY

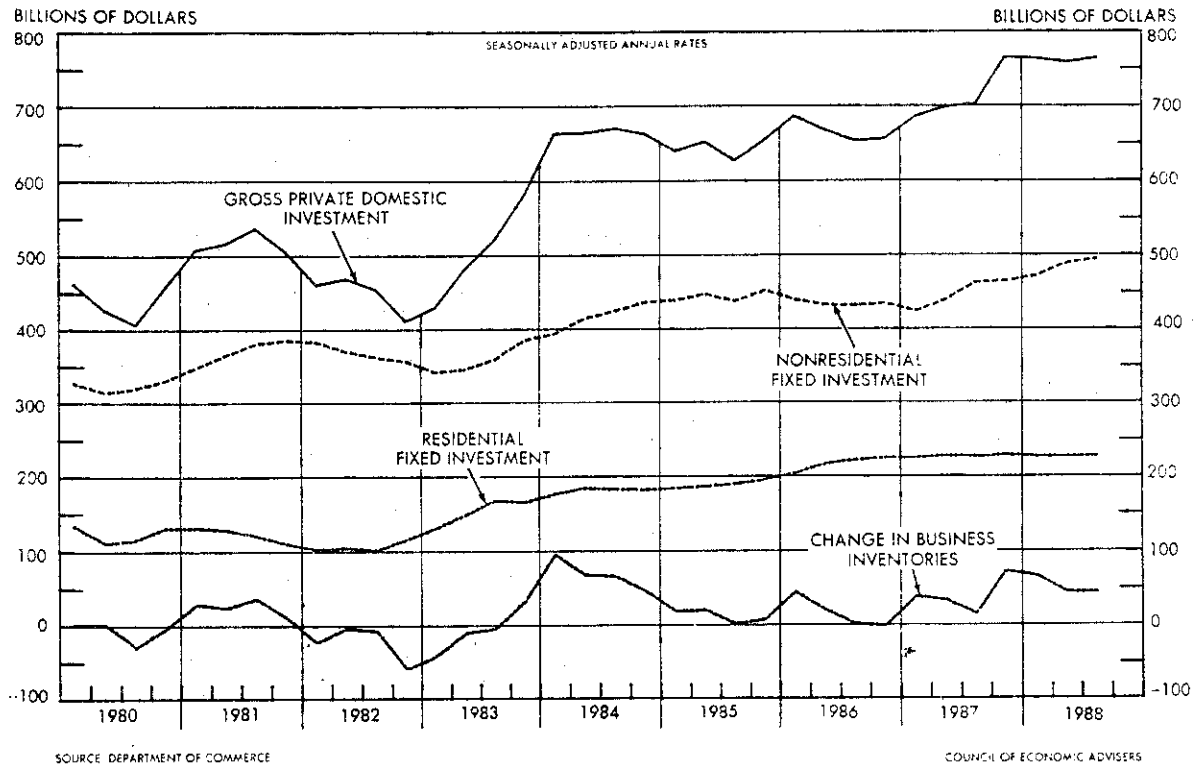
Components of Gross National Product



	Gross national product	Personal consumption expenditures	Gross private domestic investment	Government purchase goods and services	Net exports
	- billions of current dollars -				
1980	2732	1733	437	530	32
1981	3053	1915	516	588	34
1982	3166	2051	447	642	26
1983	3406	2235	502	675	-6
1984	3772	2430	665	736	-59
1985	4015	2629	643	821	-78
1986	4240	2808	666	871	-104
1987	4527	3012	713	925	-123
1988	(4850)	(3215)	(765)	(970)	(-95)

The economy continued to grow throughout 1988. The expansion since the recession in 1982, clearly evident on the graph above for GNP in 1982 dollars, is the longest in the years since World War II. During 1988 the rates of growth have slowed in each successive quarter from 3.8 percent to 2.2 percent in the third quarter. Most private and public sector economists are forecasting a continued pattern of slow, sustained growth during 1989. Richard Stuckey, chief economist for DuPont, who won a national prize for the accuracy of his projections in 1985-88, predicts a 2.5 percent growth rate for 1989, close to the average of most such estimates. The length of the expansion now prompts some caution about extending that trend too far into the future.

GROSS PRIVATE DOMESTIC INVESTMENT

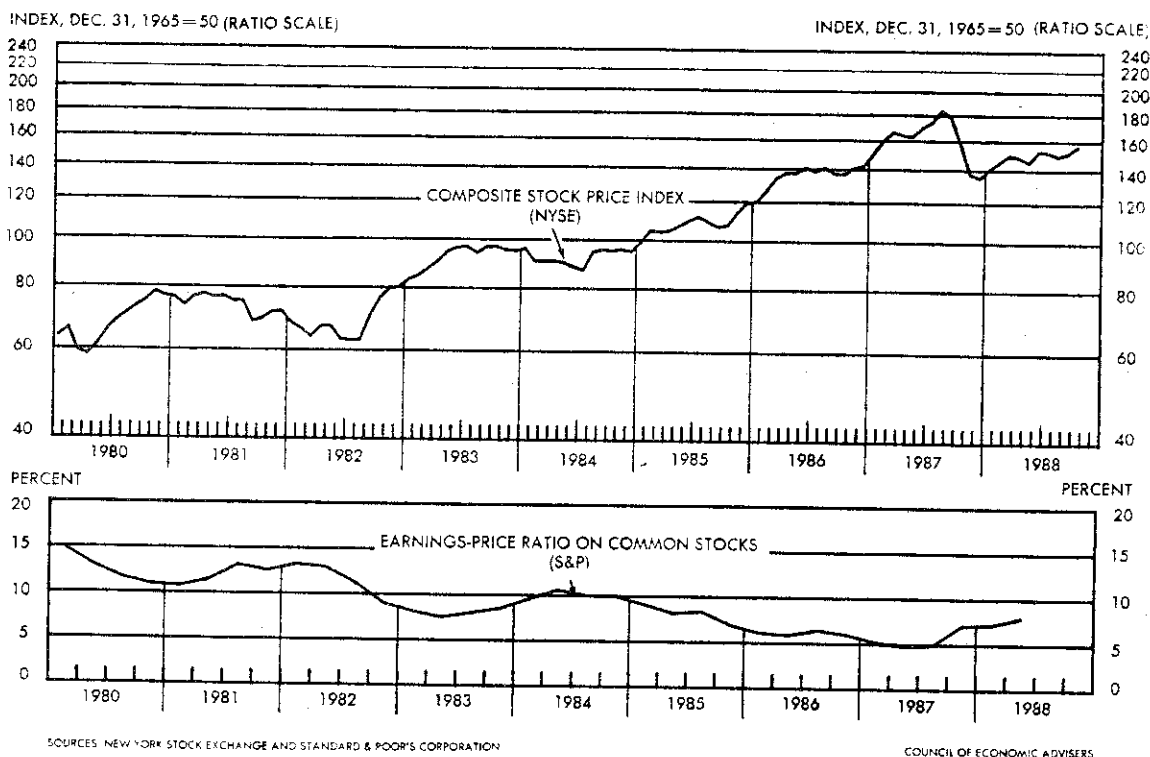


	Gross private investment	Residential fixed	<u>Non-residential</u>		Changes in business inventories
			Structures	Durables Equipment	
<u>- billions of current dollars -</u>					
1980	437	122	114	209	-8
1981	516	122	139	231	24
1982	447	105	143	223	-24
1983	502	152	124	233	-7
1984	665	181	141	275	68
1985	643	189	153	290	11
1986	666	217	139	295	16
1987	713	227	140	307	39
1988	(765)	(228)	(143)	(344)	(50)

Changes in rates of investment often provide an indication of a subsequent upturn or downturn in the economy. New investment in residential housing has remained steady nationally, but has been strong in the Northeast. The most positive statistic for continued expansion in 1989 has been the increased investment in durables and equipment during 1988. Inventory accumulation is relatively large suggesting an optimistic view of 1989 by these businessmen. Many export oriented firms are operating close to or at capacity.

COMMON STOCK PRICES AND YIELDS

New York Stock Exchange, 1979-1987



In October and November 1987 the stock market fell by 30 percent and then leveled off at year earlier levels. Throughout much of 1988, stock market averages have shown little or no trend while corporate profits before and after taxes have increased. Investors continue to be nervous as the modest ups and downs of the market during 1988 suggest. In many respects, these market indexes provide a composite indicator of what investors here and around the world think about the health of the U.S. economy. If corporate profits continue strong in 1989 and progress is made in reducing the trade gap and the federal deficit, an upward trend in the market may occur. If, on the other hand, no gains are made in deficit reduction, market instability may well continue in the year ahead.

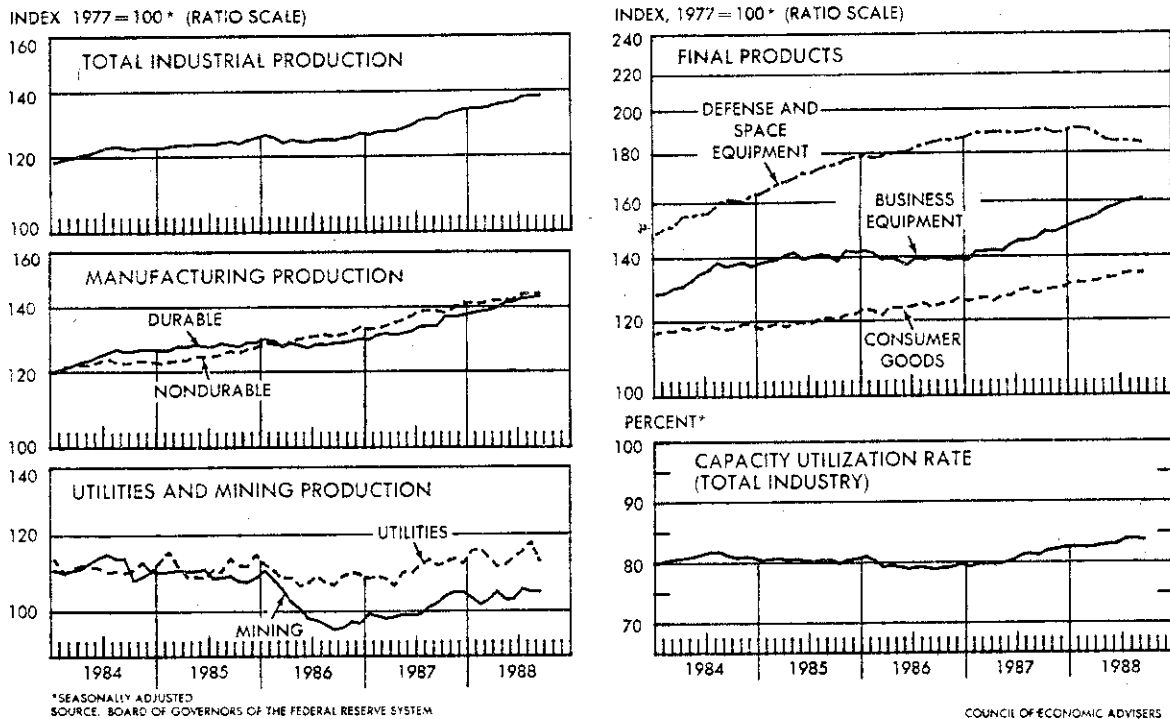
Profits before taxes

Profits after taxes

- billions -

1982	\$170	\$107
1983	208	130
1984	240	146
1985	224	128
1986	236	130
1987	277	143
1988 I (rate)	286.2	149
II (rate)	305.9	163

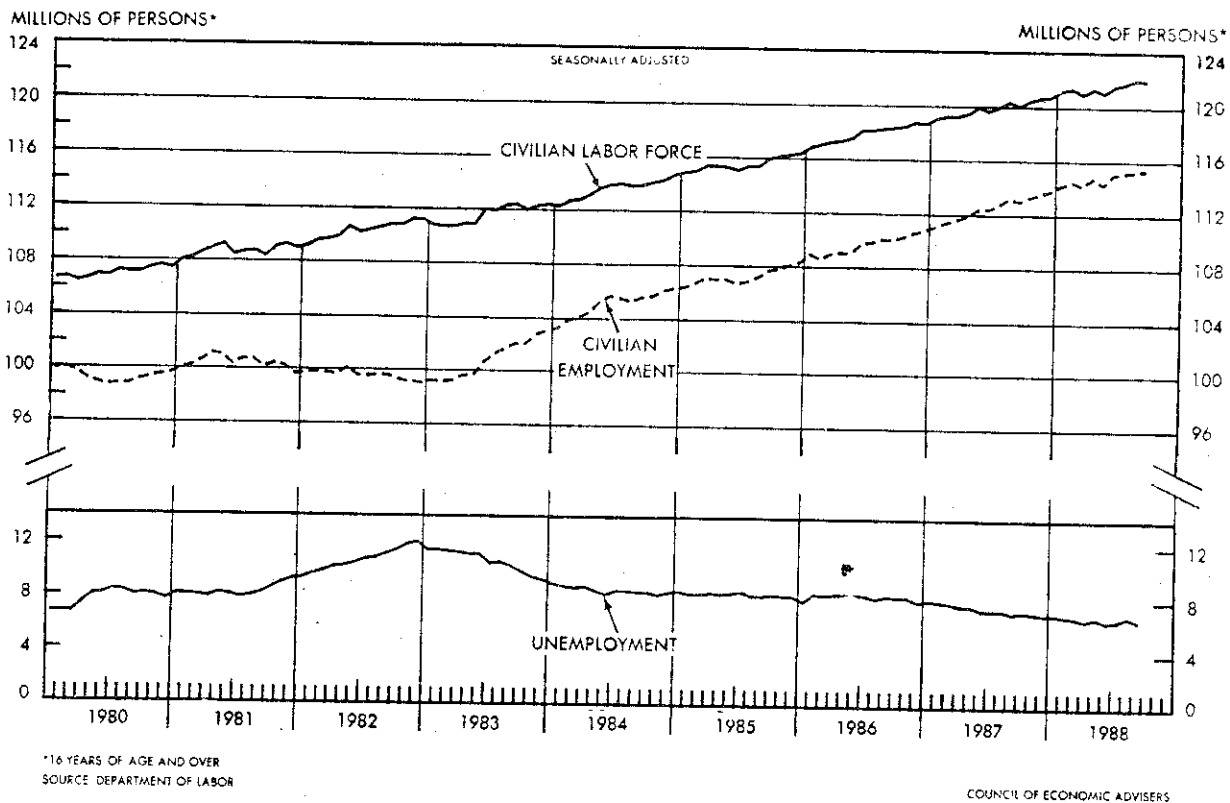
INDUSTRIAL PRODUCTION AND CAPACITY UTILIZATION



Industrial production has grown steadily throughout 1988. During most of the year, it has been between five and six percent above year earlier levels. There has been some concern that this rate of growth could not be sustained, but most think this closely watched index will continue on a somewhat slower upward trend in 1989. The only major industrial group to level off and show a downturn in 1988 was defense and space equipment. Manufacturing of both durables and non-durables continued to move up throughout the year.

The export market continues strong for business equipment and heavy manufactured goods, specialty products, chemicals, and basic commodities. 1989 is seen as a year of continued growth in these markets if confidence in the American economy holds steady. The ways in which other industrialized countries look at U.S. efforts to narrow our trade gap are likely to be important. A cheaper dollar relative to European and Japanese currencies should help to sustain production and exports through 1989.

STATUS OF THE LABOR FORCE



Civilian employment continued to increase throughout 1988 to a new record of more than 115 million as a natural part of national economic growth. Unemployment remains a problem in key areas throughout the United States but the levels have remained below 7 million during most of 1988.

Employment opportunities in New York State and the Northeast have been good throughout 1988. Unemployment rates in this region have been consistently below national averages. Wage rates have moved upward in efforts to attract new workers to service and less skilled jobs. The region is in good economic health and should prosper in 1989 relative to other sections of the country.

Employment during 1989 will mirror what happens to growth in the national economy. Adoption of the Free Trade Agreement with Canada early in 1989 should have positive effects on the New York economy as well.

CHANGES IN PRODUCER AND CONSUMER PRICES

Year	Consumer Price Index		Producer Prices		
	All items	Foods	All finished goods	All intermediate goods	All crude materials
	(1982-84 = 100)		(1982 = 100)		
1980	82.4	86.8	88.0	90.3	95.3
1981	90.9	93.6	96.1	98.6	103.0
1982	96.5	97.4	100.0	100.0	100.0
1983	99.6	99.4	101.6	100.6	101.3
1984	103.9	103.2	103.7	103.1	103.5
1985	107.6	105.6	104.7	102.7	95.8
1986	109.6	109.0	103.2	99.1	87.7
1987	113.6	113.5	105.4	101.5	93.7
1988	(118.2)	(118.5)	(108.0)	(107.5)	(97.0)

Sources: Department of Commerce; Council of Economic Advisers.

Inflation was held in check quite well in 1988. The Consumer Price Index increased at rates between four and five percent during the year. There was substantial concern by government economists and the Chairman of the Federal Reserve Board that the economy was overheating early in 1988 but lower energy prices and slowed rates of economic growth kept price increases quite steady.

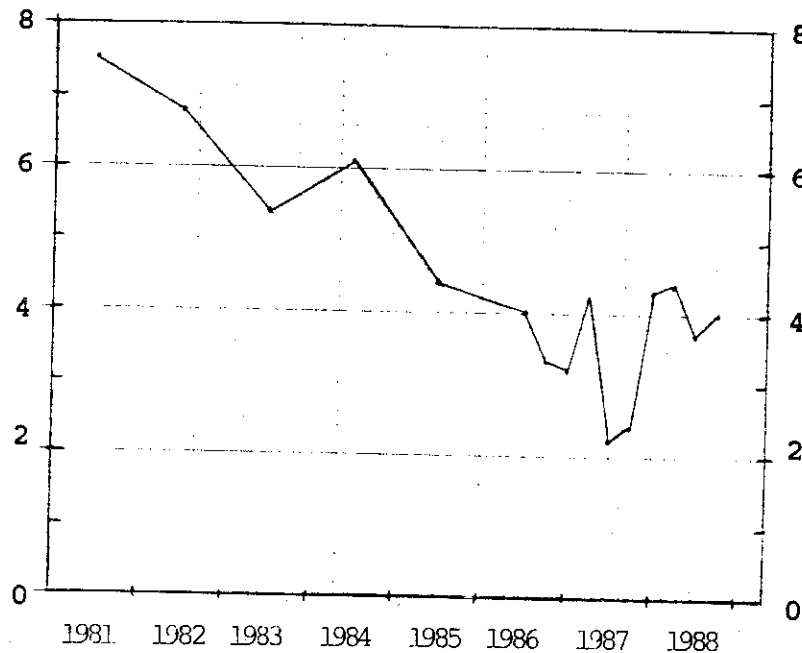
Major revisions in the base periods for the CPI and the Producer Price Indexes were made in 1988. Using a more recent time period (1982-84 for the CPI and 1982 for the PPI) makes interpretation easier and more accurate. The impact of the drought on food prices during 1988 was relatively small, perhaps an addition of one to two percent above normal increases. The effects of the drought on prices of meats and processed vegetables may be more evident in 1989.

Changes in producer prices continue to provide indicators of future changes in consumer prices. Rates of change during 1988 were modest; relatively low energy prices are an important factor in the crude materials index. Major components of the Consumer Price Index and changes from year earlier levels for October 1988 are listed below:

<u>Component</u>	<u>Weight</u>	<u>October 1988</u>	<u>Percent change</u>
	<u>(percent)</u>	<u>(1982-84=100)</u>	<u>from October 1987</u>
			<u>(percent)</u>
Housing	42.5	119.8	3.8
Transportation	17.5	110.2	2.7
Food	16.1	120.6	5.2
Apparel	6.3	117.9	4.6
Medical care	5.8	141.4	6.7
Total	100.0	120.2	4.2

SAVING AS PERCENT OF DISPOSABLE INCOME
United States, 1981-88

Percent



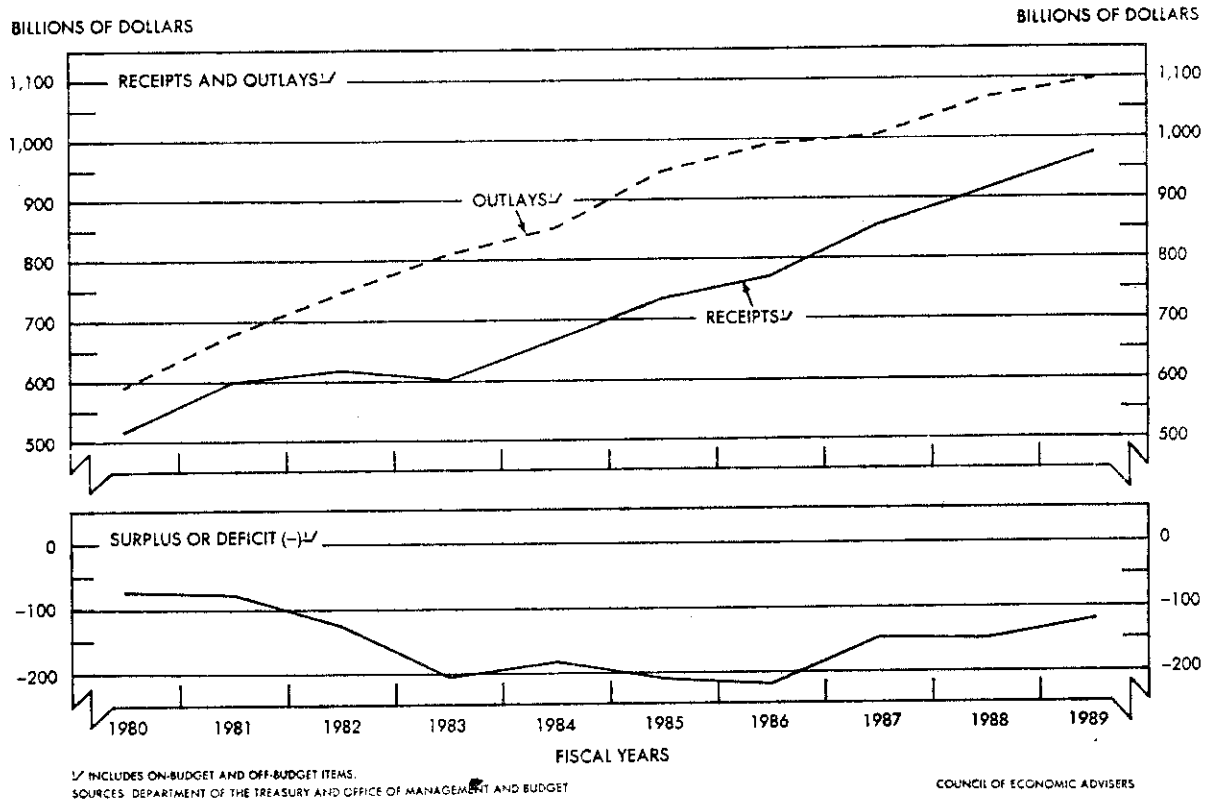
CONSUMER INSTALLMENT CREDIT

Year	Total credit outstanding	Auto loans	Auto loans as percent of total
	- billions -		- percent -
December 1978	\$262	\$ 99	38
December 1980	297	112	38
December 1982	324	124	38
December 1984	443	174	39
December 1985	518	210	41
December 1986	572	246	43
December 1987	613	267	44
December 1988	(667)	(294)	(44)

Personal savings as a percentage of personal disposable income in the U.S. is the lowest of any developed country. In 1988, this steady downward trend in the rate of savings was arrested and turned slightly upward. Nevertheless, the ability of consumers in this country to spend more than is produced remains a problem. Consumer installment debt grew to record levels in 1988 reflecting consumer confidence in the economy. Auto loans continue to make up 44 percent of that total. Our credit card economy helps to sustain steady economic growth but adds to our problems with debt and the trade balance.

FEDERAL FINANCE

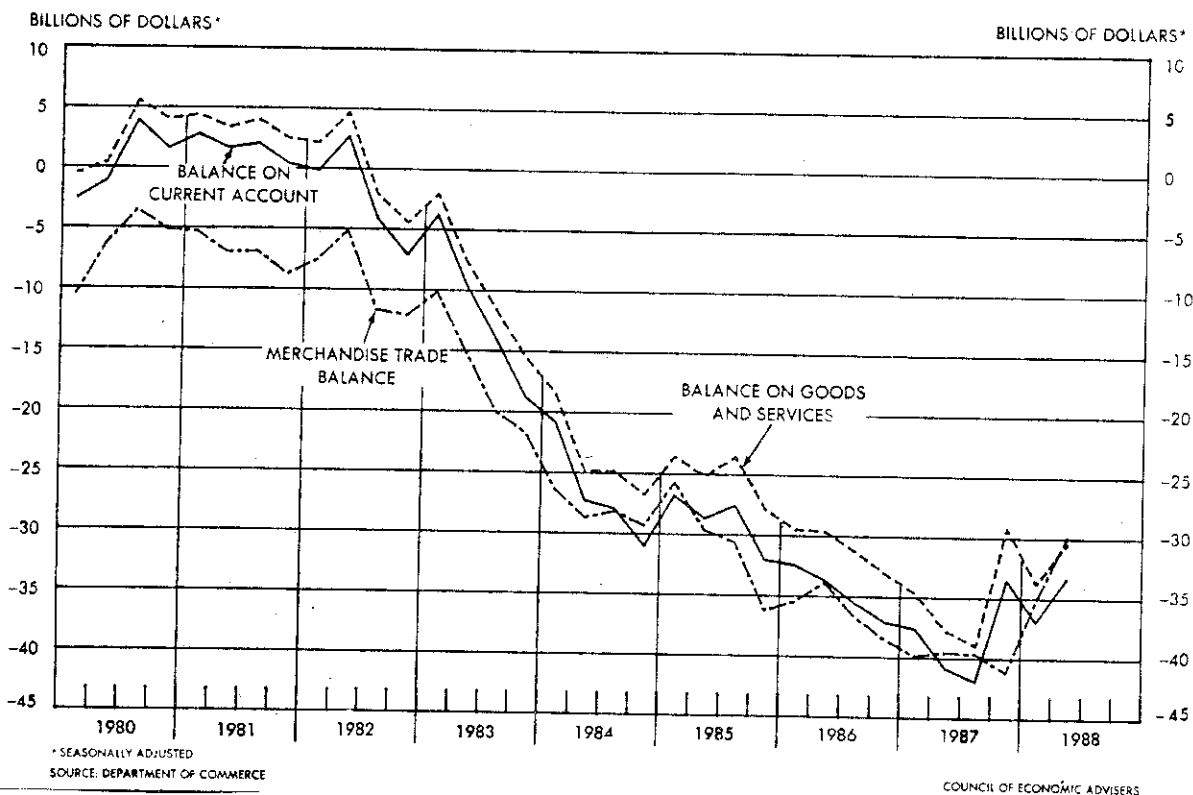
The Federal Deficit and Debt



Fiscal Year	Government			Accumulated debt
	Receipts	Outlays	Deficit	
<u>- billions of dollars -</u>				
1975	\$279	\$ 332	-53	\$ 544
1980	517	591	-74	914
1985	734	946	-212	1828
1986	769	990	-221	2120
1987	854	1005	-150	2346
1988	913	1066	-152	2577
1989	(974)	(1097)	(-123)	(2818)

The size of the federal deficit and measures to reduce it are crucial to the health of the U.S. economy. No issue will get greater attention in Washington early in 1989. Cutting government expenditures has proven difficult because so much of the total is already mandated or committed. Receipts will have to be increased in some manner in 1989. Government debt equalled 34 percent of GNP in 1975; 46 percent in 1985; and 53 percent in 1988. A change in direction is clearly necessary.

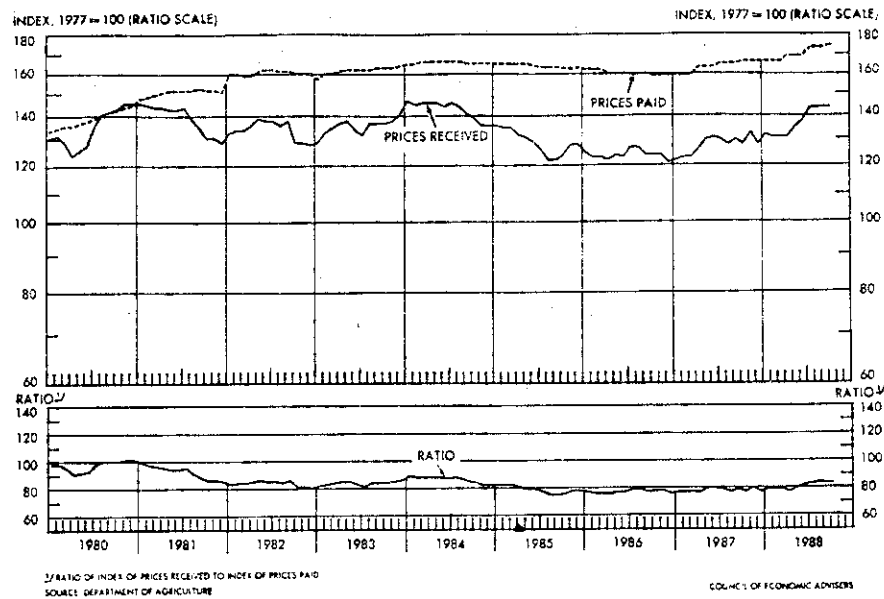
THE U.S. TRADE DEFICIT International Transactions, 1980-1988



The size of the nation's trade deficit is commonly discussed at the same time as people consider the size of the government's deficit. Progress is being made on both fronts but it is slow. The monthly reports on the merchandise trade balance attract almost too much attention. During 1988, imports have held relatively constant between \$35 to \$40 billion per month. Exports have broken across the \$25 billion per month mark since mid-year. The continuing problem is that the gap cannot be closed by additional exports alone as most of the key industries are operating at or near capacity. Imports must be reduced as well. A combination of higher costs as the buying power of the dollar declines and less buying power in the hands of consumers may be the required answer.

<u>Year</u>	<u>Net balance on goods and services</u>
	<u>- billions -</u>
1980	\$ 9.5
1982	0.2
1984	-95.0
1985	-100.1
1986	-123.5
1987	-140.5
1988	(-125.0)

PRICES RECEIVED AND PAID BY FARMERS

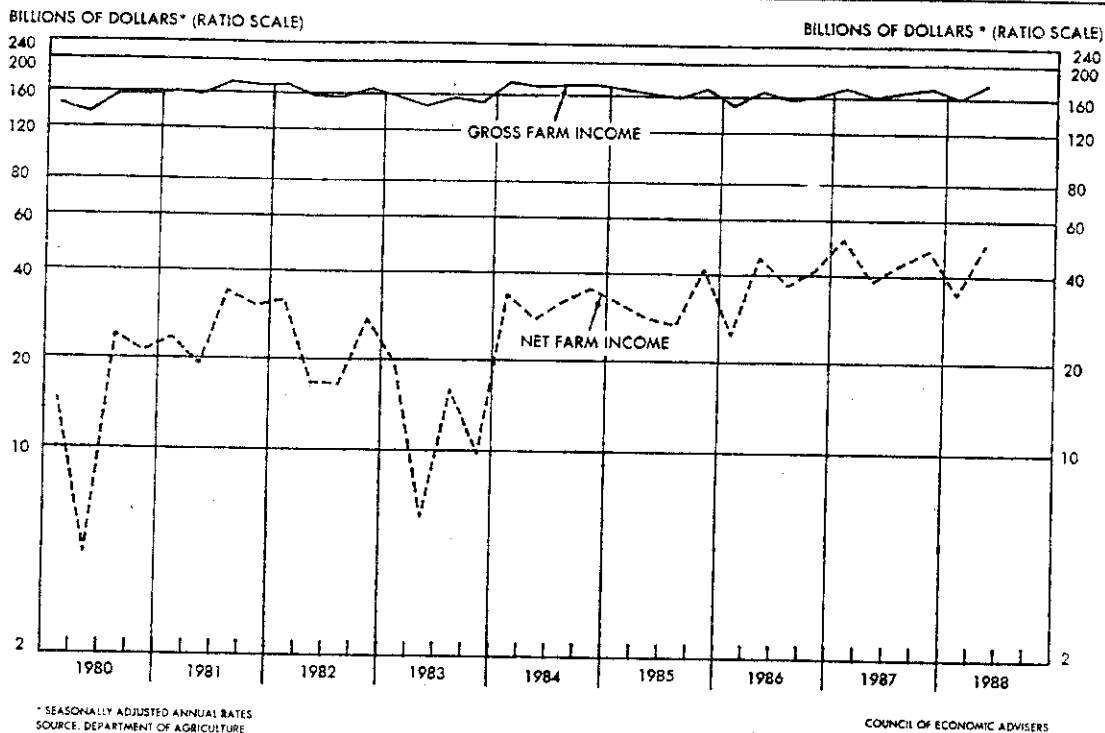


Year	Prices Received			Prices Paid	Ratio
	Crops	Livestock	All Commodities		
	(1977 = 100)				
1981	134	143	139	150	92
1982	121	145	133	159	84
1983	128	141	135	161	84
1984	139	146	142	165	86
1985	120	136	128	163	79
1986	106	138	123	159	77
1987	106	146	127	162	78
1988	(128)	(149)	(137)	(173)	(79)

The composite index numbers of prices paid and received by farmers increased by almost seven and eight percent, respectively, during 1988. Most of the increase in prices received was in the crops sector and was strongly influenced by the drought. For farmers with a normal crop this was a good year. For those with sharply reduced yields, the Disaster Assistance Act of 1988 has provided a complex source of additional income. In total, the "disaster" may be smaller than at first supposed. Falling prices for corn and soybeans during the late fall of 1988 support this idea.

Prices paid increased during 1988 by the largest percentage since 1980-81 when inflation was still rampant. A major concern for 1989 is that some of the same forces, especially those affecting wage rates and prices for fertilizer and chemicals, will continue to push prices upward again. Many of the items farmers buy are the same kinds of materials for which export markets are strong.

FARM INCOME AND EXPENSES



Year	United States			New York net farm income
	Gross farm income	Production expenses	Net farm income	
		- billions -		millions
1981	166	139	27	401
1982	164	140	24	389
1983	153	140	13	173
1984	175	143	32	367
1985	166	134	32	423
1986	160	122	38	523
1987	170	124	46	612
1988	(167)	(128)	(39)	(540)

Both gross and net farm income in 1988 are expected to be somewhat less than those for 1987 for the country as a whole and in New York State as well. Compared to most other years in this decade, 1987 was a good one for production agriculture. In 1988, production costs have increased while gross receipts, including estimated government payments, are expected to be less than the totals for 1987. Government deficiency payments, so important in the 1987 totals, will be substantially less in 1988. Crop and livestock prices are up, but the volume of harvested grains and processed vegetables is sharply lower.

Net farm income in New York was estimated by USDA to be the highest in 1987 of any year in the decade. With lower milk prices in the first half of 1988 and increased feed prices, net farm income will be lower in 1988, but only down by 10-15 percent from 1987 levels.

CARRYOVER STOCKS OF WHEAT AND CORN
AS PERCENT OF PRODUCTION IN U.S.

Year	Production	Ending stocks	Stocks as percent of production	Farm price per bushel
	- million bushels -		- percent -	
<u>Wheat:</u>				
1982-83	2765	1515	55	\$3.45
1983-84	2420	1399	58	3.51
1984-85	2595	1425	55	3.39
1985-86	2425	1905	79	3.08
1986-87	2092	1821	87	2.42
1987-88	2105	1236	59	2.57
1988-89	(1810)	(536)	(30)	(3.75)
<u>Corn:</u>				
1982-83	8235	3523	43	\$2.55
1983-84	4175	1006	24	3.21
1984-85	7674	1648	21	2.63
1985-86	8877	4040	46	2.23
1986-87	8250	4882	59	1.50
1987-88	7064	4365	62	1.95
1988-89	(4462)	(1559)	(35)	(2.50)

Source: USDA.

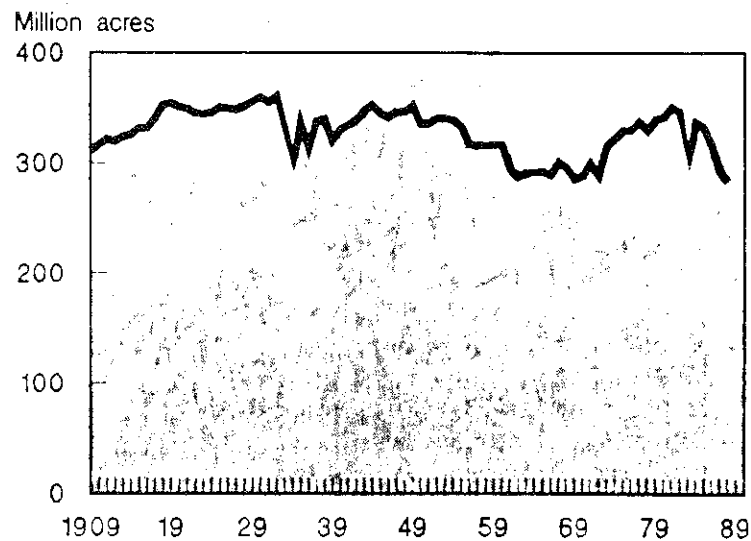
Carryover stocks of wheat and corn will be reduced substantially during 1988-89. The USDA forecasts that at the end of the Spring in 1989 stocks of wheat will be down to 500 or 600 million bushels, the lowest amount in a decade but adequate unless there is another short crop. Despite the drought corn stocks at the end of 1988-89 are forecast to exceed those at the end of the 1983-84 crop year.

WORLD SUPPLY AND USE OF GRAINS
USDA Estimates, 1982-88

Production Year	Production	Utilization	Exports	Ending stocks	Stocks as percent of use
	- million metric tons -				percent
1982-83	1548	1505	200	351	23
1985-86	1662	1594	205	430	27
1986-87	1682	1654	212	457	28
1987-88	1603	1664	222	396	24
1988-89	(1534)	(1661)	(218)	(269)	16

World supplies of grain are beginning to get more nearly into balance with utilization. In the early 1980s, production exceeded utilization every year and stocks accumulated depressing prices. In the last two years, thanks in large part to drought in North America, stocks are no longer so large. With good weather, however, production may again exceed utilization in 1989.

HARVESTED CROPLAND LOWEST THIS CENTURY

CROPLAND USE AND EXCESS CAPACITY
United States, 1969-1988

Year	Cropland harvested	Crop failure and summer fallow	<u>Government Programs</u>		Total cropland
			Annual	Long-term	
<u>- million acres -</u>					
1969	286	47	50	8	391
1974	322	39	0	3	364
1978	330	39	18	0	387
1982	347	36	11	0	394
1984	337	36	27	0	400
1986	316	41	46	2	405
1987	293	38	60	16	407
1988	284	44	54	24	406

Source: ERS, USDA, AR-12, September 1988.

Acres of cropland harvested in 1988 in the United States was the lowest in this century. A combination of drought, government programs, and low grain prices in 1987 led to this result. To qualify for deficiency payments in 1989, the government set-asides for wheat have been reduced from 27.5 percent to 10 percent of base acres and for corn from 20 percent to 10 percent. It is likely that with good weather in 1989 acres planted and grain supplies will be increased substantially. A return to problems of excess supply and lower prices is probable. The growing impact of the Conservation Reserve, set to reach a minimum of 40 million acres by 1990, will help to keep acres planted somewhat lower.

HIGHLIGHTS OF THE MARKETING COSTS SECTION

Marketing costs include all expenses incurred in transporting food from the farm to consumers. All transformations of the raw product through packing, shipping, processing, manufacturing, and retailing activities are components of marketing costs and represent the value added by marketing.

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Price changes for food marketing inputs vary markedly in direction and magnitude from year to year. Preliminary 1988 figures indicate some of the largest changes will be increases in packaging, supplies, and interest costs. After declining steadily through the early 1980's, the farmer's share of retail food prices in the typical market basket appears to have leveled off at around 30 percent since 1985.

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Preliminary 1988 figures indicate that approximately equal changes in the retail cost, farm value and the farm to retail spread; the first time in years that the retail cost and spread have not increased at a higher rate than the farm value. The total marketing bill accounted for 75 percent of consumer food expenditures in 1987, continuing a long trend of increases.

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Expenditures for food consumed "at home" and "away from home" are compared in terms of contribution to marketing inputs and farm value. Total food expenditures continue to decline as a percent of disposable income, with gains in the portion for food "away from home" more than offset by declines the portion for food "at home"

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What a dollar spent on food in 1987 paid for indicates that only 25 cents returns to farmers for raw product while marketing labor commands 34 cents. The dollar values of marketing bill components depict the magnitude of the value added by marketing.

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Average weekly consumer grocery store spending increased to \$23.26 per capita and \$62.54 per household in 1987. Total grocery store sales increased by over 5 percent with the largest gains coming in service deli (+19.6%) and prescriptions (+12.1%).

MEASURING PRICE CHANGES IN FOOD MARKETING INPUTS¹

Cost Item	1983	1984	1985	1986	1987	1988 ²
Annual Percentage Change						
Labor ³	4.1	2.4	-0.7	-0.9	2.2	1.0
Packaging materials	2.0	9.6	1.5	1.7	3.9	5.8
Paperboard boxes and containers	-1.5	12.0	-3.4	-1.0	7.0	7.6
Metal cans	2.9	6.1	4.9	3.2	0.7	2.4
Transportation	0.9	4.4	0.8	-0.6	-1.7	5.2
Fuels & electricity	0.0	1.1	-1.8	-15.7	1.1	-1.2
Electricity	2.9	5.3	3.1	1.0	-1.6	-0.4
Petroleum	-11.5	-1.8	-6.7	-39.2	12.3	-1.3
Natural gas	16.7	0.6	-0.4	-5.3	-4.4	-2.2
Maintenance & repair	4.0	3.6	2.9	2.3	3.8	4.1
Supplies	-.9	0.7	-0.3	-1.8	1.4	5.6
Interest, short term	-25.2	14.3	-20.9	-20.4	6.2	6.0
Total marketing cost index (FMCI)	2.5	4.3	0.5	-1.0	2.3	3.0

¹Data measure changes in prices for fixed quantities of labor and other inputs used in processing, wholesaling, and retailing farm foods sold through foodstores.

²Second quarter 1987 data versus second quarter 1986 data.

³Hourly earnings and benefits.

Source: Agricultural Outlook, USDA, September 1988.

PRICE INDICES OF MARKET BASKET OF FARM FOODS

Period	Retail Price	Farm Value	Farm Retail Spread	Farmer's Share (Percent)
1980	238.8	239.8	238.3	37
1981	257.1	246.4	263.4	36
1982	266.4	247.8	277.4	34
1983	268.7	242.3	284.3	33
1984	279.3	255.4	293.3	34
1985	282.6	237.1	309.3	31
1986	288.7	234.1	320.8	30
1987	303.1	239.5	340.5	29
1988 July	318.6	259.2	353.3	30

Source: Agricultural Outlook, USDA, October 1988.

MARKET BASKET STATISTICS

Category	Changes from Previous Years							July ¹
	1981	1982	1983	1984	1985	1986	1987	1988
	(Percent)							
Retail cost	7.7	3.8	0.8	3.9	1.2	2.2	5.0	4.6
Farm value	2.8	1.0	-2.6	1.4	-7.2	-1.3	2.3	4.5
Farm-to-retail spread	10.5	5.1	2.7	3.1	5.5	3.7	6.1	4.4

¹July 1988 data versus July 1987 data.

Source: Agricultural Outlook, USDA, October 1988.

SELECTED COMPONENTS OF CONSUMER FOOD SPENDING

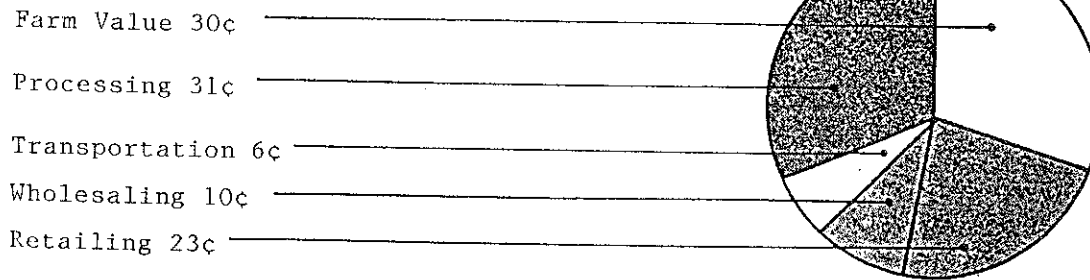
	1975	1986	1987
	Billion Dollars (Percent)		
Consumer expenditures	167.0 (100)	359.6 (100)	377.1 (100)
Farm value	55.6 (33)	89.1 (25)	93.9 (25)
Total marketing bill	111.4 (67)	270.5 (75)	283.2 (75)
Labor ¹	48.3 (29)	124.2 (34)	130.7 (35)
Packaging	13.3 (8)	27.7 (8)	29.5 (8)

Source: Agricultural Outlook, USDA, June 1988.

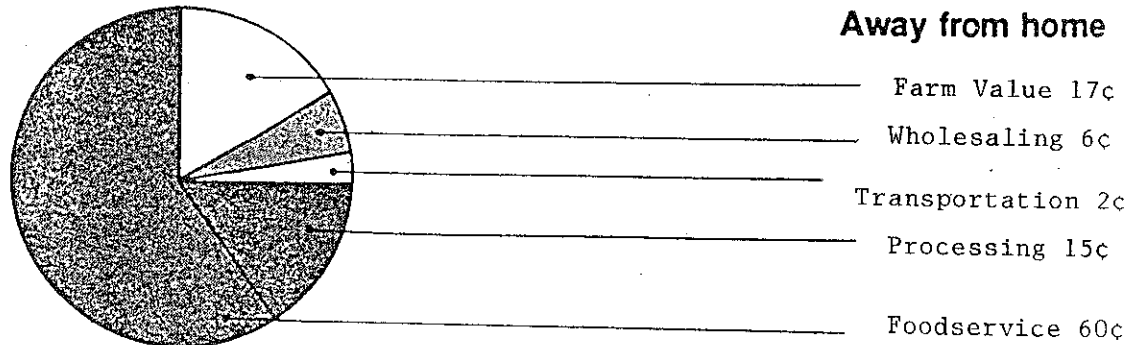
¹Includes supplements to wages and salaries such as pensions and health insurance premiums. Also includes imputed earnings of proprietors, partners, and family workers not receiving stated remuneration.

WHERE THE FOOD DOLLAR GOES AT HOME VERSUS AWAY

At home



Away from home



1987 data.

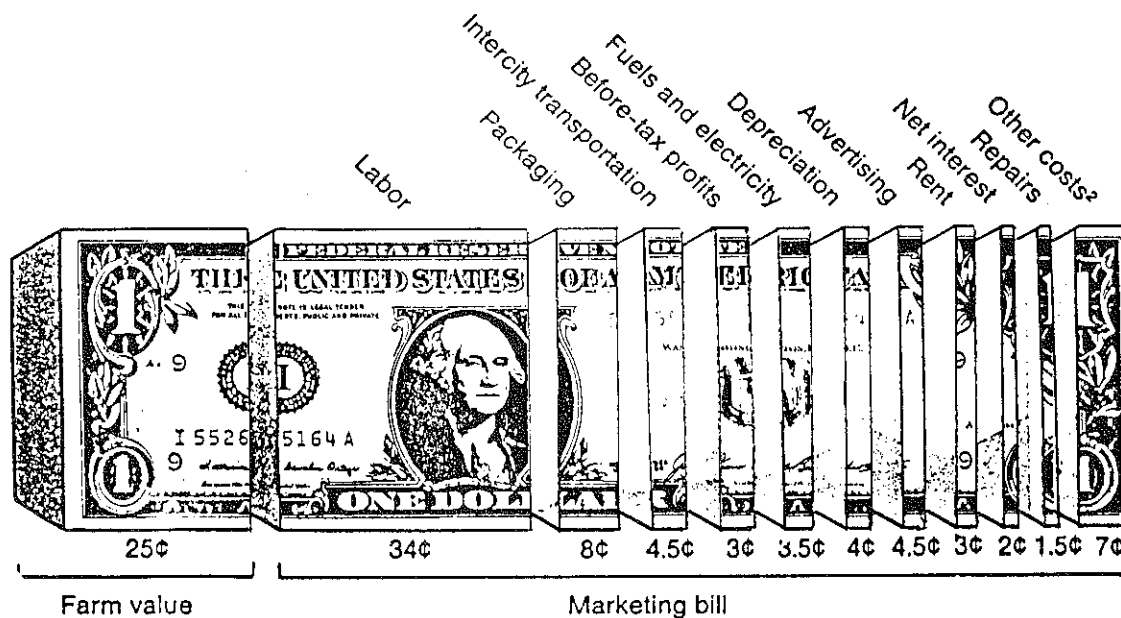
Source: USDA 1988

FOOD EXPENDITURES AS PERCENT OF DISPOSABLE INCOME

Year	Total Food, Except Alcoholic Beverages	Food Except Alcoholic Beverages	
		At Home	Away From Home
1970	17.1	13.0	4.1
1975	16.5	12.3	4.2
1980	15.8	11.2	4.3
1981	15.4	10.9	4.6
1982	15.5	11.0	4.5
1983	15.2	10.6	4.6
1984	14.8	10.3	4.5
1985	14.7	10.1	4.6
1986	14.5	9.9	4.6
1987P	14.3	9.6	4.7

Source: Food Retailing Review - 1988 Edition, The Food Institute, 1988.

What a Dollar Spent on Food Paid for in 1987¹



¹Includes food at home and away. ²Includes property taxes and insurance, accounting and professional services, promotion, bad debts, and miscellaneous items.

Labor is the Largest Component of the Marketing Bill

Component	1975	1980	1984	1985	1986	1987
<i>Billion dollars</i>						
Labor ¹	48.3	81.5	109.3	116.5	124.2	128.5
Packaging materials	13.3	21.0	26.2	26.9	27.7	29.5
Rail and truck transportation ²	8.4	13.0	15.9	16.5	16.8	17.2
Fuels and electricity	4.6	9.0	12.5	13.1	13.3	13.6
Pre-tax corporate profits	7.1	10.2	9.7	9.5	9.3	10.0
Other ³	29.7	48.0	67.0	74.6	78.7	80.9
Total marketing bill	111.4	182.7	240.6	257.1	270.0	279.7

¹Includes employee wages or salaries and their health and welfare benefits. Also includes imputed earnings of proprietor, partners, and family workers not receiving stated remuneration. ²Excludes local hauling charges. ³Includes depreciation, rent, advertising and promotion, interest, taxes, licenses, insurance, professional services, etc.

AVERAGE WEEKLY SPENDING IN GROCERY STORES

	<u>PER CAPITA</u>		<u>PER HOUSEHOLD</u>	
	<u>1986</u>	<u>1987</u>	<u>1986</u>	<u>1987</u>
Perishables	\$10.45	\$10.76	\$28.47	\$28.78
Dry Grocery (Food)	<u>6.44</u>	<u>6.76</u>	<u>17.53</u>	<u>18.07</u>
Total Foods	\$16.89	\$17.52	\$46.00	\$46.85
Dry Grocery (Non-food)	2.93	3.10	7.97	8.32
General Merchandise/HBA	<u>1.76</u>	<u>1.87</u>	<u>4.80</u>	<u>5.02</u>
Grand Total	\$22.32	\$23.36	\$60.78	\$62.54

Source: 1987 Supermarket Business Consumer Expenditures Study, Supermarket Business, September 1988.

GROCERY STORE SALES MIX TRENDS

	<u>1987 % of Total Sales</u>	<u>% Change in Sales from 1986</u>
Dry Grocery (Food)	28.90 %	+ 3.0 %
Meat, Fish, Poultry	17.44	+ 1.6
Dry Grocery (Non-food)	13.29	+ 3.1
Produce	8.79	+ 3.5
Dairy	6.68	+ 2.1
Frozen	4.88	+ 4.5
Baked Goods	3.93	+ 2.8
In-Store Bakery	1.61	+ 9.4
Service Deli	2.68	+ 19.6
Health and Beauty Aids	3.90	+ 5.8
General Merchandise	3.43	+ 5.1
Prescriptions	<u>0.68</u>	<u>+ 12.1</u>
Total Store	100.00 %	+ 5.6 %

Source: 1987 Supermarket Business Consumer Expenditures Study, Supermarket Business, September 1988.

United States Farm Balance Sheet
Current Dollars, January 1
Including Operator Households

Item	1960	1970	1980	1985	1987	1988
-----billion dollars-----						
<u>Assets</u>						
Real Estate	137.2	215.8	755.9	693.7	554.0	567.2
Livestock	15.3	23.5	61.4	49.6	47.6	57.6
Machinery	22.7	32.3	96.7	99.4	84.5	78.6
Crops ^a	7.7	10.9	33.5	33.7	37.2	35.4
Household	9.2	9.6	17.2	26.1	30.5	33.3
Deposits & Currency	9.2	11.9	15.9	19.8	24.8	26.4
U.S. Savings Bonds	4.7	3.7	4.0	3.6	4.5	5.0
Coop. Invest.	<u>4.2</u>	<u>7.2</u>	<u>20.2</u>	<u>29.8</u>	<u>24.9</u>	<u>24.5</u>
TOTAL	210.2	314.9	1004.8	955.7	808.0	828.0
<u>Claims</u>						
RE Debt	12.0	29.2	85.4	112.4	95.8	87.4
NonRE Debt	<u>12.8</u>	<u>23.8</u>	<u>80.4</u>	<u>100.3</u>	<u>89.7</u>	<u>80.8</u>
TOTAL	24.8	53.0	165.8	212.7	185.5	168.2
Owner Equity	<u>185.4</u>	<u>261.9</u>	<u>839.0</u>	<u>743.0</u>	<u>623.5</u>	<u>659.8</u>
TOTAL	210.2	314.9	1004.8	955.7	808.0	828.0
% Equity	88	83	83	78	77	80

^a Includes value of crops held under CCC loan of \$14.7 billion

Source: Economic Research Service, USDA

Changes in Structure, U.S. Farm Balance Sheet
Current Dollars, 1960-88

Item	1960	1970	1980	1985	1987	1988
-----percent of total-----						
<u>Assets</u>						
Real Estate	65	68	75	73	69	69
Livestock	7	8	6	5	6	7
Machinery	11	10	10	10	10	9
All Other	<u>17</u>	<u>14</u>	<u>9</u>	<u>12</u>	<u>15</u>	<u>15</u>
TOTAL	100	100	100	100	100	100
<u>Liabilities</u>						
RE Debt	49	55	52	53	52	52
NonRE Debt	<u>51</u>	<u>45</u>	<u>48</u>	<u>47</u>	<u>48</u>	<u>48</u>
TOTAL	100	100	100	100	100	100

Distribution of United States Farm Debt by Lender
Current Dollars, January 1
Including Operator Households

Lender	1988		Percent Change From	
	%	Bil \$	1987	1983
<i><u>Real Estate</u></i>				
Federal Land Bank	19	32.2	-14	-34
Individuals & Others	12	20.6	-14	-36
Insurance Companies	6	9.9	-9	-22
Commercial Banks	9	14.5	+14	+56
Farmers Home Admin.	6	10.1	-3	+5
CCC - Storage	<u>a</u>	<u>b</u>	<u>-63</u>	<u>-95</u>
TOTAL	52	87.4	-9	-23
<i><u>Nonreal Estate</u></i>				
Commercial Banks	17	29.0	-7	-26
PCA's and FICB's	6	9.5	-14	-53
Merchants & Dealers	7	11.1	-10	-41
Farmers Home Admin.	9	16.0	-2	+10
CCC - Crop Loans	<u>9</u>	<u>14.9</u>	<u>-20</u>	<u>+51</u>
TOTAL	48	80.8	-10	-21
TOTAL DEBT	100	168.2	-9	-22

a Less than .5 percent.

b \$46 million.

Source: ERS, USDA

Delinquent Farm Loans
United States, December 31

Lender Group	December 31						Mid-Year	
	1981	1982	1983	1984	1985	1986	1986	1987
<i>Billions of Dollars</i>								
Commercial Banks	n.a.	.9	1.5	2.1	2.6	2.2	3.5	2.5
Farm Credit System	.4	.7	1.3	2.1	5.3	7.1	7.6	6.5
Life Ins. Companies	.5	.8	1.1	1.2	1.7	1.8	2.2	1.8
Farmers Home Adm.	5.8	9.5	11.0	12.1	11.9	12.0	13.5	12.9
<i>Percentage of Outstanding Loans</i>								
Commercial Banks	n.a.	2.5	3.8	5.2	7.3	7.0	10.3	8.1
Farm Credit System	.5	1.1	1.8	3.3	8.7	14.4	12.4	8.1
Life Ins. Companies	3.7	6.4	8.3	9.6	15.1	17.0	19.9	18.0
Farmers Home Adm.	24.1	37.9	43.9	45.9	41.5	42.9	48.6	49.0

Source: ERS, USDA, AFO-28, p.20, April 1988.

New York Farm Balance Sheet
In Current Dollars, Including Farm Households

Item	January 1, 1988	
	Million Dollars	Percent
<u>Assets</u>		
Real Estate	\$ 8,222	61
Livestock	1,159	9
Machinery & Vehicles	1,685	12
Crops Stored ^b	456	3
Household Items & Equip.	863	6
Deposits & Currency	502	4
Coop. Investments	482	4
Savings Bonds	75	1
TOTAL ASSETS	\$13,442	100
<u>Liabilities & Equity</u>		
Real Estate Debt	\$ 1,045	42
Nonreal Estate Debt ^a	1,428	58
TOTAL LIABILITIES	\$ 2,473	100
EQUITY	10,969	
TOTAL LIABILITIES & EQUITY	\$13,412	

^a All FmHA Emergency Loans are included under nonreal estate. This overestimates nonreal estate loan volume and underestimates real estate loan volume.

^b Includes the value of crops held under CCC loan.

Changes in New York Farm Balance Sheet
Current Dollars, January 1

Item	1960	1970	1980	1985	1987	1988
Total Assets	\$3,579	\$5,428	\$11,698	\$13,194	\$13,211	\$13,442
Total Debts	547	842	2,527	3,020	2,682	2,473
Owner's Equity	3,032	4,586	9,171	10,174	10,529	10,969
Percent Equity	85	84	78	77	80	82

Source: ERS, USDA

**New York Farm Credit Outstanding
January 1, 1988**

Credit Type & Source	Million Dollars	Percent
<u>Real Estate Loans</u>		
Commercial Banks	\$ 134	5
Federal Land Banks	396	16
Farmers Home Admin. ^a	197	8
Insurance Companies	18	1
Individuals & Others	300	12
CCC - Storage	3	<u>c</u>
TOTAL	\$ 1,045	42
<u>Nonreal Estate Loans</u>		
Commercial Banks ^b	\$ 589	24
Production Credit Assn.	295	12
Farmers Home Admin. ^a	304	12
Merchants, Dealers, Individuals and Others	189	8
CCC - Crop Loans	51	<u>2</u>
TOTAL	\$ 1,428	58
TOTAL DEBT	\$ 2,473	100

^a All emergency loans are included under nonreal estate. This overestimates nonreal estate loan volume and underestimates real estate loan volume.

^b Includes loans made outside of New York by New York City banks.

^c Less than .5 percent.

**Trends in New York Farm Lending
January 1**

Credit Type and Source	Percent Change in Outstanding Loans			
	1984 to 1985	1985 to 1986	1986 to 1987	1987 to 1988
<u>Real Estate Loans</u>				
Commercial Banks	-18	+ 3	+ 1	+38
Federal Land Banks	- 3	- 6	-12	- 3
Farmers Home Admin.	+ 3	+ 2	- 2	- 4
Insurance Companies	0	+ 3	-32	- 5
Individuals and Others	- 7	- 9	-12	-14
CCC - Storage	-25	-41	-53	-67
<u>Nonreal Estate</u>				
Commercial Banks	-29	- 9	+ 9	-14
Production Credit Assoc.	- 2	- 8	-17	+ 3
Farmers Home Admin.	- 3	+ 6	- 4	- 3
Merchants and Dealers	+ 2	-17	-20	-18
CCC - Crop Loans	-50	+114	+44	-22
TOTAL DEBT	-12	- 5	- 6	- 8

Trends in the Financial Condition of New York Farmers

Category	1985	1986	1987	1988
<u>Debt/Asset Ratio</u> ----- Percent of All Farms -----				
No Debt	42	32	40	42
0.1 - 19.9	24	29	28	27
20.0 - 39.9	15	19	15	16
40.0 - 69.9	13	15	13	12
70.0 plus	6	5	4	3
<u>Type of Farm</u> ----- Debt/Asset Ratio -----				
Dairy	25	27	20	21
Other Livestock	13	12	9	12
Cash Grain	26	27	16	18
Tree Fruits	24	18	24	15
Grapes	23	22	16	14
Vegetables	17	22	16	18
All	22	24	18	17
<u>Type of Delinquency</u>				
Real Estate Loans	5	9	9	7
Other Loans ^a	17	18	14	11

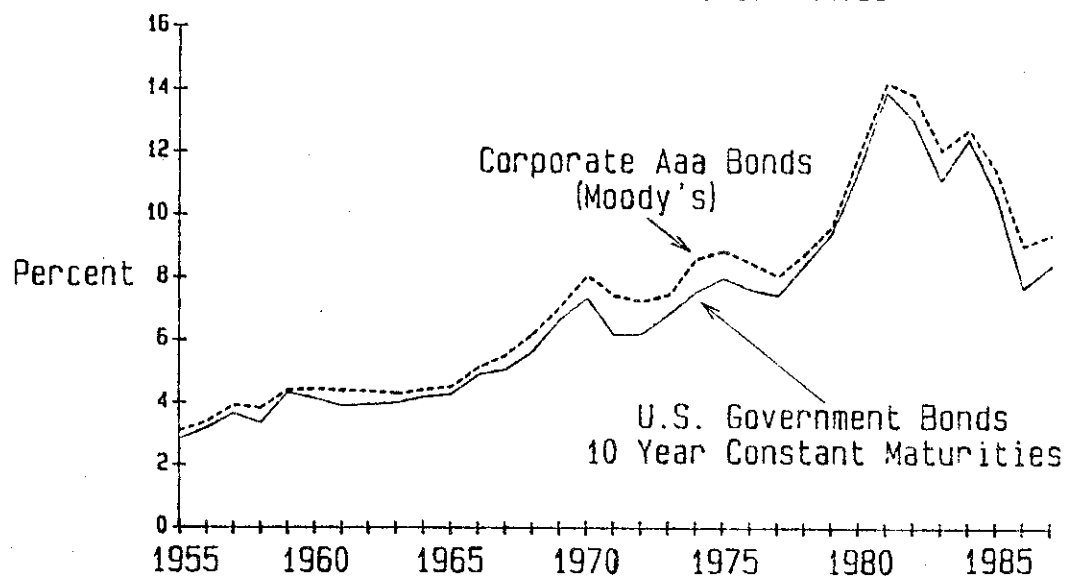
^a Includes accounts payable, 1985 estimated.

Delinquency by Debt Asset Ratio
New York Farmers

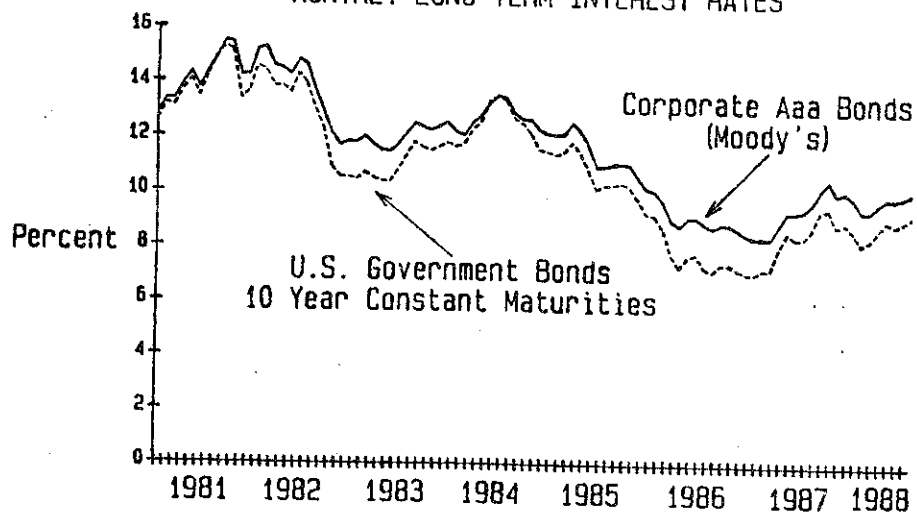
Debt Asset Ratio	Real Estate			Nonreal Estate		
	1986	1987	1988	1986	1987	1988
-----Percent of Farms-----						
Under 19.9	6	5	4	9	6	7
20.0 - 39.9	6	5	6	14	9	10
40.0 - 69.9	11	12	11	28	23	16
70.0 plus	27	27	17	47	40	28

Source: Farm Finance Surveys, New York Agricultural Statistics Service.

ANNUAL LONG TERM INTEREST RATES

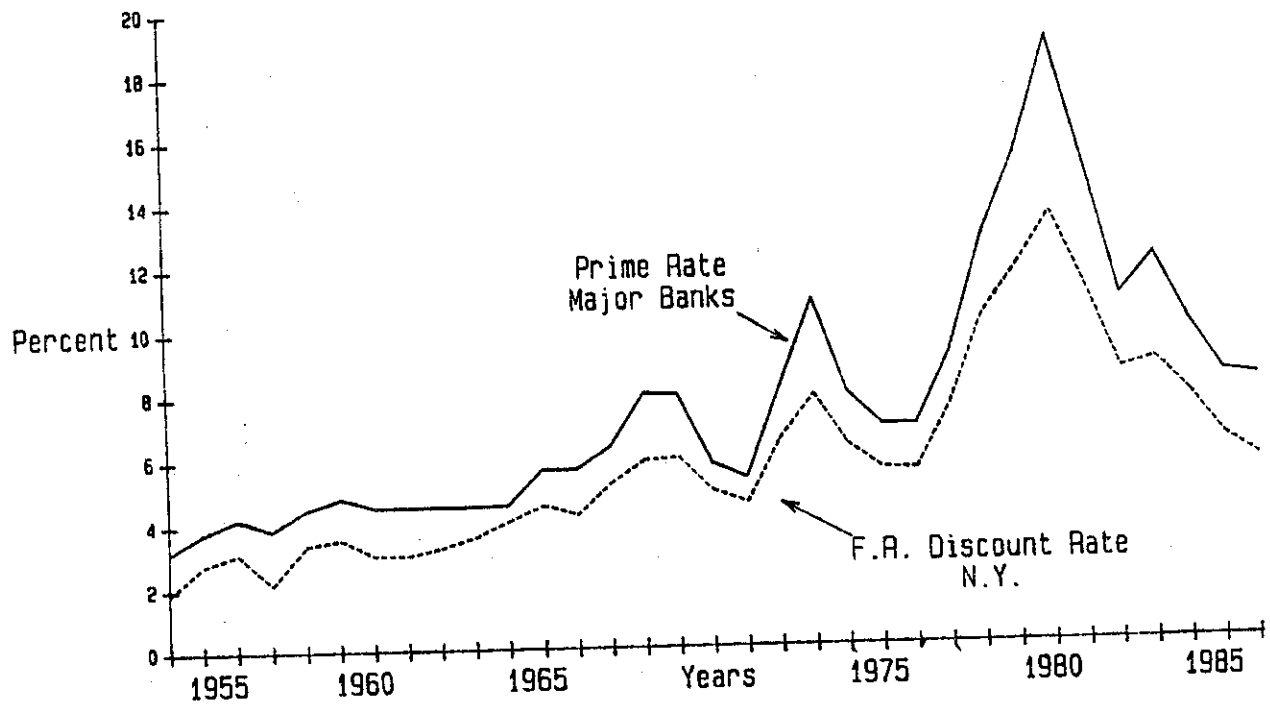


MONTHLY LONG TERM INTEREST RATES

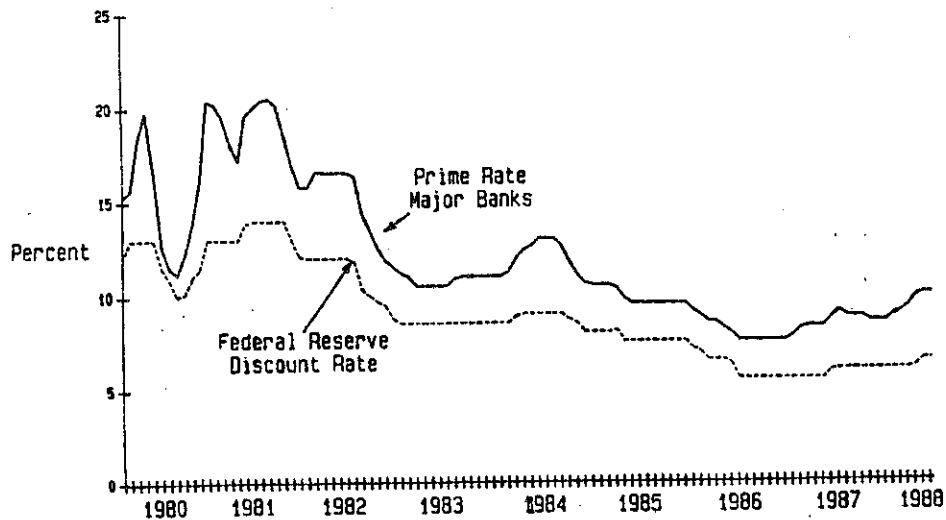
U.S. Government Bonds
10 Year Constant Maturities

	<u>1987</u>	<u>1988</u>
Jan	7.08	8.67
Feb	7.25	8.21
Mar	7.25	8.37
Apr	8.02	8.72
May	8.61	9.09
Jun	8.40	8.92
Jul	8.45	9.06
Aug	8.76	9.26
Sep	9.42	
Oct	9.52	
Nov	8.86	
Dec	8.99	

ANNUAL AVERAGE SHORT TERM INTEREST RATES

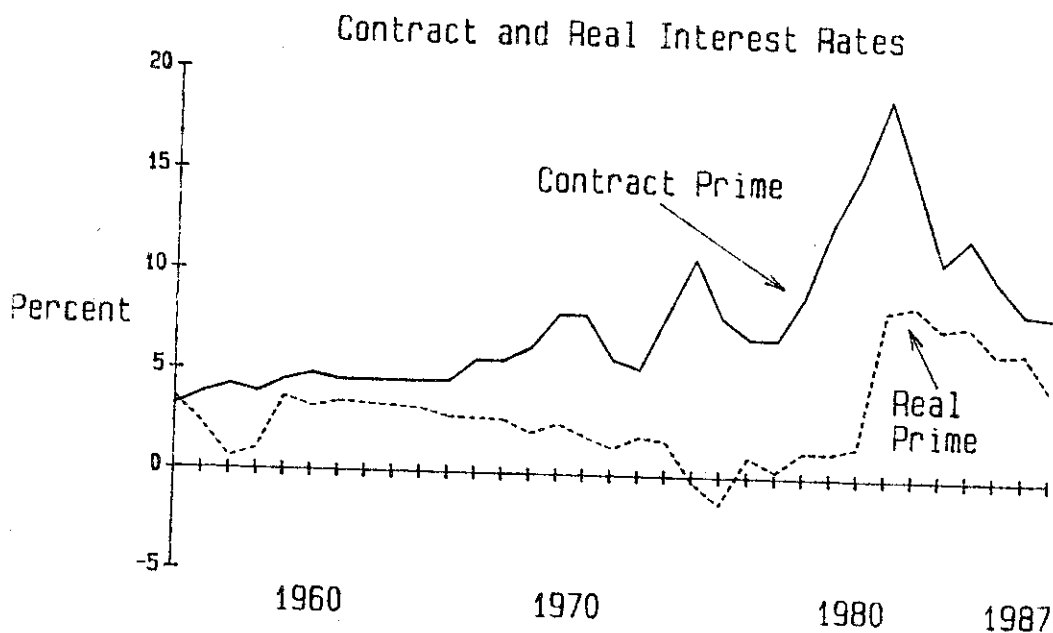


MONTHLY SHORT TERM INTEREST RATES



Prime Rate
Major Banks
1987 1988

Jan	7.50	8.75
Feb	7.50	8.51
Mar	7.50	8.50
Apr	7.75	8.50
May	8.14	8.84
Jun	8.25	9.00
Jul	8.25	9.29
Aug	8.25	9.84
Sep	8.70	10.00
Oct	9.07	10.00
Nov	8.78	
Dec	8.75	

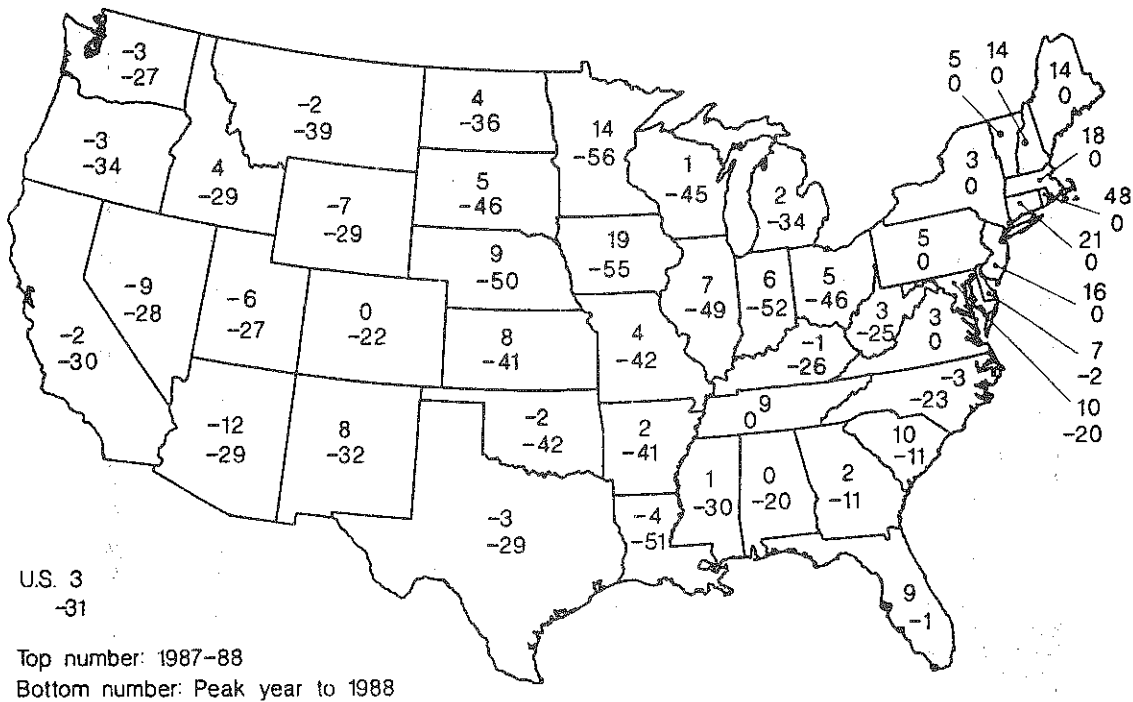
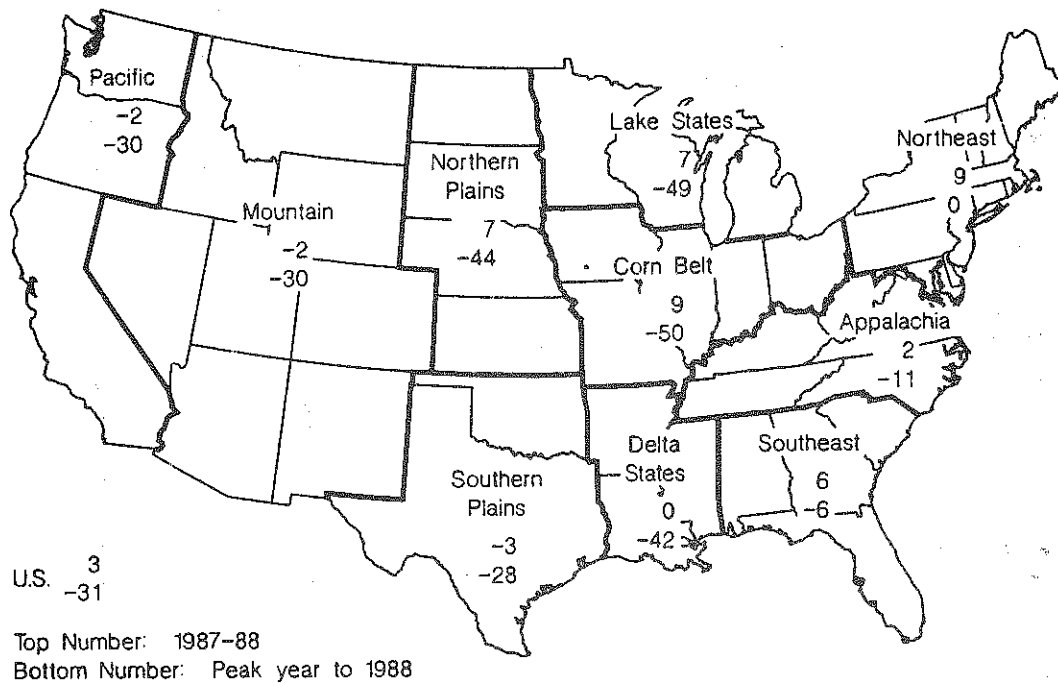


After remaining relatively constant to down slightly during the first half of the year, short and intermediate term farm level interest rates increased modestly throughout the last half of 1988. 1988 rates averaged less than one-half percent above average 1987 rates, representing the second year of relative stability. Long term rates were quite stable throughout the year.

Several Factors could influence interest rates during 1989. Given the high level of capacity utilization in the manufacturing sector, the large budget deficit, and the expected moderate rate of growth in the economy, investment demand can be expected to maintain firmness in interest rates but provide only modest upward pressure. Unless the oil price or food prices drop significantly, the current high level of employment, high capacity utilization in manufacturing and continued increases in medical and other costs will likely result in a continued creep up in inflation. This will result in somewhat higher interest rates but should not push up rates sharply unless the inflation rate gets high enough that the Federal Reserve finds it necessary to raise interest rates to fight inflation.

A large amount of United States debt is held by foreigners. A declining value of the dollar could cause foreigners to reduce their U.S. debt holdings in an effort to avoid currency exchange losses. The reduced supply of funds would increase interest rates until the dollar becomes stable and investment returns. Alternately, the Federal Reserve may increase rates to stem the outflow. The continuing large trade deficit will likely provide some downward pressure on the dollar resulting in upward pressure on interest rates. In summary, most factors point towards higher rates but none with great strength. It is expected that rates will increase about one percent during the year and average one-half to one percent above 1988 levels.

CHANGE IN FARM REAL ESTATE VALUES, UNITED STATES

Percent Change in Farmland Value Per Acre, February 1987-88 and
Peak Year to February 1988Percent Change in Farmland Value Per Acre, February 1987-88 and
Peak Year to February 1988, by Farm Production Regions

AVERAGE VALUE PER ACRE OF UNITED STATES FARM REAL ESTATE

Table 1.—Average per acre value of farmland and buildings, by State, 1982-88 1/

State	As of April 1				As of February 1			Percent change 1987-88
	1982	1983	1984	1985	1986	1987	1988	
	Dollars							Percent
Northeast	1,364	1,343	1,414	1,392	1,416	1,607	1,747	9
Maine	680	708	750	856	993	1,082	1,236	14
New Hampshire	1,136	1,174	1,244	1,419	1,646	1,794	2,037	14
Vermont	815	842	893	1,017	1,180	1,286	1,345	5
Massachusetts	1,874	1,963	2,081	2,372	2,752	2,999	3,534	18
Rhode Island	2,729	2,760	2,926	3,335	3,869	4,217	6,240	48
Connecticut	2,610	2,655	2,814	3,208	3,721	4,056	4,914	21
New York	821	817	842	808	824	931	956	3
New Jersey	3,181	3,140	3,234	3,525	3,913	5,321	6,189	16
Pennsylvania	1,513	1,520	1,642	1,510	1,450	1,725	1,819	5
Delaware	1,787	1,829	1,866	1,642	1,757	1,775	1,895	7
Maryland	2,376	2,121	2,185	2,097	1,887	1,831	2,014	10
Lake States	1,234	1,160	1,099	874	702	598	639	7
Michigan	1,278	1,223	1,223	1,052	936	833	853	2
Wisconsin	1,144	1,113	1,046	847	711	626	630	1
Minnesota	1,272	1,165	1,083	823	609	493	563	14
Corn Belt	1,642	1,482	1,414	1,055	903	815	888	9
Ohio	1,629	1,504	1,444	1,126	1,013	942	991	5
Indiana	1,804	1,610	1,594	1,259	1,058	931	983	6
Illinois	2,023	1,837	1,800	1,314	1,143	1,040	1,114	7
Iowa	1,889	1,684	1,499	1,064	841	748	890	19
Missouri	945	856	856	659	606	552	572	4
Northern Plains	547	528	499	383	323	286	306	7
North Dakota	455	439	439	360	317	282	292	4
South Dakota	349	348	338	250	215	178	187	5
Nebraska	730	701	617	444	364	335	366	9
Kansas	628	601	583	466	387	340	368	8
Appalachia	1,083	1,082	1,090	1,005	983	951	972	2
Virginia	1,096	1,125	1,114	1,091	1,146	1,111	1,143	3
West Virginia	723	688	667	554	537	527	542	3
North Carolina	1,297	1,314	1,380	1,242	1,130	1,096	1,062	-3
Kentucky	1,058	1,049	1,007	906	870	791	786	-1
Tennessee	1,040	1,014	1,044	982	992	1,012	1,104	9
Southeast	1,095	1,095	1,094	1,042	999	1,000	1,056	6
South Carolina	980	946	927	899	872	794	874	10
Georgia	926	929	910	865	822	846	865	2
Florida	1,518	1,576	1,608	1,527	1,435	1,464	1,596	9
Alabama	885	826	809	769	761	731	731	0
Delta States	1,135	1,039	1,040	946	797	666	665	0
Mississippi	981	894	939	835	752	654	658	1
Arkansas	1,096	972	933	849	705	634	645	2
Louisiana	1,414	1,351	1,351	1,256	1,005	734	708	-4
Southern Plains	576	574	614	635	529	471	457	-3
Oklahoma	725	699	699	566	481	428	421	-2
Texas	539	544	593	652	541	482	466	-3
Mountain	325	314	319	286	247	233	227	-2
Montana	271	259	264	222	204	167	164	-2
Idaho	839	814	814	749	644	567	592	4
Wyoming	193	193	197	177	154	151	140	-7
Colorado	451	454	468	435	357	364	364	0
New Mexico	195	178	182	163	134	122	132	8
Arizona	302	289	295	265	231	242	214	-12
Utah	589	560	571	514	478	454	428	-6
Nevada	268	249	254	229	199	211	193	-9
Pacific	1,346	1,357	1,361	1,225	1,107	974	951	-2
Washington	922	933	961	923	812	723	699	-3
Oregon	705	705	698	579	521	479	466	-3
California	1,900	1,918	1,918	1,726	1,571	1,366	1,341	-2
48 States	823	788	782	679	595	547	564	3
Alaska					1,902	1,437	1,322	-8

1/ Current dollars.

VALUE OF LAND AND BUILDINGS PER FARM, UNITED STATES

Table 4.--Average per farm value of farmland and buildings, by State, 1982-88 1/

State	As of April 1				As of February 1		
	1982	1983	1984	1985	1986	1987	1988
Dollars							
Northeast	224,400	219,000	235,000	232,889	237,459	270,454	293,989
Maine	136,000	136,400	146,300	166,810	193,500	210,915	240,907
New Hampshire	180,400	186,500	199,500	225,371	267,482	291,555	331,031
Vermont	184,700	190,900	207,800	232,457	265,852	285,754	298,813
Massachusetts	212,000	215,600	232,000	268,827	311,839	339,904	400,543
Rhode Island	255,800	258,800	284,800	324,607	376,544	410,433	607,317
Connecticut	297,400	308,700	329,500	384,960	440,678	482,358	584,329
New York	162,500	158,400	168,300	167,109	170,719	197,758	203,038
New Jersey	341,500	330,500	344,700	380,862	429,448	595,150	692,159
Pennsylvania	221,900	224,100	246,200	226,500	218,081	259,517	273,655
Delaware	337,000	339,700	342,000	304,943	351,388	360,626	385,077
Maryland	363,000	318,100	331,400	311,554	277,554	258,449	284,346
Lake States	289,500	274,100	262,800	215,784	176,054	152,922	163,269
Michigan	227,600	217,800	221,300	193,432	176,333	162,348	166,195
Wisconsin	235,200	230,200	219,000	180,625	152,708	136,960	137,795
Minnesota	375,400	347,200	326,100	260,617	196,458	160,861	183,574
Corn Belt	401,500	367,000	357,900	272,573	237,938	220,120	239,772
Ohio	280,300	259,900	253,500	199,897	181,951	175,029	184,060
Indiana	356,600	318,200	318,800	258,095	225,247	209,397	221,081
Illinois	588,300	527,200	549,700	419,020	381,503	354,195	379,166
Iowa	544,100	493,500	445,600	322,076	259,108	234,218	278,532
Missouri	249,900	226,300	226,800	176,497	161,850	148,092	153,537
Northern Plains	466,800	454,800	436,400	343,294	296,799	266,013	284,734
North Dakota	504,200	493,100	507,000	433,059	390,720	351,356	364,496
South Dakota	414,100	418,500	406,000	304,795	265,764	226,886	238,072
Nebraska	550,400	535,900	485,300	355,200	301,484	282,318	308,574
Kansas	404,400	387,000	378,100	310,667	264,668	232,908	251,960
Appalachia	157,000	157,600	160,900	149,505	149,549	144,022	147,234
Virginia	179,000	190,100	192,900	193,956	219,946	213,347	219,449
West Virginia	139,400	120,700	115,300	94,971	94,681	92,788	95,441
North Carolina	167,400	174,100	192,100	176,495	167,211	164,447	159,316
Kentucky	148,900	147,700	144,600	131,370	127,289	115,924	115,182
Tennessee	146,700	143,000	144,300	134,273	134,309	132,780	144,943
Southeast	268,700	271,300	275,700	265,786	257,064	260,508	275,178
South Carolina	189,700	189,200	185,400	179,800	174,406	158,709	174,850
Georgia	227,400	231,400	241,400	233,550	223,046	229,234	234,185
Florida	497,100	512,200	522,400	509,000	478,460	488,029	532,049
Alabama	189,900	177,400	172,400	163,769	164,204	164,070	164,119
Delta States	314,600	293,900	297,900	277,687	239,639	199,263	199,050
Mississippi	268,400	250,700	266,600	245,281	228,717	200,500	201,787
Arkansas	311,500	281,200	273,200	256,302	221,266	199,321	202,670
Louisiana	384,600	373,800	379,000	352,378	279,111	197,639	190,701
Southern Plains	376,400	376,700	400,700	431,548	379,364	340,362	330,460
Oklahoma	332,700	320,800	316,000	263,070	223,610	201,856	198,465
Texas	393,400	398,500	433,800	499,130	447,626	400,959	388,208
Mountain	675,000	635,300	643,600	576,353	501,924	476,179	465,329
Montana	694,400	661,500	675,400	568,992	527,043	437,021	426,970
Idaho	506,100	495,000	486,400	441,484	381,116	340,106	355,037
Wyoming	742,300	734,200	752,800	684,400	608,960	603,641	560,541
Colorado	577,300	585,200	599,200	560,449	458,614	461,580	462,181
New Mexico	640,700	584,900	594,000	531,522	438,326	401,831	434,782
Arizona	1,415,600	1,321,600	1,331,800	1,169,118	997,263	1,066,294	942,284
Utah	509,100	480,000	481,400	428,950	397,768	377,319	355,888
Nevada	822,500	820,800	859,600	806,080	730,510	774,341	707,360
Pacific	577,700	588,900	596,900	532,907	479,561	427,549	417,705
Washington	387,700	400,200	407,200	391,061	341,996	308,695	298,323
Oregon	343,000	338,400	339,500	281,676	252,100	231,932	225,252
California	773,900	796,000	811,500	718,803	652,263	578,658	567,548
48 States	352,000	340,300	341,800	302,361	270,808	251,884	259,743

1/ Current dollars. Average per farm value is estimated by dividing total value of farmland and buildings for each State by the State's number of farms.

CASH RENT PER ACRE AND RATIO OF RENT TO VALUE

Table 6.—Cropland rented for cash: Average gross cash rent per acre and rent as a percent of value, selected States, 1985-88 1/

State	Rent per acre				Rent to value			
	1985	1986	1987	1988	1985	1986	1987	1988
	Dollars				Percent			
Northeast								
Maine	28.70	27.00	31.80	36.90	4.5	5.4	4.1	5.4
Vermont	28.20	26.00	31.30	45.20	4.1	3.0	3.2	3.2
New York	34.80	30.00	32.00	31.30	5.0	5.1	4.2	3.7
New Jersey	43.20	46.00	48.00	61.10	1.1	0.9	0.5	0.6
Pennsylvania	43.00	37.20	40.00	42.70	2.5	2.7	2.5	2.4
Delaware	66.80	64.50	61.40	51.70	3.8	3.7	3.0	2.9
Maryland	63.60	54.50	50.80	50.50	2.7	3.3	2.7	2.0
Lake States								
Michigan	51.10	47.70	41.90	41.70	5.5	5.8	5.9	5.9
Wisconsin	53.10	48.80	44.80	45.40	6.3	7.0	7.3	7.3
Minnesota	62.20	53.80	47.80	52.70	7.8	8.7	9.0	8.5
Corn Belt								
Ohio	72.60	70.30	63.20	65.60	5.4	6.5	5.6	6.3
Indiana	95.70	85.60	77.00	77.00	7.3	7.5	7.5	7.2
Illinois	110.10	99.90	85.70	89.20	7.2	7.7	7.6	7.1
Iowa	102.60	87.60	80.30	86.30	8.4	9.3	9.8	8.6
Missouri	56.50	54.40	48.30	54.70	8.5	9.0	9.1	9.1
Northern Plains								
North Dakota	31.70	29.70	28.20	28.80	7.6	8.1	8.4	8.1
South Dakota	29.40	26.40	25.50	27.10	8.3	9.2	10.0	9.5
Nebraska								
(Nonirrigated)	47.10	46.70	42.30	48.50	8.6	10.4	10.3	10.2
(Irrigated)	92.50	86.30	81.20	85.50	9.6	10.6	11.6	10.5
Kansas								
(Nonirrigated)	32.40	30.30	28.60	30.60	7.2	8.0	7.8	8.3
(Irrigated)	61.50	58.40	59.70	54.10	8.7	9.8	10.4	9.8
Appalachia								
Virginia	37.60	*	37.70	36.20	3.0	*	3.2	2.9
West Virginia	25.30	25.60	31.70	29.70	4.2	4.3	4.2	4.6
North Carolina	41.40	39.50	33.70	34.00	2.0	3.5	2.8	2.6
Kentucky	50.70	53.60	53.30	52.70	5.2	6.0	6.8	6.1
Tennessee	45.80	47.40	39.90	46.60	4.8	5.8	4.8	5.3
Southeast								
South Carolina	27.00	25.50	22.40	23.00	3.5	2.9	3.2	2.9
Georgia	30.30	27.80	26.20	30.70	4.3	3.2	3.9	4.2
Alabama	29.50	29.70	28.50	30.40	4.7	4.3	4.4	4.8
Florida	*	94.60	99.20	106.90	*	2.6	3.1	3.0
Delta States								
Mississippi	41.00	35.00	31.20	36.30	5.2	5.1	5.0	5.8
Arkansas	51.00	48.20	44.40	50.40	6.4	6.5	6.5	7.2
Louisiana	50.40	45.10	36.50	44.60	3.2	2.7	3.6	4.8
Southern Plains								
Oklahoma								
(Nonirrigated)	28.50	26.50	23.00	24.30	4.2	4.7	4.8	5.3
(Irrigated)	39.60	*	37.20	33.70	5.0	*	8.3	6.8
Texas								
(Nonirrigated)	21.30	20.20	19.90	20.50	1.9	2.2	2.3	2.5
(Irrigated)	43.60	39.60	40.60	41.10	4.6	5.1	5.4	4.8
Mountain								
Montana								
(Nonirrigated)	20.30	22.20	21.70	20.30	2.9	8.4	10.1	7.8
(Irrigated)	61.60	55.90	41.70	42.00	3.6	6.6	6.1	5.6
Idaho								
(Nonirrigated)	32.50	32.40	34.10	30.80	5.7	6.0	7.6	6.7
(Irrigated)	106.60	85.40	77.80	91.20	6.8	7.7	7.9	8.5
Wyoming								
(Nonirrigated)	21.40	13.80	11.20	12.00	7.8	6.9	7.8	7.8
(Irrigated)	55.90	47.50	42.50	42.50	3.1	7.2	7.0	8.7
Colorado								
(Nonirrigated)	33.10	22.80	21.10	24.30	7.1	6.0	5.5	4.7
(Irrigated)	82.20	63.40	59.10	63.80	6.3	6.0	6.6	6.7
New Mexico								
(Irrigated)	80.70	79.80	69.80	74.40	3.4	3.0	2.7	2.3
Arizona								
(Irrigated)	142.80	134.30	124.10	146.40	1.4	1.1	1.3	1.4
Utah								
(Nonirrigated)	35.30	25.40	23.50	25.80	2.5	2.3	3.3	3.3
(Irrigated)	61.30	63.70	54.60	54.30	2.0	2.4	2.9	2.8
Nevada								
(Irrigated)	82.90	62.80	80.00	77.40	5.5	4.6	4.9	5.0
Pacific								
Washington								
(Nonirrigated)	61.00	42.40	42.60	42.30	5.3	4.5	5.4	5.7
(Irrigated)	*	118.30	96.60	89.70	*	7.4	7.3	5.1
Oregon								
(Nonirrigated)	50.30	50.70	49.70	42.20	4.1	6.6	5.7	4.4
(Irrigated)	122.40	96.00	88.10	81.50	7.6	7.6	6.2	5.8
California								
(Irrigated)	179.40	152.50	160.20	166.80	4.1	4.0	3.3	3.9

* = Insufficient information.

1/ Current dollars. Estimated cash rent as a percent of per acre value of rented cropland.

CROP PRODUCTION
United States and New York
1986-88 a/

Crop	<u>Acres Harvested</u>			<u>Yield Per Acre</u>			<u>Production</u>		
	1986	1987	1988	1986	1987	1988	1986	1987	1988
<u>United States</u>	(million)			(bu.)			(million bu.)		
Corn grain	69.2	59.2	56.7	119.3	119.4	82.3	8,250	7,064	4,671
Sorghum	13.9	10.6	9.0	67.7	69.9	60.6	938	741	546
Oats	6.9	6.9	5.4	56.3	54.0	39.1	386	374	211
Barley	12.0	10.1	7.4	50.8	52.7	38.2	611	530	283
Wheat	60.7	56.0	53.3	34.4	37.7	34.0	2,092	2,107	1,812
Soybeans	58.3	57.0	56.8	33.3	33.7	26.6	1,940	1,923	1,512
<u>New York</u>	(thousand)			(bu.)			(thousand bu.)		
Corn grain	620	510	500	99	109	87	61,380	55,590	43,500
Oats	190	200	145	68	60	52	12,920	12,000	7,540
Wheat	155	80	90	49	47	55	7,595	3,760	4,950
				(tons)			(thousand tons)		
Corn silage	570	480	NA	14.0	15	NA	7,980	7,200	NA
All hay	2,245	2,230	2,230	2.41	2.36	2.17	5,408	5,269	4,845
Alfalfa <u>b/</u>	925	930	930	2.85	2.80	2.50	2,636	2,604	2,262

Source: USDA Crop Production and New York Crop Reporting Service.

a/ All 1988 data are preliminary and subject to revision. Estimates for the United States are as of November 1, 1988. New York estimates are as of October 1988 except for corn which is November 1988.

b/ Includes alfalfa mixtures.

Grain production in the United States in 1988 is below year earlier levels primarily due to the drought. Corn for grain production of 4.7 billion bushels is 34 percent below the 1987 crop and the smallest crop since the PIK-drought crop of 1983. Sorghum production is 26 percent below the 1987 crop.

Oat production is down 44 percent from the 1987 level. Barley production is down 47 percent from last year. Total feed grain production is down 34 percent from 1987.

The soybean crop is down 21 percent from 1987. Wheat production of 1.8 billion bushels is down 14 percent from 1987.

The New York corn for grain crop is forecast at 43 million bushels, down 22 percent from 1987. New York corn yield per acre is expected to be 87 bushels per acre, down from 109 in 1987. Wheat production is up 32 percent from 1987. Oat production is estimated to be down 37 percent from 1987. Hay production is down 8 percent from the 1987 level.

CORN AND FEED GRAIN BALANCE SHEETS

Item	1985/86	1986/87	1987/88 (Prelim.)	1988/89 (Proj.)
<u>Supply</u> ----- CORN (million bushels) -----				
Beginning Stocks (Sept. 1)	1,648	4,040	4,882	4,260
Production	8,877	8,250	7,064	4,671
Imports	11	2	4	5
Total	10,536	12,291	11,950	8,936
<u>Disappearance</u>				
Feed and residual	4,095	4,714	4,730	4,500
Food, Ind. and Seed	1,160	1,192	1,229	1,215
Total domestic	5,255	5,906	5,959	5,715
Exports	1,241	1,504	1,732	1,775
Total	6,496	7,410	7,690	7,490
<u>Ending Stocks</u> (Aug. 30)	4,040	4,882	4,260	1,446
Season average farm price	\$2.23	\$1.50	\$1.94	\$2.40-2.80
<u>Supply</u> ----- FEED GRAINS a/ (million metric tons) -----				
Beginning Stocks	57.5	126.3	152.1	133.6
Production	274.4	252.3	215.2	141.7
Imports	0.9	0.7	1.1	1.4
Total	332.7	379.4	368.4	276.8
<u>Disappearance</u>				
Feed and residual	134.8	145.5	145.6	136.6
Food, Ind. and Seed	35.0	35.5	36.5	36.3
Total domestic	169.8	181.0	182.1	172.9
Exports	36.6	46.3	52.6	51.3
Total	205.4	227.2	234.8	224.2
<u>Ending Stocks</u>	126.3	152.1	133.6	52.6

Source: Agricultural Supply and Demand Estimates, USDA, November 9, 1988.

a/ Marketing year beginning September 1 for corn and sorghum, June 1 for barley and oats.

The fall 1988 corn supply of 9 billion bushels is down 25 percent from 1987 and is the smallest since the fall of 1985. Feed use is projected to drop 5 percent. Exports are projected to increase 3 percent from 1987 levels. Total utilization is expected to be 3 percent below the 1987/88 level. Projected carryover in the fall of 1989 of 1.4 billion bushels is 66 percent below the fall 1988 carryover. This projected carryover is greater than the fall 1984 carryover of about 700 million bushels after the PIK-drought year of 1983.

Feedgrain supplies are dominated by corn, so changes in supply and demand are similar. The total supply of feedgrains is 25 percent below last year. Domestic feed use in the 1988-89 marketing year is projected to decrease 6 percent. Exports are projected to decrease 2 percent. Carryover stocks at the end of the 1988-89 marketing year are projected to be 53 million metric tons, 61 percent below the 1988 level.

WHEAT AND SOYBEAN BALANCE SHEETS

Item	1985/86	1986/87	1987/88 (Prelim.)	1988/89 (Proj.)
<u>Supply</u> ----- WHEAT (million bushels) -----				
Beginning Stocks (June 1)	1,425	1,905	1,821	1,256
Production	2,425	2,092	2,107	1,812
Imports	16	21	17	15
Total	3,866	4,018	3,945	3,083
<u>Disappearance</u>				
Food	683	696	719	735
Seed	93	84	85	100
Feed	270	413	293	270
Total domestic	1,046	1,193	1,097	1,105
Exports	915	1,004	1,592	1,450
Total	1,961	2,197	2,689	2,555
<u>Ending Stocks</u> (May 31)	1,905	1,821	1,256	528
Season average farm price	\$3.08	\$2.42	\$2.57	\$3.55-3.85
<u>Supply</u> ----- SOYBEANS (million bushels) -----				
Beginning Stocks (Sept. 1)	316	536	436	302
Production	2,099	1,940	1,923	1,512
Total	2,415	2,476	2,359	1,814
<u>Disappearance</u>				
Crushings	1,053	1,179	1,174	1,030
Exports	741	757	800	565
Seed, Feed	60	57	56	60
Residual	25	47	27	34
Total	1,879	2,040	2,057	1,689
<u>Ending Stocks</u> (Aug. 30)	536	436	302	125
Season average farm price	\$5.05	\$4.78	\$6.15	\$6.75-8.75

Source: Agricultural Supply and Demand Estimates, USDA, November 9, 1988.

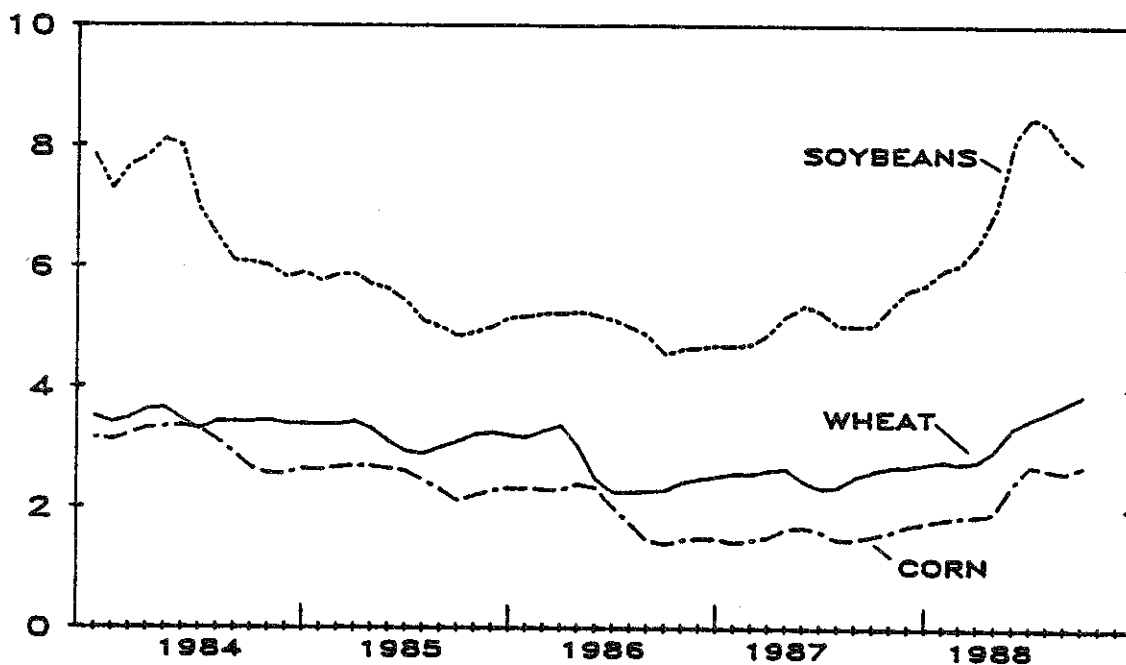
The 1988 United States wheat supply of three billion bushels is 22 percent below the 1987 level and the smallest since 1979. Domestic food use is projected to increase slightly and feed use to decrease slightly. Exports are projected to decrease 9 percent. Carryover on May 31, 1989 is projected to be 528 million bushels, down 58 percent from the 1988 level. If realized, this will be the smallest wheat carryover since 1976.

The total soybean supply is 1.8 billion bushels, down 23 percent from 1987, and the smallest supply since 1977. Crushings are projected to be down 12 percent and exports to decrease 29 percent from year earlier levels. Carryover in the fall of 1989 is projected to be about 125 million bushels, 59 percent below the 1988 carryover and the smallest since 1977.

PRICES RECEIVED FOR CORN, WHEAT AND SOYBEANS

PRICES RECEIVED BY FARMERS, US

DOLLARS PER BU



Source: USDA Agricultural Prices

Soybean prices increased from late 1987 until mid-1988 and then declined. The October 1987 average price received by U.S. farmers was \$7.71, \$2.67 per bushel above the level of October 1987.

Wheat prices increased quite steadily from the summer of 1987 to the fall of 1988. The October 1988 price received by U.S. farmers was \$3.89 or \$1.27 above the year earlier price. The N.Y. price of \$3.44 was \$.54 above the October 1987 level.

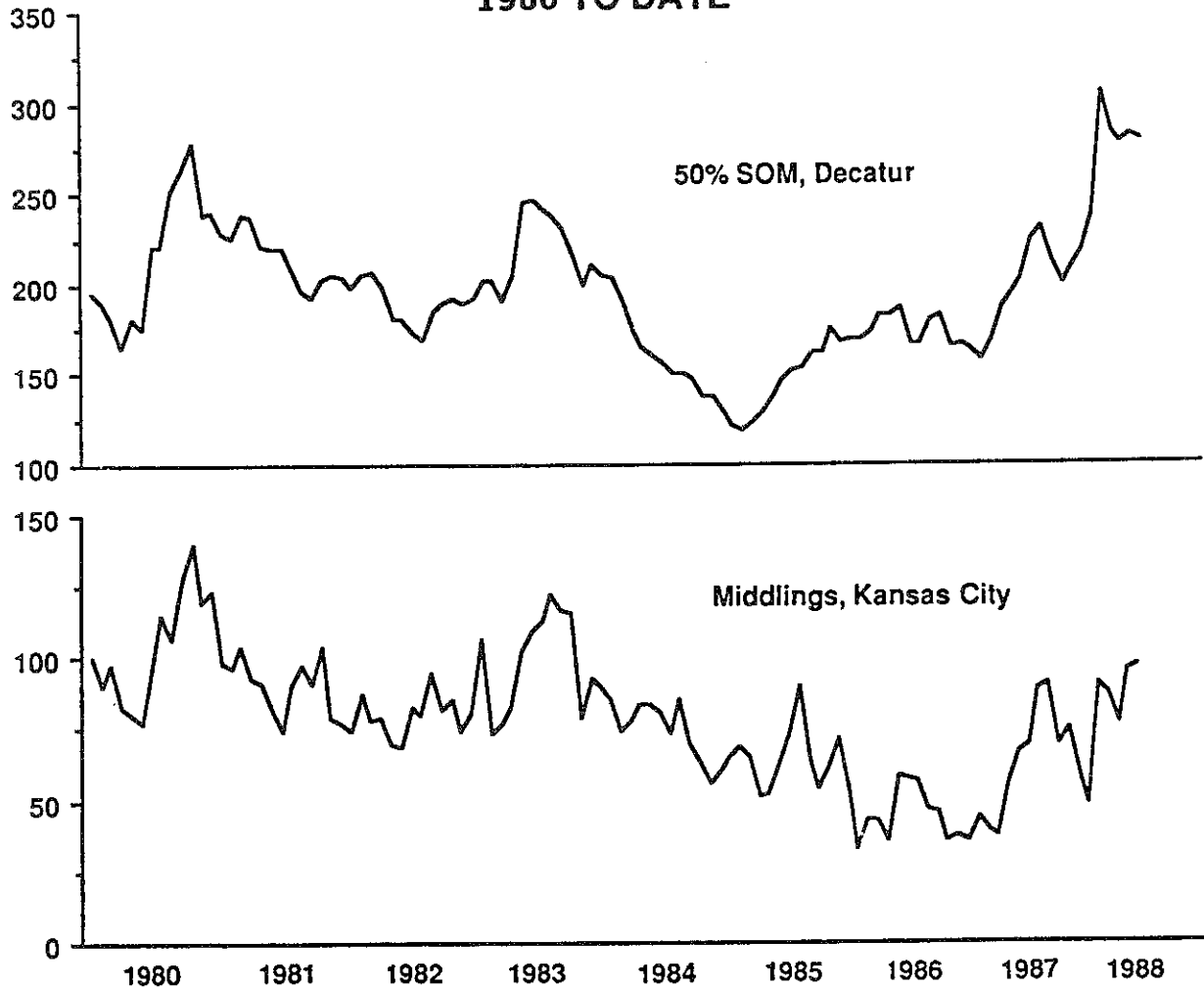
Corn prices increased from the fall of 1987 until mid-1988 but then declined somewhat. The U.S. average price received by farmers in October 1988 was \$2.71, \$1.16 above the year earlier level. The N.Y. price in October was \$3.08 per bushel, \$1.26 above the level of a year earlier.

The mid-November USDA projection of the season average price received by U.S. farmers for the 1988 corn crop was \$2.40 to \$2.80 per bushel. The mid-point is \$.66 above the season average price for the 1987 crop.

USDA's projection for the season average price of 1988 crop soybeans is \$6.75 to \$8.75, with a mid-point \$1.60 above the average price for the 1987 crop.

The projected season average 1988 crop price for U.S. wheat is \$3.55 to \$3.85. The mid-point is \$1.13 above the average price received by farmers for the 1987 crop.

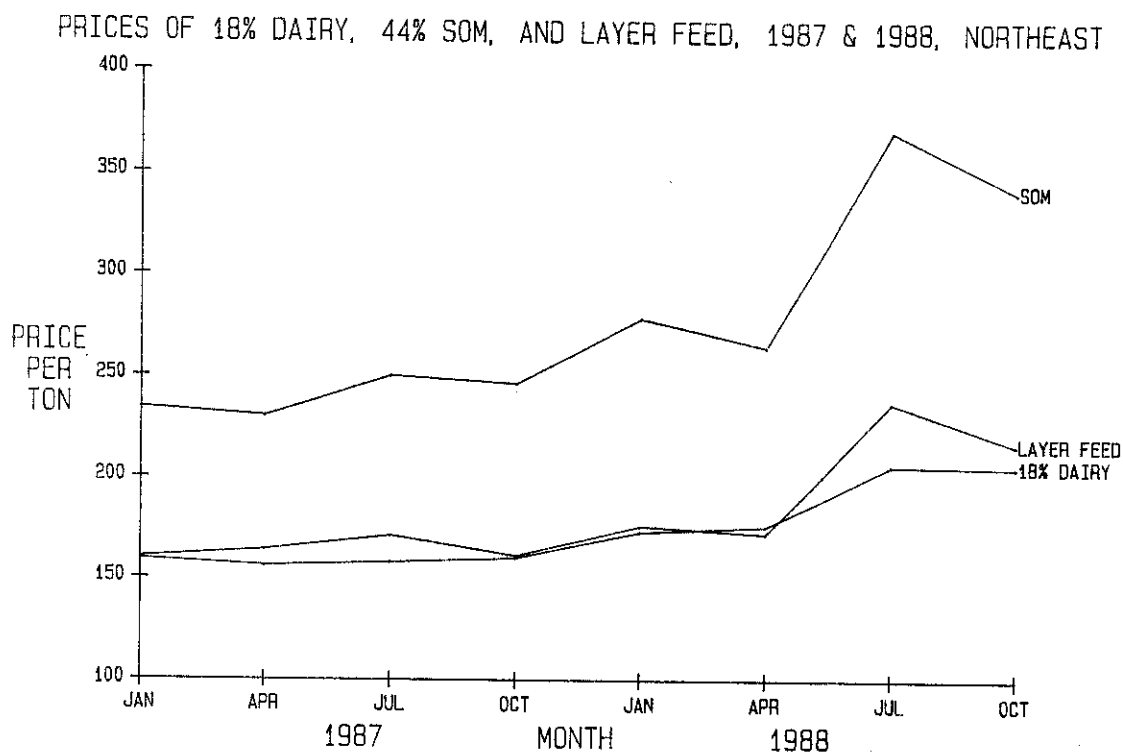
MONTHLY PRICES OF SOYBEAN MEAL AND MIDLINGS 1980 TO DATE



Source: USDA Feed Situation and Feedstuffs

Prices of soybean oil meal (50%, Decatur) increased rather steadily from \$200 in February 1988 to \$305 in June 1988 and then declined to about \$280 in the fall of 1988. Fall 1988 prices were about \$75 above year earlier levels. Substantial price rationing by the market will be required to reduce the domestic use and exports of soybeans enough so that supplies are not completely depleted before the 1989 harvest.

Prices of byproducts such as middlings continue to fluctuate widely and are not always closely related to the prices of the grains from which they are derived. Prices of these byproducts in the fall of 1988 are around 40 percent above year earlier levels.



Source: USDA Agricultural Prices and New York Crop Reporting Service

Prices for 18% dairy feed increased from \$160 in October 1987 to \$206 in July 1988 and remained at about this level until the fall of 1988.

Layer feed prices increased from \$161 in October 1987 to \$237 in July 1988 and declined to \$216 in October. In October 1988, 18% dairy was \$45 above the price of a year earlier. Layer feed was \$55 per ton above the level of a year earlier. In October 1988, soybean meal (44%) was \$94 per ton above the year earlier level.

Month	1988			1989		
	18% Dairy	44% SOM	Layer feed	18% Dairy	44% SOM	Layer feed
Jan	173	278	176	—	—	—
Apr	176	264	172	—	—	—
July	206	360	237	—	—	—
Oct	205	340	216	—	—	—

Only quarterly data are available after February 1986, and those data are for New York and New England combined.

Layer feed and 18% dairy prices in the first half of 1989 are likely to average at least \$30 to \$40 per ton above the levels of the first half of 1988. Soybean meal prices in the first half of 1989 are likely to be at least \$80 per ton above year earlier levels.

1989 DAIRY OUTLOOK

Overview

POSITIVE FACTORS

- Continued Tight Northeast Milk Supply
- First Half of Year Milk Prices Above Year Earlier
- Continued Over-Order Premiums
- Virtually No Uncommitted CCC Stocks

NEGATIVE FACTORS

- Higher Prices Paid by Dairy Farmers for all Items
- Higher Average Annual Feed Prices
- Second Half of Year Milk Prices Below Year Earlier
- Tight Farm Labor Supply

UNCERTAINTIES

- Second Half of Year Feed Prices
- Growth in U.S. Milk Supply
- Strength of U.S. Economy
- Rate of Growth in Commercial Disappearance
- End of Year changes in Dairy Policy

NEW YORK DAIRY SITUATION AND OUTLOOK
1986, 1987, Preliminary 1988, and Projected 1989

Item	Year				Percent Change	
	1986	1987	1988	1989	87-88	88-89
Number of milk cows (thousand head)	934	858	822	810	-4.2	-1.5
Milk per cow (lbs.)	12,551	13,242	13,765	14,040	+3.9	+2.0
Total milk production (million lbs.)	11,723	11,362	11,315	11,372	-0.4	+0.5
Blended milk price (\$/cwt.) ^a	12.09	12.18	11.83	11.84	-2.9	-0.1
Index of prices paid by dairy farmers	149	149	161	167	+8.1	+3.7

^aNew York-New Jersey blend price, 201-210 mile zone, 3.5 percent fat.
Effective farm price after milk price assessments for 1986 is \$11.73, \$11.99 for 1987, \$11.80 for 1988, and projected 1989 is \$11.84.

Table 1
U.S. Milk Supply and Utilization
1981-1989

	1981	1982	1983	1984	1985 ^a	1986 ^a	1987 ^b	1988 ^c	1989 ^d
<u>Supply</u>									
Cow Numbers (thous.)	10898	11011	11098	10833	11016	10813	10334	10243	10135
Production/Cow (lbs.)	12183	12306	12585	12506	12994	13260	13786	14185	14430
	(billion pounds)								
Production	133.0	135.5	139.7	135.4	143.1	143.4	142.5	145.3	146.2
Farm Use	2.3	2.4	2.4	2.9	2.4	2.4	2.2	2.2	2.2
Marketings	130.7	133.1	137.3	132.5	140.7	141.0	140.3	143.1	144.0
Beginning Commercial Stocks	5.8	5.4	4.6	5.2	4.9	4.6	4.2	4.6	4.8
Imports	2.3	2.5	2.6	2.7	2.8	2.7	2.5	2.5	2.5
TOTAL SUPPLY	138.8	141.0	144.5	140.5	148.4	148.3	146.9	150.2	151.3
<u>Utilization</u>									
Commercial Disappearance	120.5	122.1	122.5	126.9	130.6	133.5	135.6	136.5	137.5
Ending Commercial Stocks	5.4	4.6	5.2	4.9	4.6	4.2	4.6	4.8	4.8
Net Government Removals	12.9	14.3	16.8	8.6	13.2	10.6	6.7	8.9	9.0
TOTAL USE	138.8	141.0	144.5	140.5	148.4	148.3	146.9	150.2	151.3

Source: Dairy Situation and Outlook, Milk Production, and Dairy Market News, U.S. Department of Agriculture.

^a Revised.

^b Preliminary.

^c Based on preliminary USDA data and Cornell estimates.

^d Projected by Andrew Novakovic.

The U.S. Dairy Situation and Outlook

Milk Supplies

Milk production started 1988 up relative to the Dairy Termination Program (DTP) effected first half of 1987. The middle of 1988 brought the worst wide-spread drought since the 1930s and production declined relative to 1987. Drought relief came to much of the country by August or September and production rebounded. In this roller coaster year, the ups ended ahead of the downs and milk production for the year is estimated to exceed 1987 by almost 2% or 2.8 billion pounds (Table 1). If one adjusts for the fact that 1988 was a leap year, the estimated increase is reduced to 1.7%.

Nationally, milk production per cow in 1988 is about 3% or 400 pounds/cow higher than 1987. When this is adjusted for leap year, the gain is actually more like 2.6%; quite a bit less than the 4% gain achieved in 1987. Cow numbers are down about 0.9% or 91,000 cows, much less than the buyout affected reduction in 1987.

Most states followed the national up-down-up pattern of national production; however California and Texas were important exceptions. Through October 1988, Texas production has increased 12%, hardly showing any slowing in its rapid growth. California grew 2% in the third quarter of 1988 compared to a 4% growth in the first quarter, but it is still up between 3% to 4% for the first 9 months of 1988. Wisconsin, the nation's largest milk producer, was sharply affected by the summer drought, but its production began increasing again in the Fall. For the first 9 months of 1988, Wisconsin production is up over 2%, about the national average. The Northeast was less affected by the drought than the Midwest, yet production is down from Pennsylvania through New England. On a monthly basis, the only major milk producing states that are still below year earlier levels in October are New York, Michigan, and Vermont.

Milk Utilization

In a remarkable departure from the considerable increases experienced since 1983, commercial disappearance (or sales) of dairy products have been running below year earlier levels through the third quarter of 1988. In part because fourth quarter 1987 was a very poor quarter; most analysts are still expecting 1988 to end up above 1987. Our estimate of an annual gain of 0.7% reduces to 0.4% when adjusted for leap year (Table 1); this means per capita dairy product disappearance is down for only the second time during the 1980s.

Growth in cheese consumption, particularly Italian cheeses, is still very good, but sales of butter have fallen dramatically. The most remarkable story this year is for nonfat dry milk. During most of the 1980s, as much as 75% of the nonfat dry milk produced in the U.S. was sold to the government. This year, lower world production, higher world prices, a cheaper dollar, lower U.S. prices, and some concerns over Chernobyl tainted European powder have combined to make U.S. nonfat dry milk very competitive on world markets.

These very different changes on a product by product basis are probably not reflected very well in the milk equivalent, total commercial disappearance figure. Total disappearance is calculated on a fats-basis, the decline in

total is very much affected by the decline in butter and nonfat dry milk has no impact whatsoever. No matter how its sliced, after four years of incredibly good increases, this was not a very good year for dairy sales in total.

Price Support Program

With production increasing faster than consumption, net removals under the price support program are estimated to be up by about one-third, ending the year close to 9 billion pounds (m.e.), (Table 1). This represents about 6% of the milk produced in the U.S., compared to 4% in 1987. Although still well below net removals during the rest of the 1980s, net removals at this level are still too high to take the budget and political pressure off of dairy programs.

It also appears that, if the Disaster Assistance Act of 1988 had not eliminated the possibility, the support price would surely be reduced on January 1, 1989. As it is, the amended Food Security Act of 1985 now holds the support price for milk at \$10.60 through March, 1989. From April through May it will increase to \$11.10. In June it returns to \$10.60. On January 1, 1990, the support price will once again be subject to review and a possible 50¢ reduction, if net removals for 1990 are projected to exceed 5 billion pounds.

Milk Prices

As shown in Table 2, farm milk prices in 1988 are estimated to be almost 40¢ below last year. If assessments are included, the effective average price of all milk in 1988 is actually down 25¢/cwt.

Wholesale prices for butter followed the CCC purchase price down. But wholesale prices for cheddar cheese and nonfat dry milk were held to year earlier levels despite drops in the CCC purchase price. As indicated earlier, butter sales were very poor this year, but good domestic markets for cheese and very good export markets for nonfat dry milk held wholesale prices above purchase prices.

Although the differences are closer than in previous years, retail prices of dairy products are estimated to have increased less than the general rate of inflation for consumer products. All dairy product prices are estimated to average about a 2% increase over 1987. Fluid whole milk, like all food prices, are estimated to be up about 5% in 1988, which is less than a half percent below the expected increase in the general Consumer Price Index.

The 1989 Outlook - Policy

Barring new legislation, there will be almost no changes in dairy programs in 1989. The support price will be increased 50¢ for the three months of April, May, and June, and it is likely to be dropped to \$10.10 on January 1, 1990. The real question is what will come out of the many policy discussions that are taking place and which touch every major dairy program.

The Food Security Act of 1985 is scheduled to expire at the end of 1990. Apparently what seemed like a good idea to Congress in 1985 does not look like such a good idea now. With 1990 Congressional elections affecting several key agriculture committee positions in the Senate and everybody in the House, the

prevailing sentiment today is to not wait for 1990 before changing agricultural policy, including dairy. The possibilities range from a simple extension of current provisions through 1991 to having a full scale debate and new policy in 1989. One might guess that unless legislative leaders tightly hold discussion to a simple extension, the Pandora's Box of policy options will once again burst open. As before, discussions will range from triggered price support cuts to mandatory production quotas and many points in between.

Where all these many and varied discussions will eventually lead and when one change or another will be made is anybody's guess right now. In any case, it seems rather unlikely that any changes would be enacted until late 1989 at the earliest.

The 1989 Outlook - The Market

As shown in Table 1, production per cow is expected to push milk production up less than 1% or about 1 billion pounds, despite a projected decline in cow numbers. Higher feed prices and somewhat shorter supplies of corn and hay, may hold down production per cow increases somewhat, but expectations would still point to improvements in production per cow only a little off the recent trend. Changes in total cow numbers will depend in part on the number of dairy farmers going out of business relative to new entrants, but they may be more affected by heavier culling and/or fewer additions to herds in the first half of the year, while feed is still tight. Lower numbers of replacement heifers are part of the limit on new additions to dairy herds.

Perhaps it is too easy to just extend the most recent annual trend, but it is hard to see why commercial disappearance in 1989 should be much different from what it is in 1988. The projection of a 0.4% increase next year is closer to a 1% increase if one allows for the fact that 1988 is a leap year. The much awaited general recession that business economists talk about is still a dark cloud on the horizon, as well.

With these projected changes in production and commercial disappearance, net removals of dairy products under the price support program would be near 9 billion pounds, about the same as 1988. Obviously, net removals could be lower, but it seems unlikely that they will fall below 5 billion pounds, the current magic number for the maximum desired level of net removals.

In a nutshell, the annual averages and totals for 1989 are projected to look very similar to 1988. One important difference may be changes within the year. For dairy farmers, 1988 ends on an up-tick -- consumption is picking up, markets are led by demand, price support sales to the government are trivial, the drought is over, feed prices are a little lower than their peak, and milk prices are the highest they've been in two years. The end of 1989 may reverse much of this. Assuming a more normal crop year, feed prices may moderate some, but milk prices will likely be pointing down again. Net removals won't add up much different but the impression is likely to be that they are building rather than decreasing. Another year of flat sales gains will sound a lot worse than it does now.

Table 2
Farm Prices for Milk; CCC Purchase, Wholesale, and Retail Prices
for Cheese, Butter, and Nonfat Dry Milk; and Selected Retail Price Indices
1981-1988

	1981	1982	1983	1984	1985	1986	1987 ^a	1988 ^b
Farm Milk (\$/cwt., ave. fat):								
All Milk	13.77	13.61	13.58	13.46	12.75	12.50	12.54	12.15
Grade A	13.95	13.80	13.75	13.61	12.90	12.62	12.68	12.25
Grade B	12.72	12.60	12.61	12.49	11.72	11.46	11.37	11.05
Milk/16% Feed Ratio	1.43	1.54	1.45	1.41	1.52	1.57	1.63	1.34
Assessment	.00	.00	.48	.50	.125	.365	.188	.025
Cheese (\$/lb.):								
CCC Purchase, Natural Cheddar, Grade A or higher, blocks	1.400	1.400	1.391	1.348	1.279	1.250	1.219	1.1525
Wholesale, Cheddar (40 pound blocks), National Cheese Exchange	1.358	1.358	1.352	1.341	1.248	1.260	1.213	1.21
Retail, Cheddar Cheese	N.A.	N.A.	N.A.	3.065	3.093	3.049	3.056	3.17
Butter (\$/lb.):								
CCC Purchase, Grade A or higher, Chicago	1.490	1.490	1.485	1.433	1.415	1.398	1.373	1.320
Wholesale, Grade A, Chicago (1 lb.)	1.480	1.477	1.473	1.488	1.411	1.445	1.402	1.32
Retail, Grade AA, sticks (1 lb.)	1.993	2.046	2.066	2.107	2.121	2.151	2.170	2.17
Nonfat Dry Milk (\$/lb.):								
CCC Purchase, Spray Process, Extra Grade, Unfortified	.940	.940	.937	.910	.843	.808	.783	.7275
Wholesale (1 lb.)	.940	.940	.932	.909	.841	.806	.791	.79
Retail Price Indices (1982-84=100.0):								
Fluid Whole Milk	98.1	99.4	100.1	100.5	99.6	99.4	101.0	106.0
All Dairy Products	97.4	98.8	100.0	101.3	103.2	103.3	105.9	108.0
All Food	93.6	97.4	99.4	103.2	105.6	109.0	113.5	118.0
All Consumer Prices	90.9	96.5	99.6	103.9	107.6	109.6	113.6	119.0

Source: Dairy Situation and Outlook, Dairy Market News, and Federal Milk Order Market Summaries, U.S. Department of Agriculture.

^a Revised.

^b Estimated.

Number of Producers Delivering Milk, Simple Average of Months per Year
Northeast Federal and State Marketing Orders
1982-1988

Markets	1982	1983	1984	1985	1986	1987 ^a	1988 ^b
New York-New Jersey	17485	17434	17120	16521	15876	14731	13980
New England	6923	6812	6669	6350	5891	5412	5182
Middle Atlantic	7168	7033	6891	6712	6586	6406	6196
E. Ohio-W. Pennsylvania	6219	6322	6235	6103	5885	5605	5487
Western N.Y. Order (Buffalo & Rochester)	1311	1286	1258	1211	1161	1088	1000
Regional Total	39106	38887	37922	36902	35353	33242	31845

Source: Annual Federal Milk Order Market Statistics and Annual Statistical Reports for State Orders.

^aRevised.

^bEstimated.

Producer numbers in Northeast Federal and State Order markets declined by 1397, or 4.2 percent in 1988 following a 6 percent decline in 1987.

Higher costs, particularly of feed, lower milk prices, dry weather and increasing urban pressures in some Northeast areas were all factors that influenced the relatively high attrition rate.

During the five-year period from 1984 through 1988, which encompassed the Milk Diversion and Dairy Termination Programs, producer numbers in the Northeast Order markets have declined by 6077 or 16 percent. For 1988, the New York Federal and State Order markets registered the largest percentage declines of 5 and 7 percent, respectively, while producer numbers declined by only 2.1 percent in the E. Ohio-W. Pennsylvania Federal Order.

A further decline of 3 to 4 percent in producer numbers is expected in the Northeast orders in 1989.

Receipts of Milk from Producers by Regulated Handlers, Million Pounds
 Northeast Federal and State Marketing Orders
 1982-1988

Markets	1982	1983	1984	1985	1986	1987 ^a	1988 ^b
	(million pounds)						
New York-New Jersey	11094	11643	11358	11689	11729	11339	11201
New England	5253	5483	5252	5399	5341	5173	5124
Middle Atlantic	6043	6140	5850	6239	6412	6281	6215
E. Ohio-W. Pennsylvania	3486	3750	3669	3866	3884	3842	3915
Western N.Y. Order (Buffalo & Rochester)	<u>1090</u>	<u>1172</u>	<u>1158</u>	<u>1212</u>	<u>1237</u>	<u>1203</u>	<u>1240</u>
Regional Total	26966	28188	27287	28406	28603	27838	27695

Source: Annual Federal Milk Order Market Statistics and Annual Statistical Reports for State Orders.

^aRevised.

^bEstimated.

Total receipts of milk from Northeast Order producers declined by 143 million pounds or 0.5 percent in 1988.

The New York-New Jersey, New England and Middle Atlantic Orders all had declines of approximately 1 percent while the E. Ohio-W. Pennsylvania Federal Order increased by almost 2 percent. The Western New York State Order had an increase of 3 percent as a result of the order area expansion that became effective on July 28, 1988.

In 1989, the New England market is expected to experience a further decline of 1 to 2 percent in producer receipts as production areas in the States of Connecticut and Massachusetts come under increasing urban pressure. Producer receipts in the New York-New Jersey market will be affected by the continuing shift of New York milk supplies to New England handlers. A further modest decline of approximately 0.5 percent in producer receipts is expected in the New York-New Jersey and Middle Atlantic Orders in 1989. Receipts are expected to increase further in the E. Ohio-W. Pennsylvania and Western New York Orders in 1989.

Producer Milk Used in Class I by Regulated Handlers, Million Pounds
Northeast Federal and State Marketing Orders
1982-1988

Markets	1982	1983	1984	1985	1986	1987 ^a	1988 ^b
	(million pounds)						
New York-New Jersey	4523	4457	4534	4662	4665	4606	4612
New England	2762	2788	2786	2793	2814	2813	2820
Middle Atlantic	2792	2884	2895	2869	2986	3152	3068
E. Ohio-W. Pennsylvania	1942	1954	2019	2033	1985	2023	2037
Western N.Y. Order (Buffalo & Rochester)	447	441	437	443	437	427	501
Regional Total	12466	12524	12672	12800	12887	13021	13038

Source: Annual Federal Milk Order Market Statistics and Annual Statistical Reports for State Orders.

^aRevised.

^bEstimated.

Fluid milk sales in the Northeast Order markets were virtually unchanged in 1988, having increased by only 17 million pounds or 0.1 percent.

Fractional increases in sales were registered in the New England, New York-New Jersey and E. Ohio-W. Pennsylvania Federal Orders. Class I sales in the Middle Atlantic Order declined 2.7 percent in 1988, following a 5.5 percent increase in 1987. The decline occurred as a result of increasing milk production in Southern markets which reduced the need for shipments of fluid milk to these markets. The Western New York State Order posted a 17 percent increase in fluid sales for the year, primarily resulting from the expansion of the marketing area in July.

In 1989, Northeast Order fluid sales are expected to remain relatively unchanged.

Producer Milk Used in Class I as Percentage of All Producer Milk Received
by Regulated Handlers
Northeast Federal and State Marketing Orders
1982-1988

Markets	1982	1983	1984	1985	1986	1987 ^a	1988 ^b
	(percent)						
New York-New Jersey	41	38	40	40	40	41	41
New England	53	51	53	52	53	54	55
Middle Atlantic	46	47	50	46	47	50	49
E. Ohio-W. Pennsylvania	56	52	55	53	51	53	52
Western N.Y. Order (Buffalo & Rochester)	41	38	38	37	35	36	40

Source: Annual Federal Milk Order Market Statistics and Annual Statistical Reports for State Orders.

^aRevised.

^bEstimated.

The Class I fluid utilization is impacted by the volume of fluid sales and total receipts of milk in a market.

Fluid utilization was relatively stable in the four Federal Order markets with only fractional changes up or down.

The sharp increase in fluid utilization in the Western New York State Order reflects the order expansion that went into effect in July.

Class I utilization is expected to remain stable in most Northeast markets in 1989.

Minimum Class I Prices for 3.5% Milk
Northeast Federal and State Marketing Orders
1982-1988

Markets	1982	1983	1984	1985	1986	1987	1988 ^a
	(\$/cwt)						
New York-New Jersey ¹	14.73	14.78	14.49	13.97	13.63	13.89	13.41
New England ²	14.76	14.82	14.52	14.00	13.62	13.86	13.38
Middle Atlantic ³	15.26	15.32	15.02	14.50	14.13	14.37	13.89
E. Ohio-W. Pennsylvania ³	14.43	14.49	14.19	13.67	13.20	13.34	12.86
Western N.Y. Order ³ (Buffalo & Rochester)	15.19	15.25	14.95	14.43	14.09	14.35	13.45

Source: Annual Federal Milk Order Market Statistics and Annual Statistical Reports for State Orders.

^aEstimated.

¹201-210 mile zone.

²21st zone.

³Priced at major city in the marketing area.

The minimum Order price of Class I fluid milk declined 48 cents per hundredweight, or approximately 3.5 percent in Northeast Order markets during 1988, following an increase of more than 1 percent in 1987.

In the Western New York State Order the Class I differential was reduced by 71 cents per hundredweight when the amended order became effective July 28, 1988. The combination of a lower M-W price and lower Class I differential reduced the State Order fluid price by 90 cents, or 6.3 percent, from the previous year.

In 1989, the Northeast Federal Order Class I prices are expected to vary seasonally from year earlier levels, being higher in the spring and lower in the fall. For the year, Class I prices should average 1 to 2 percent above 1988. The fluid price for the Western New York State Order should average slightly below 1988.

Minimum Class II Prices for 3.5% Milk
Northeast Federal and State Marketing Orders
1982-1988

Markets	1982	1983	1984	1985	1986	1987	1988 ^a
	(\$/cwt)						
New York-New Jersey ¹	12.49	12.50	12.29	11.48	11.30	11.23	10.95
New England ²	12.49	12.50	12.29	11.48	11.30	11.23	10.95
Middle Atlantic ³	12.51	12.52	12.31	11.50	11.32	11.25	11.00
E. Ohio-W. Pennsylvania ⁴	12.49	12.49	12.29	11.48	11.30	11.23	10.93
Western N.Y. Order ³ (Buffalo & Rochester)	12.44	12.45	12.24	11.43	11.25	11.18	10.93

Source: Annual Federal Milk Order Market Statistics and Annual Statistical Reports for State Orders.

^aEstimated.

¹201-210 mile zone.

²21st zone.

³Priced at major city in the marketing area.

⁴Class III.

Class II manufacturing milk prices declined by 2.5 percent in 1988 following a decline of less than 1 percent in 1987.

Class II prices in the five order markets ranged from 25 to 30 cents below 1987 levels.

In 1989, minimum Order Class II prices are expected to vary seasonally from 1988 levels, but should average near or slightly below 1988.

Minimum Blend Prices for 3.5% Milk
Northeast Federal and State Marketing Orders
1982-1988

Markets	1982	1983	1984	1985	1986	1987	1988 ^a
	(\$/cwt)						
New York-New Jersey ¹	13.26	13.23	13.03	12.32	12.09	12.18	11.83
New England ²	13.61	13.59	13.38	12.67	12.43	12.56	12.20
Middle Atlantic ³	13.80	13.85	13.67	12.90	12.66	12.84	12.44
E. Ohio-W. Pennsylvania ³	13.53	13.46	13.35	12.69	12.32	12.37	11.97
Western N.Y. Order ³ (Buffalo & Rochester)	13.43	13.36	13.18	12.47	12.25	12.22	11.94

Source: Annual Federal Milk Order Market Statistics and Annual Statistical Reports for State Orders.

^aEstimated.

¹201-210 mile zone.

²21st zone.

³Priced at major city in the marketing area.

Northeast Order minimum blend prices declined approximately 3 percent in 1988, following an increase of nearly 1 percent the previous year.

The blend price in the four Federal Orders declined between 35 and 40 cents from previous year levels. The blend price declined 12 cents less in the Western New York Order due to the Order amendments that became effective in July 1988.

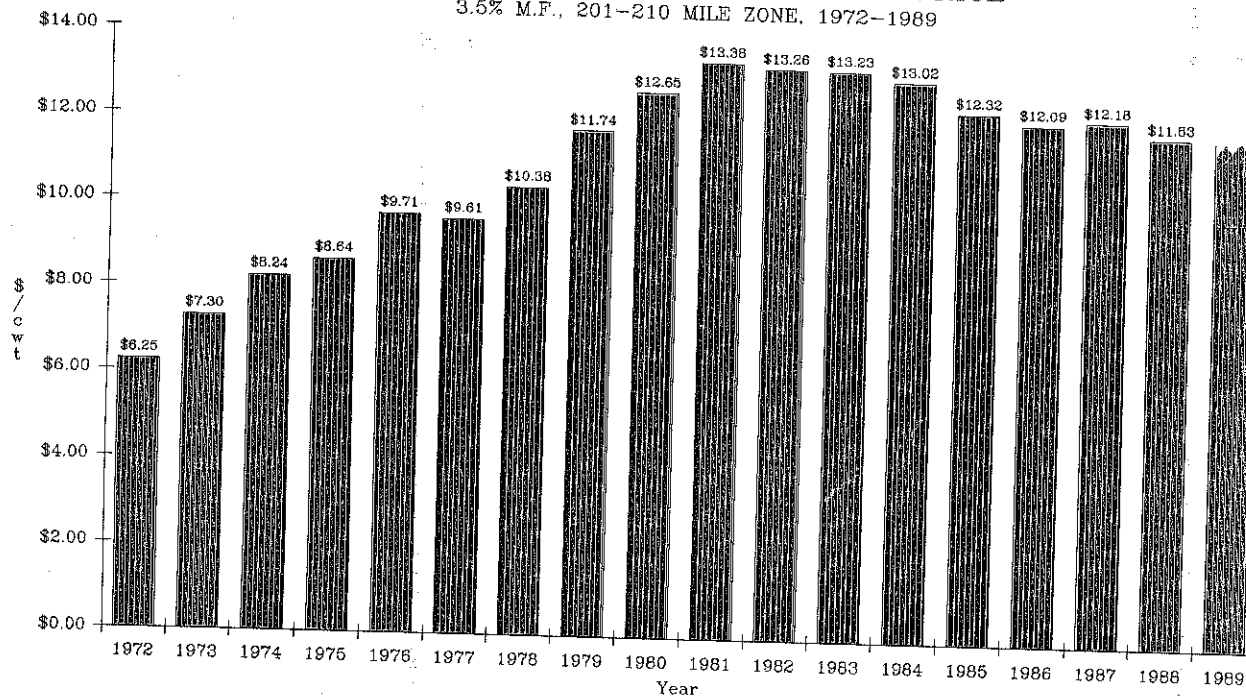
Emergency legislation enacted in response to the 1988 drought freezes the \$10.60 support price set on January 1, 1988 through March 31, 1989. During the second quarter of 1989, the support price will increase to \$11.10; however, for the last half of 1989 the support price returns to \$10.60.

During the first half of 1989, blend prices in the New York-New Jersey Order are expected to average 49 cents above year earlier levels, but this situation is expected to reverse during the second half of the year as U.S. milk supplies rebound from this year's drought-induced slump.

Second half blend prices are expected to fall below the previous year by 49 cents, thus leaving the annual average blend price almost unchanged.

RCMA and other over-order premiums should continue at levels comparable to 1988.

NEW YORK-NEW JERSEY BLEND PRICE 3.5% M.F., 201-210 MILE ZONE, 1972-1989



N.Y.-N.J. Blend Price, 3.5% M.F., 201-210 Mile Zone, 1982-1988

Month	1982	1983	1984	1985	1986	1987	1988
January	\$13.35	\$13.35	\$12.99	\$13.34	\$11.92	\$12.76	\$12.03
February	13.30	13.35	12.79	13.13	11.84	12.42	11.80
March	13.02	13.01	12.55	12.64	11.50	11.92	11.29
April	12.82	12.85	12.36	12.19	11.31	11.55	10.92
May	12.61	12.64	12.26	11.78	11.25	11.30	10.71
June	12.63	12.61	12.29	11.47	11.27	11.35	10.66
July	13.16	13.12	12.84	11.93	11.86	11.96	11.31
August	13.59	13.59	13.39	12.27	12.46	12.44	12.03
September	13.74	13.75	13.74	12.37	12.79	12.75	12.50
October	13.81	13.74	13.83	12.40	13.05	12.80	12.94
November	13.71	13.63	13.91	12.30	13.05	12.69	12.96*
December	13.41	13.07	13.38	12.01	12.78	12.21	12.80*
Average	13.26	13.23	13.03	12.32	12.09	12.18	11.83*

*Estimates

Source: Price Announcements, Office of the Administrator, New York-New Jersey Milk Marketing Area.

MILK PRICE PROJECTIONS
New York-New Jersey Blend Price, 3.5 Percent, 201-210 Mile Zone
Last Quarter 1988 - First Half 1989

Month	1987	1988	Difference
	(dollars per hundredweight)		
October	12.80	12.94a	+0.14
November	12.69	12.96p	+0.27
December	12.21	12.80p	+0.59
Annual Average	12.18	11.83p	-0.35
	1988	1989e	
January	12.03	12.57	+0.54
February	11.80	12.31	+0.51
March	11.29	11.87	+0.58
April	10.92	11.44	+0.52
May	10.71	11.15	+0.44
June	10.66	11.03	+0.37
Six Month Average	11.24	11.73	+0.49
Annual Average Blend Price	11.83	11.84	+0.01
Annual Effective Price*	11.80	11.84	+0.04

*Blend price less CCC assessment.

a=actual; p=projected; e=estimated.

Assumptions Associated With These Projections

No drop in support price on January 1, 1989.

A 50¢/cwt increase in the support price for April, May and June, 1989.

National milk production up 0.5 to 1.0 percent.

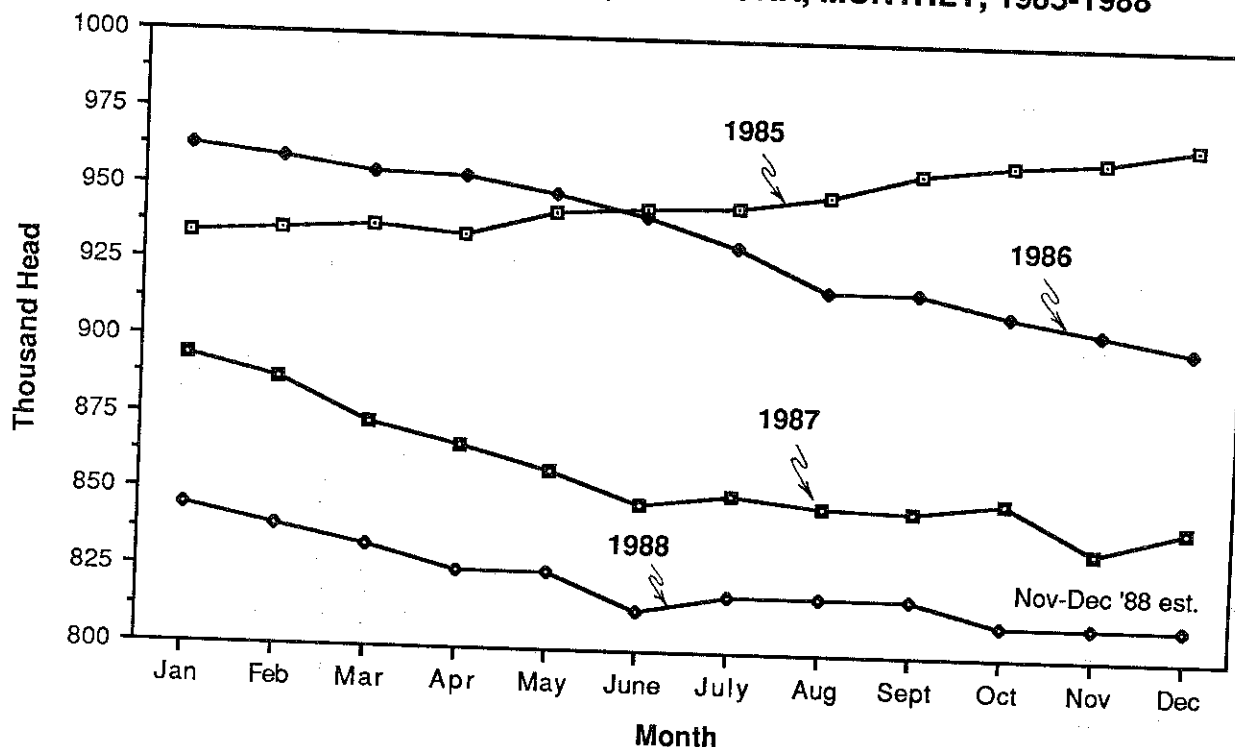
Commercial sales up 0.5 to 1 percent.

CCC purchases from 7 to 10 billion pounds M.E.

Government stocks at relatively low levels.

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MILK COWS ON FARMS, NEW YORK, MONTHLY, 1985-1988



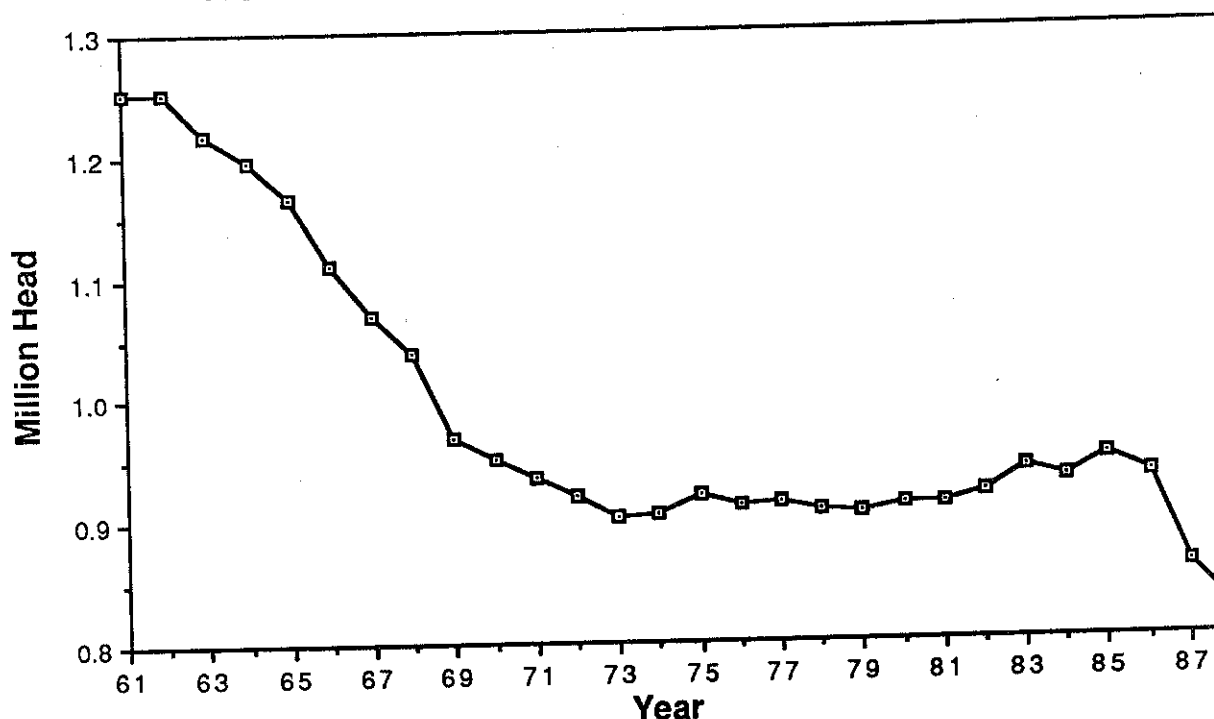
SOURCE: New York Agricultural Statistics.

Monthly cow numbers during 1988 have been well below those during the period of 1985 through 1987. A steady decline in monthly cow numbers in New York began in January 1986 and continued uninterrupted through June 1987. Cow numbers stabilized the second half of 1987, and have once again been declining in 1988. In October 1988, the number of cows totaled 810,000, which was the lowest number for any month in New York since monthly records began in 1930. The number of cows in the State is projected to remain stable through the remainder of the year.

The U.S. quarterly milk cow numbers have followed the same trend as that in New York. In the third quarter of 1988, the number of cows in the U.S. averaged 10,219,000. That is 64,000 head less than a year earlier. The Northeast¹ comprised 19 percent of total U.S. milk cows or 1,990,000 head in the third quarter of 1988. This is 54,300 head less than a year earlier. The Northeast accounted for 85 percent of the 1987 to 1988 third quarter U.S. reduction in cow numbers.

¹Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont.

NUMBER OF MILK COWS, NEW YORK, 1961-1988



SOURCE: New York Agricultural Statistics.

The average number of milk cows on New York farms for 1988 is estimated at 822,000 head, which is 4.2 percent lower than in 1987. The projected average number of cows for 1989 is 810,000, or down 1.5 percent from 1988.

Heifers on New York farms as a percent of cow numbers on January 1, 1988 decreased 8.4 percentage points from 1987 to 34.5 percent. At 291,000 head, milk cow replacement heifers were at the lowest level in 21 years.

Heifers on U.S. farms as a percent of cow numbers was 39.8 percent in January 1988, a 1.2 percentage point decrease from 1987. July 1988 U.S. heifers as a percent of cow numbers was 42.9 percent, a 3.1 percentage point increase since January 1988.

<u>Year</u>	<u>New York Milk Cows, Annual Average</u>	<u>New York Milk Cows, January</u>	<u>New York Heifers, January</u>	<u>Heifers as Percent of Cow Numbers</u>
	----- thousand head -----			percent
1980	911	910	356	39.1
1981	912	915	348	38.0
1982	919	920	403	43.8
1983	940	932	435	46.7
1984	931	943	428	45.4
1985	948	942	440	46.7
1986	934 ¹	968	430	44.4
1987	858 ¹	900	386	42.9
1988	822 ²	844	291	34.5
1989	810 ³			

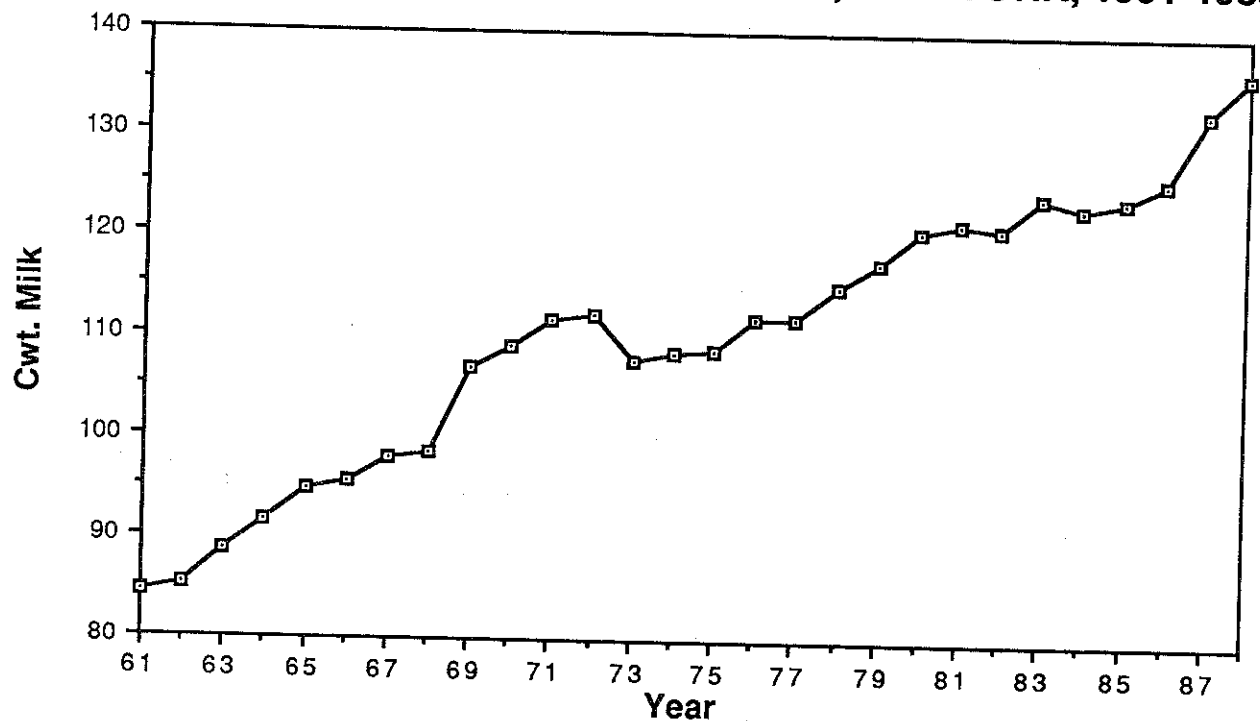
¹Revised

²Preliminary

³Projected

SOURCE: New York Agricultural Statistics

ANNUAL MILK PRODUCTION PER COW, NEW YORK, 1961-1988



SOURCE: New York Agricultural Statistics.

Pounds of milk produced per cow in 1987 was up by 5.5 percent from 1986 primarily due to the favorable milk-feed price ratio. Milk per cow is expected to average 13,765 pounds in 1988, an increase of 3.9 percent over 1987. Milk production per cow has increased steadily since 1960 with the exception of 1973 and 1974 and small declines in 1982 and 1984.

Milk production per cow is projected to increase in 1989 by 2.0 percent. Based on continued genetic improvements and reduced number of cows, milk per cow is projected to reach 14,040 pounds in 1989.

<u>Year</u>	<u>N.Y. Milk Production Per Cow pounds</u>	<u>N.Y. Mixed Dairy Feed 16% Protein \$/ton</u>	<u>New York Milk-Feed Price Ratio¹</u>	<u>New York All Hay, Baled² \$/ton</u>	<u>U.S. Milk Production Per Cow pounds</u>
1980	12,046	180	1.45	58.00	11,891
1981	12,137	194	1.43	69.00	12,183
1982	12,075	177	1.56	77.00	12,306
1983	12,393	193	1.43	82.00	12,585
1984	12,290	194	1.41	81.50	12,503
1985	12,374	164	1.57	75.50	12,994
1986 ³	12,551	163	1.56	70.50	13,260
1987 ³	13,242	153	1.68	72.00	13,786
1988 ⁴	13,765	181	1.35	76.00	14,185
1989 ⁵	14,040				

¹1980-1985 is New York, 1986-1988 is Northeast.

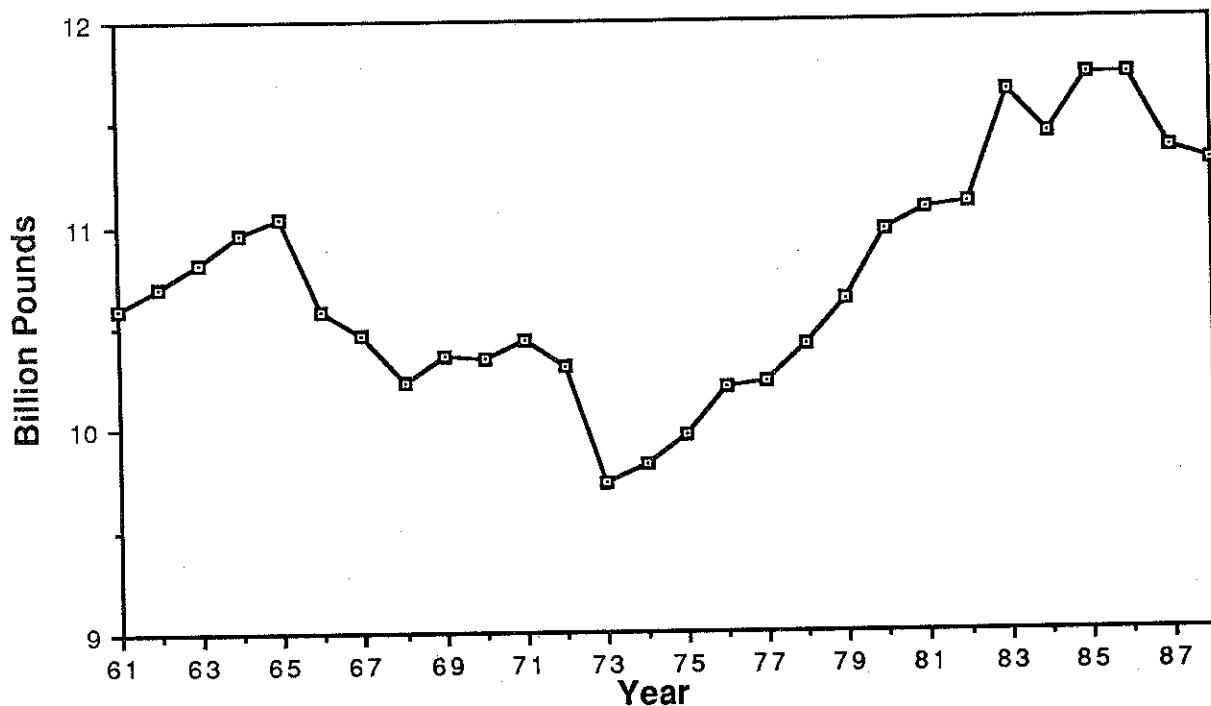
²Season average, June through May.

³Revised

⁴Preliminary

⁵Projected

TOTAL MILK PRODUCTION, NEW YORK, 1961-1988



SOURCE: New York Agricultural Statistics.

Total New York milk production in 1988 is estimated at 11,315 million pounds, down 0.4 percent from 1987. This decrease is entirely due to the 4.2 percent decrease in cow numbers, since production per cow is up by 3.9 percent.

Total milk production is projected to increase 0.5 percent in 1989 to 11,372 million pounds. This is a result of the factors discussed on the previous two pages in regard to cow numbers and production per cow.

United States total milk production was 142,462 million pounds in 1987. It is estimated that 1988 production will be a record high, surpassing 1987 by about two percent.

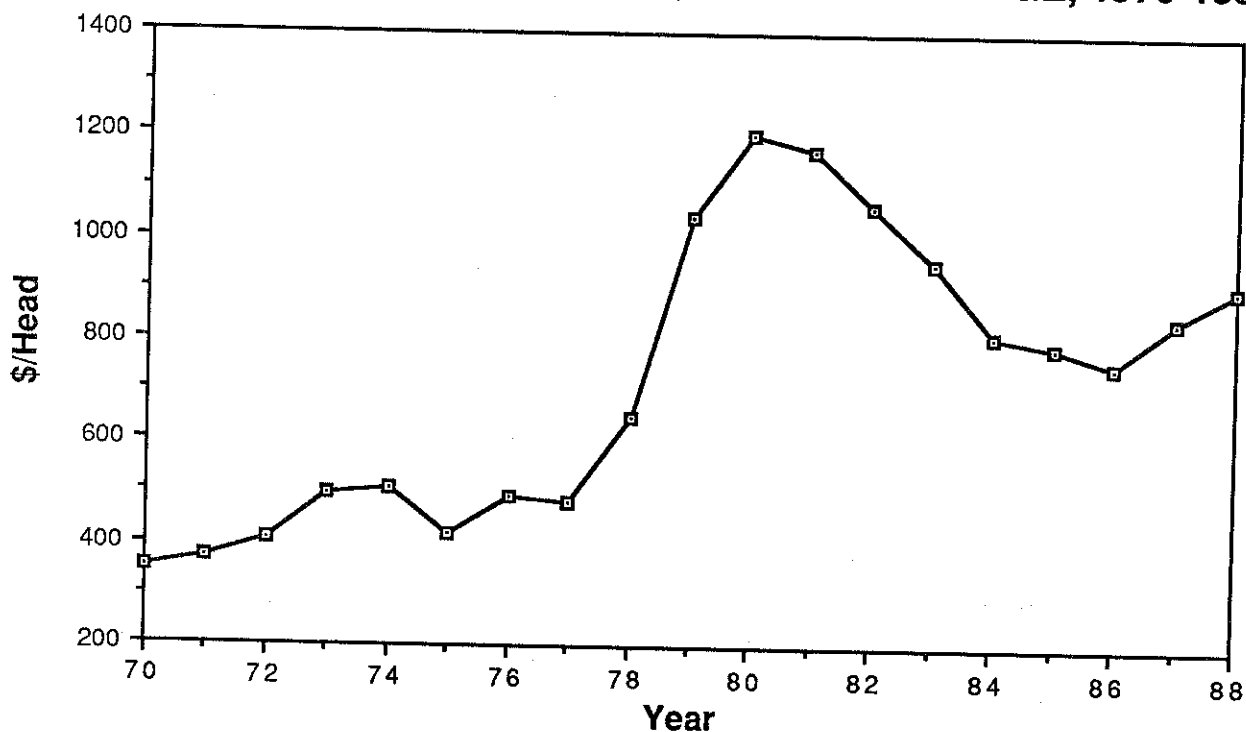
<u>Year</u>	<u>Total N.Y. Milk Production</u> million pounds	<u>Year</u>	<u>Total N.Y. Milk Production</u> million pounds
1980	10,974	1985	11,731
1981	11,069	1986	11,723
1982	11,097	1987	11,362 ¹
1983	11,649	1988	11,315 ²
1984	11,442	1989	11,372 ³

¹Revised

²Preliminary

³Projected

MILK COW PRICES, NEW YORK, SEASON AVERAGE, 1970-1988



SOURCE: New York Agricultural Statistics.

Milk cow prices increased through 1987 and the first half of 1988 to \$930 per head in July, the highest milk cow price since 1983. Monthly prices for milk cows have averaged \$70 a head higher than a year earlier. Slaughter cow prices are stronger than a year earlier. Calf prices were up more than \$20 per hundredweight in the first half of 1988 but have fallen below the 1987 level by October.

Month	Milk Cows. \$/Head		Slaughter Cows. \$/Cwt		Calves. \$/Cwt	
	1987	1988	1987	1988	1987	1988
January	790	\$880	35.40	\$43.30	\$59.10	\$ 88.30
February	790	890	37.80	45.50	64.80	94.40
March	810	910	39.60	44.90	63.10	88.10
April	830	920	41.10	47.20	71.30	100.00
May	840	930	43.60	47.40	86.00	113.00
June	850	930	42.40	44.40	86.50	103.00
July	860	930	41.60	42.60	78.40	88.20
August	860	910	40.90	43.10	80.50	85.50
September	860	890	41.00	43.30	85.90	91.00
October	870	900	41.90	43.70	90.50	90.00
November	870		41.30		83.50	
December	870		42.70		80.50	

INDEX OF PRICES PAID BY NEW YORK DAIRY FARMERS
(1977=100)

Item	Weight	1983	1984	1985	1986	1987	1988 ¹	1989 ²
Feed	.31	141	141	119	118	112	133	142
Purchased animals	.03	195	170	163	156	173	188	190
Fuel & energy	.05	205	206	204	178	176	184	188
Fertilizer	.05	139	142	134	127	128	139	145
Seed	.02	160	169	169	167	166	171	182
Machinery	.18	172	181	185	185	189	198	200
Building & fencing supplies	.08	138	138	136	136	137	138	140
Farm services & rent	.08	147	149	152	150	147	150	152
Agricultural chemicals	.01	125	128	128	127	124	126	133
Interest rates	.07	145	151	146	141	134	140	150
Farm wage rates	.09	151	158	169	185	195	206	216
Property taxes	.03	152	161	176	181	190	199	210
Prices Paid, Not Including Assessment		153	156	150	149	149	161	167
Prices Paid, Including Assessment		159	162	152	154	151	--	--
¹ *Preliminary		² Projected						

SOURCE: New York Agricultural Statistics Service

The preliminary 1988 index of prices paid by New York dairy farmers not including the assessment is 161, an 8 percent increase from the 1987 index of 149. Every component item in the index increased in 1988. Feed showed the largest increase at 19 percent, followed by purchased animals with a 9 percent increase, and fertilizer with an 8.5 percent increase. The index had been very stable from 1985 through 1987.

Feed prices are expected to increase by seven percent in 1989. The increase is not attributable to further increases in prices, but rather prices being stable at current levels at least through the first six months of the year. Prices during the first half of 1988 were much lower than prices in the last half of the year.

Seed prices, especially for corn, are expected to increase in 1989. Seed corn prices are likely to be up 10 to 15 percent. Fertilizer and chemical prices are expected to increase as a result of the projected increase in planted acres. Interest rates paid by farmers are expected to increase by one-half to one percentage point or about seven percent in 1989.

The 1989 index of prices paid is projected at 167, up 3.7 percent from 1988.

PERCENT OF MILK COW OPERATIONS AND INVENTORY BY HERD SIZE GROUPS
New York, 1978-1988

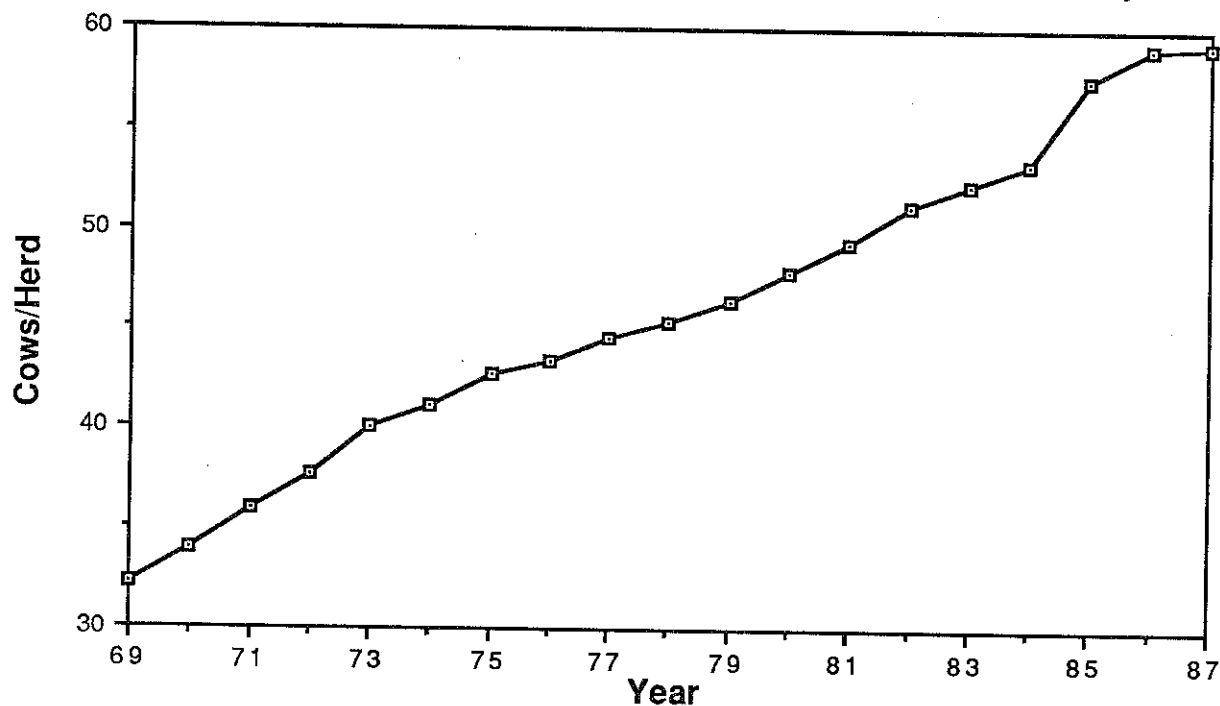
Year	MILK COW OPERATIONS			MILK COWS, JANUARY 1		
	Number of Milk Cows in Herd			Number of Milk Cows in Herd		
	<50	50-99	≥100	<50	50-99	≥100
	percent			percent		
1978	64	30	6	na	na	na
1979	64	29	7	35	43	22
1980	61	32	7	34	44	22
1981	60	32	8	31	44	25
1982	59	32	9	29	44	27
1983	58	32	10	29	44	27
1984	59	31	10	29	43	28
1985	58	31	11	28	41	31
1986	54	34	12	27	40	33
1987	52	35	13	25	41	34
1988				25	41	34

SOURCE: New York Agricultural Statistics Service.

The percent of dairy farms with more than 100 cows has been steadily increasing since the late 1970's, as the percent of farms with less than 50 cows has steadily decreased. The percent of dairy farms with 50-99 cows has remained fairly constant until 1986 when a 3 percent increase occurred. The percent of milk cows by herd size group follow a similar pattern.

As seen in the chart below, the average number of cows in a herd has steadily increased with the greatest increase occurring between 1984 and 1985.

AVERAGE NUMBER OF MILK COWS PER HERD, NEW YORK, 1969-1987



AVERAGE COST OF PRODUCING MILK PER HUNDREDWEIGHT¹
New York Dairy Farms, 1984 to 1987

Item	1984	1985 ¹	1986 ¹	1987 ¹
<u>Cash Operating Expenses</u>				
Hired labor	\$ 1.39	\$ 1.38	\$ 1.38	\$ 1.49
Purchased feed	3.46	3.10	3.21	3.30
Machinery & auto expenses (farm share)	.83	.82	.79	.92
Fuel, oil & grease	.50	.48	.34	.35
Replacement livestock	.10	.10	.13	.13
Breeding fees	.20	.20	.19	.19
Veterinary & medicine	.29	.27	.28	.28
Other dairy expenses	1.58	1.33	1.37	1.27
Lime & fertilizer	.66	.62	.48	.51
Seeds & plants	.22	.24	.22	.21
Spray & other crop expense	.20	.23	.19	.20
Land, building, fence repair	.18	.17	.16	.20
Taxes & insurance	.53	.56	.55	.57
Telephone & electricity (farm share)	.36	.37	.39	.38
Interest paid	1.40	1.25	1.18	1.04
Misc. (including rent)	.44	.40	.41	.45
Total	\$12.34	\$11.52	\$11.27	\$11.49
<u>Overhead Expenses</u>				
Depreciation: mach. & bldgs.	\$ 1.65	\$ 1.64	\$ 1.54	\$ 1.43
Unpaid labor	.12	.12	.13	.10
Operator(s) labor	.87	.97	.86	.87
Operator(s) management	.76	.72	.71	.74
Interest on farm equity capital (5%)	1.22	1.16	1.10	1.15
Total	\$ 4.62	\$ 4.61	\$ 4.34	\$ 4.28
Gross Farm Operating Cost	\$16.96	\$16.13	\$15.61	\$15.77
Less: Non-milk cash receipts	1.74	1.58	1.52	1.84
Increase in feed & supplies	.18	.06	.07	.23
Increase in livestock	.16	.18	.12	.10
TOTAL COST OF MILK PRODUCTION	\$14.88	\$14.31	\$13.90	\$13.60
OPERATING COST OF MILK PRODUCTION	\$10.26	\$9.70	\$9.56	\$9.32
AVERAGE FARM PRICE OF MILK	\$13.49	\$12.90	\$12.65	\$12.89
Return per cwt. to operator labor, capital, & management	\$1.46	\$1.44	\$1.42	\$2.05
Rate of return on farm equity capital	-0.7%	-1.1%	-0.7%	1.9%

¹Includes cash expenses plus changes in accounts payable and cash receipts plus changes in accounts receivable.

SOURCE: New York Dairy Farm Business Summary data.

These data indicate that total production costs decreased \$0.30 per hundredweight in 1987 compared with 1986 while milk receipts increased \$0.24 per hundredweight. The result was an increase of \$0.63 per hundredweight in the return to operator's labor, management, and equity capital. Total cost and operating cost of milk production reached a high point in 1984 and have steadily declined through 1987.

In addition to the cash operating expenses, values are placed on unpaid family labor, the operator's labor, a charge is made for management, and interest on equity capital is computed at a rate of five percent to calculate the total cost of milk production. Together with depreciation these charges amounted to \$4.28 per hundredweight in 1987. Adjustments to gross farm operating cost were made to reflect income and expenses for crop and livestock sales and inventory adjustments so that the resulting cost of milk production reflects only those for milk production.

COMPARISON OF FARM BUSINESS SUMMARIES FOR 1983-1987
Same 165 New York Dairy Farms

<u>Selected Factors</u>	1983	1984	1985	1986	1987
<u>Size of Business</u>					
Average no. of cows	96	97	102	107	111
Milk sold, lbs.	1,498,713	1,537,052	1,635,584	1,741,059	1,833,455
Total tillable acres	294	302	314	317	322
<u>Rates of Production</u>					
Milk sold per cow, lbs.	15,654	15,830	15,987	16,283	16,535
Hay DM per acre, tons	2.7	2.8	2.8	2.8	2.8
Corn silage per acre, tons	13.6	13.9	14.8	14.4	16.5
<u>Labor Efficiency</u>					
Cows per worker	31	30	31	32	33
Milk sold per worker, lbs.	480,481	477,091	490,378	523,826	540,778
<u>Cost Control</u>					
Grain & concentrate purchased as % milk sales	24%	23%	21%	23%	24%
Oper. cost of prod. cwt.milk	\$10.27	\$10.28	\$9.61	\$9.53	\$9.23
Total cost of prod. cwt.milk	\$14.56	\$14.67	\$13.94	\$13.72	\$13.31
Milk rec. per cwt. milk	\$13.64	\$13.48	\$12.93	\$12.71	\$12.93
<u>Capital Efficiency</u>					
Farm capital per cow ¹	\$5,427	\$5,588	\$5,941	\$5,842	\$5,959
Capital turnover, years ¹	2.29	2.31	2.49	2.33	2.17
<u>Profitability</u>					
Net farm income w/o apprec.	\$25,446	\$22,343	\$26,544	\$27,478	\$40,879
Net farm income w/apprec.	\$27,676	\$31,773	\$24,975	\$43,876	\$66,535
Labor & management income	\$7,848	\$3,953	\$5,545	\$5,803	\$17,776
Rate return on:					
all capital w/apprec.	4.6%	5.2%	3.7%	6.2%	8.9%
all capital w/o apprec.	4.2%	3.5%	3.9%	3.5%	5.0%
<u>Financial Summary, End Year</u>					
Farm net worth	\$323,857	\$335,496	\$387,594	\$406,182	\$448,028
Debt to asset ratio	0.40	0.39	0.36	0.36	0.34
Farm debt per cow	\$2,156	\$2,199	\$2,100	\$2,071	\$2,012

¹End year farm capital is used for 1983 and 1984, average farm capital is used for 1985-1987.

SOURCE: New York Dairy Farm Business Summary data.

In 1987, farms that participated in the Dairy Farm Business Summary Project in each of the last five years were larger, producing more milk, more profitable, and financially stronger than in any of the past four years. In 1987, the average number of cows was 111, 15 greater than 1983. Milk per cow also steadily increased to 16,535 pounds sold per year, an increase of 881 pounds since 1983. Profitability was stable from 1983 to 1986, but increased significantly in 1987. Net farm income was about 60 percent higher in 1987 than the average of the previous four years. Over this period net worth exhibited a steady increase from \$323,857 in 1983 to \$448,028 in 1987. The debt to asset ratio improved from 0.40 in 1983 to 0.34 in 1987. Farm debt per cow was down \$144 in 1987 compared to 1983.

HIGHLIGHTS OF THE 1989 FRUIT OUTLOOK

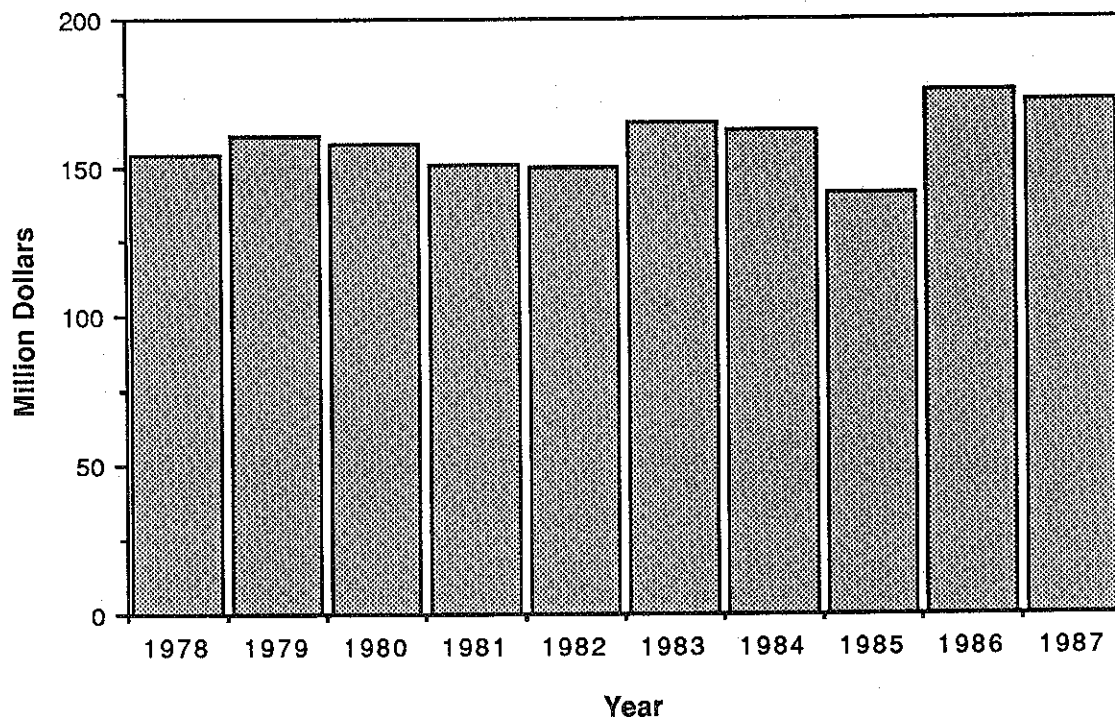
The total production of the six tree and vine crops which are important to New York's agricultural economy was projected to decrease nine percent nationally and seven percent in New York. The drought, a large 1987 crop, and spring freezes contributed to lower production in 1988. The national production of apples, tart cherries, pears and sweet cherries decreased, while the production of grapes and peaches increased. The production of apples nationally was projected at 193.7 million bushels, a major decline from the record 251 million bushel crop of a year ago. Grape production was forecast to be four percent above a year ago.

In New York, indicated apple production for 1988 was 19.9 million bushels and grape production was expected to total 158,000 tons, both well below the average production of recent years.

Noncitrus prices are expected to be fairly high in 1988-89 because of smaller supplies and stable demand. In New York, the value of production of the major fruit crops has been as much as \$176.3 million (in 1986).* This year, however, higher prices will not be enough to offset lower production. A \$169 million utilized value is forecast.

*The value of the fresh apple crop is based on the "as sold" price for apples rather than "packinghouse door equivalent".

FRUIT: PRODUCTION AND VALUE OF MAJOR FRUIT CROPS, NEW YORK STATE, 1978-1987



COMMERCIAL NON-CITRUS FRUIT PRODUCTION, NEW YORK AND UNITED STATES

Fruit	New York				United States			
	1985	1986	1987	1988	1985	1986	1987	1988
----- thousand tons -----								
Apples	545	450	440	418	3,962	3,967	5,271	4,067
Grapes	144	164	178	158	5,607	5,225	5,251	5,457
Tart Cherries	11	7	18	12	140	112	179	105
Pears	16	18	15	17	747	766	940	798
Peaches	7	7	7	7	1,073	1,164	1,214	1,264
Sweet Cherries	2	1	1	1	127	137	209	175
Total New York's								
Major Fruit Crops	725	647	658	613	11,656	11,371	13,064	11,866

AVERAGE FARM PRICES OF NON-CITRUS FRUITS, NEW YORK AND UNITED STATES

Fruit	New York				United States			
	1985	1986	1987	1988	1985	1986	1987	1988
----- dollars per ton -----								
Apples								
Fresh	230	330	274		346	382	244	
Processed	89	118	114		103	116	80	
All sales	140	202	184		234	268	170	
Grapes	147	201	228		171	224	259	
Tart Cherries	512	460	190		448	406	122	
Pears	242	210	259		269	267	197	
Peaches	464	472	430		300	292	284	
Sweet Cherries	670	849	839		799	825	743	

VALUE OF UTILIZED PRODUCTION NON-CITRUS FRUITS, NEW YORK AND UNITED STATES

Fruit	New York				United States			
	1985	1986	1987	1988	1985	1986	1987	1988
----- million dollars -----								
Apples								
Fresh	43.6	59.4	52.1		730	863	684	
Processed	31.5	31.9	28.5		187	196	186	
All Sales*	75.1	91.3	80.6		917	1,059	869	
Grapes	21.2	32.9	40.5		959	1,173	1,361	
Tart Cherries	5.8	2.8	2.3		63	44	17	
Pears	3.9	3.8	3.8		201	203	185	
Peaches	3.3	3.3	3.0		307	327	326	
Sweet Cherries	1.0	1.2	1.0		101	113	155	
Total New York's Major								
Fruit Crops	110.3	135.3	131.2		2,548	2,919	2,913	

*May not add from total of fresh and processed due to rounding errors.

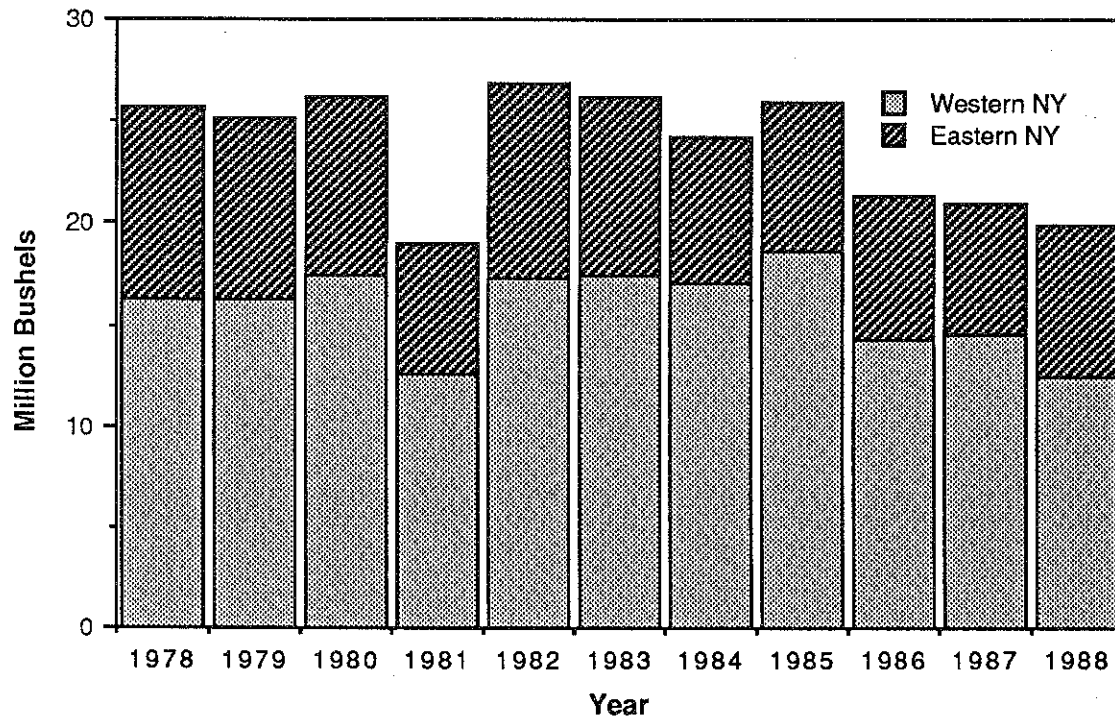
APPLE PRODUCTION, UNITED STATES, 1983-1987, FIVE-YEAR AVERAGE PRODUCTION,
AND 1987 FORECAST, 1,000 42-POUND BUSHELS

States/Regions	5-Year Average 1983-87*	1987*	USDA Estimate**	1988 Compared to (Percent Change) 5-Year Average
Maine	1,919	1,786	2,048	+7
New Hampshire	1,243	1,190	1,262	+2
Vermont	1,100	1,167	952	-13
Massachusetts	2,257	2,286	2,286	+1
Rhode Island	117	119	131	+12
Connecticut	1,052	1,072	905	-14
New York	23,762	20,952	18,810	-21
New Jersey	2,357	1,905	1,905	-19
Pennsylvania	13,048	10,952	11,190	-14
Delaware	547	619	595	+9
Maryland	1,700	952	1,190	-30
Virginia	10,743	11,452	10,238	-5
West Virginia	5,167	4,286	5,000	-3
North Carolina	7,429	9,286	7,381	-1
South Carolina	733	1,072	857	+17
Georgia	809	1,190	714	-12
Total East	73,983	70,167	65,464	-12
Ohio	2,952	3,571	2,500	-15
Indiana	1,448	1,714	1,429	-1
Illinois	2,281	2,452	2,143	-6
Michigan	20,810	25,000	17,857	-14
Wisconsin	1,410	1,548	1,262	-10
Minnesota	500	619	357	-29
Iowa	221	238	286	+29
Missouri	1,128	1,262	1,310	+16
Kansas	231	286	262	+13
Kentucky	352	500	310	-12
Tennessee	269	357	310	+15
Arkansas	252	95	238	-6
Total Central	31,854	37,642	28,264	-11
Total East & Central	105,837	107,809	93,728	-11
Colorado	1,919	2,976	1,428	-26
New Mexico	203	300	300	+48
Utah	1,248	1,619	1,000	-20
Idaho	3,033	3,548	3,095	+2
Washington	76,262	114,286	76,190	NC
Oregon	3,619	5,000	3,214	-11
California	13,167	15,476	13,095	-1
Total West	99,451	143,205	98,322	-1
TOTAL U.S.	205,288	251,014	192,050	-6

*1987 and 5-year average are USDA data revised as of July 11, 1988.

**USDA based on July 1, 1988 crop conditions.

APPLE PRODUCTION IN NEW YORK STATE, BY REGIONS, 1978-1987 AND 1988 (Estimated)

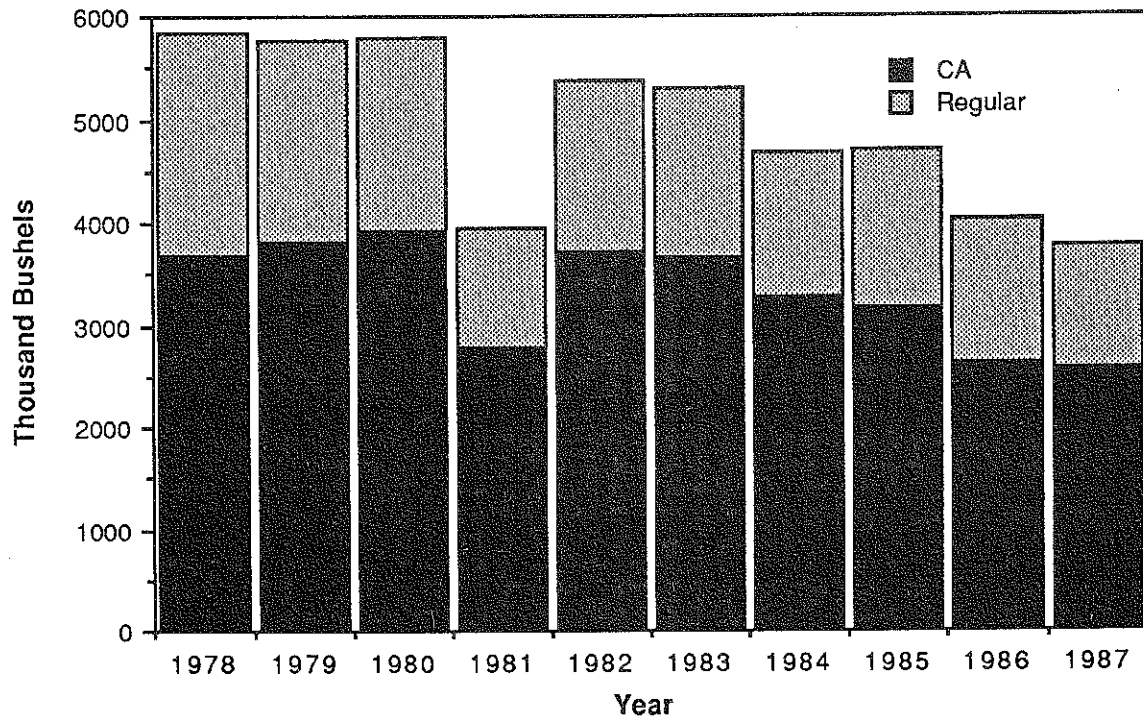


Of the projected 19.9 million bushel crop of 1988, a 7.5 million bushel crop is indicated for eastern New York and 12.4 million bushels is indicated for western New York. This is the lowest crop since 1981, and well below the five year average production of 23.8 million bushels.

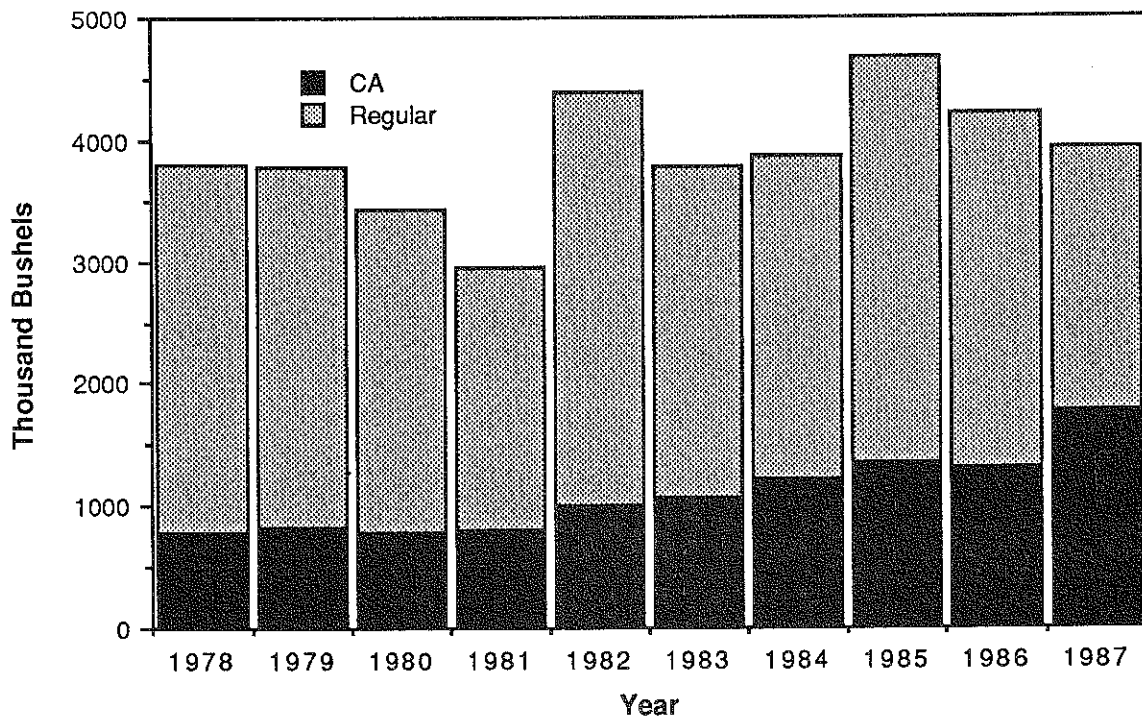
Lower production in recent years has occurred due to (1) three consecutive years of poor weather conditions, especially in western New York, and (2) orchard removal. Even though production has not been high in recent years, the potential productive capacity has increased due to plantings of higher density, more productive systems which are currently nonbearing but will have an impact on production in future years.

Cold storage holding patterns, shown on the following page, indicate that eastern New York is the primary fresh fruit production area in New York. However, western New York is becoming more important as a fresh fruit producer, as indicated in the increased emphasis on controlled atmosphere storage.

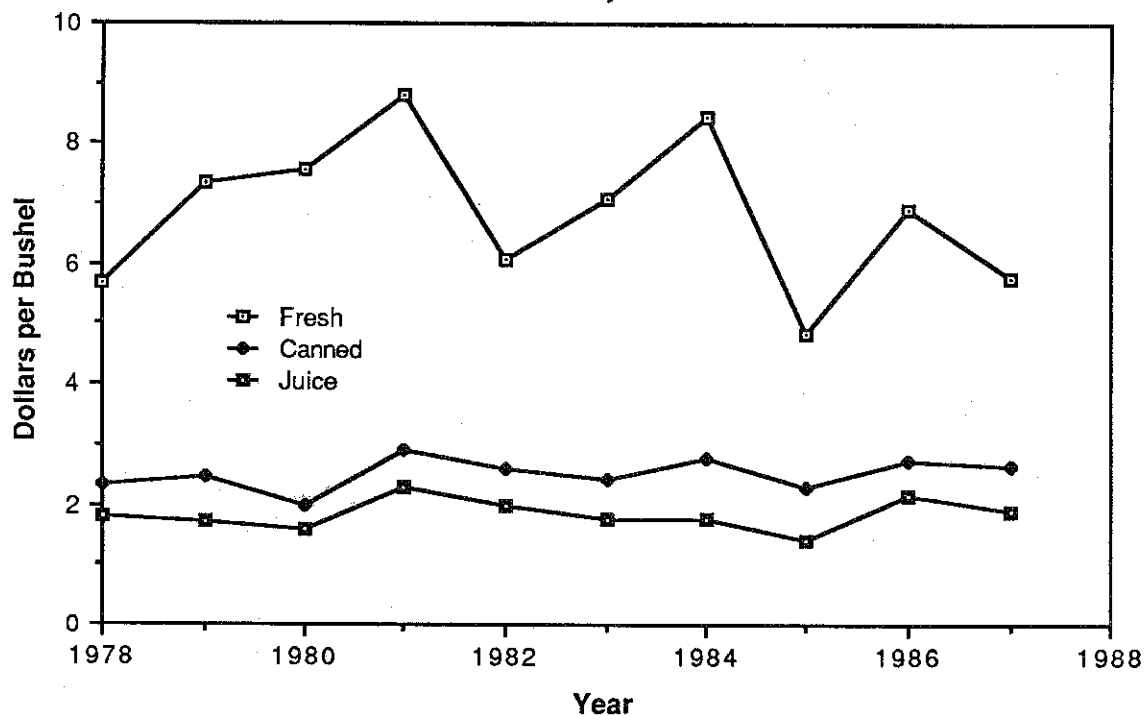
APPLES IN COLD STORAGE, EASTERN NEW YORK, AS OF OCTOBER 31, REGULAR STORAGE AND CA, 1978-1987



APPLES IN COLD STORAGE, WESTERN NEW YORK, AS OF OCTOBER 31, REGULAR STORAGE AND CA, 1978-1987



AVERAGE ANNUAL PRICES RECEIVED BY NEW YORK GROWERS FOR APPLES, 1978-1987



Over the past 10 years, prices for processed apples have been fairly constant, while fresh apple prices have more pronounced fluctuations due to particular supply and demand conditions in a given year. (Note: Beginning in 1985, the fresh price for apples was reported based on a packinghouse door equivalent rather than "as sold". Therefore, the 1985-87 prices are not directly comparable to the fresh prices prior to 1985.)

In October 1988, the average price of fresh apples sold averaged 23 percent above a year ago when there was a record national crop. Prices of McIntosh apples in October were \$9-10 per box for bagged apples and \$17-18 for boxes of cell packed apples. Prices last year were \$7.50-8.50 for bagged apples and \$14.00 for cell packs. Price prospects for fresh apples are very strong for the remainder of the marketing season.

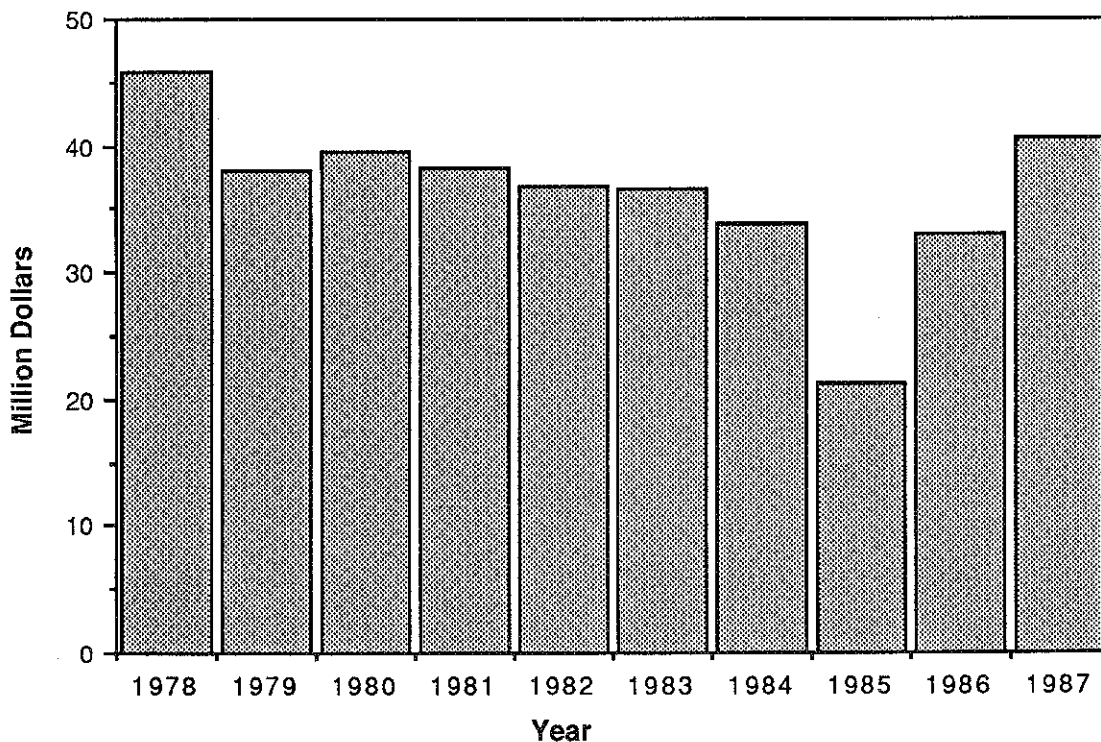
Processed apple prices were also substantially higher. Major processors were paying \$8.50-9.00 per hundredweight for 2-3/4" and up, compared with \$6.00-6.50 last year; and \$4.00-4.50 for juice apples, compared with \$3.00-3.50 in 1987.

Grapes

The value of utilized production for grapes in New York increased rapidly during the 1960's and early 1970's, reaching a peak of \$45.9 million in 1978. For several years after 1978, the value was generally declining and reached a dramatic low of \$21.2 million in 1985. In the past two seasons, the industry was recovering, fueled by the growth in the wine cooler market, a lower-valued dollar which increased the prices of competing imports of wine and juice, and new product development and promotion of grape juice.

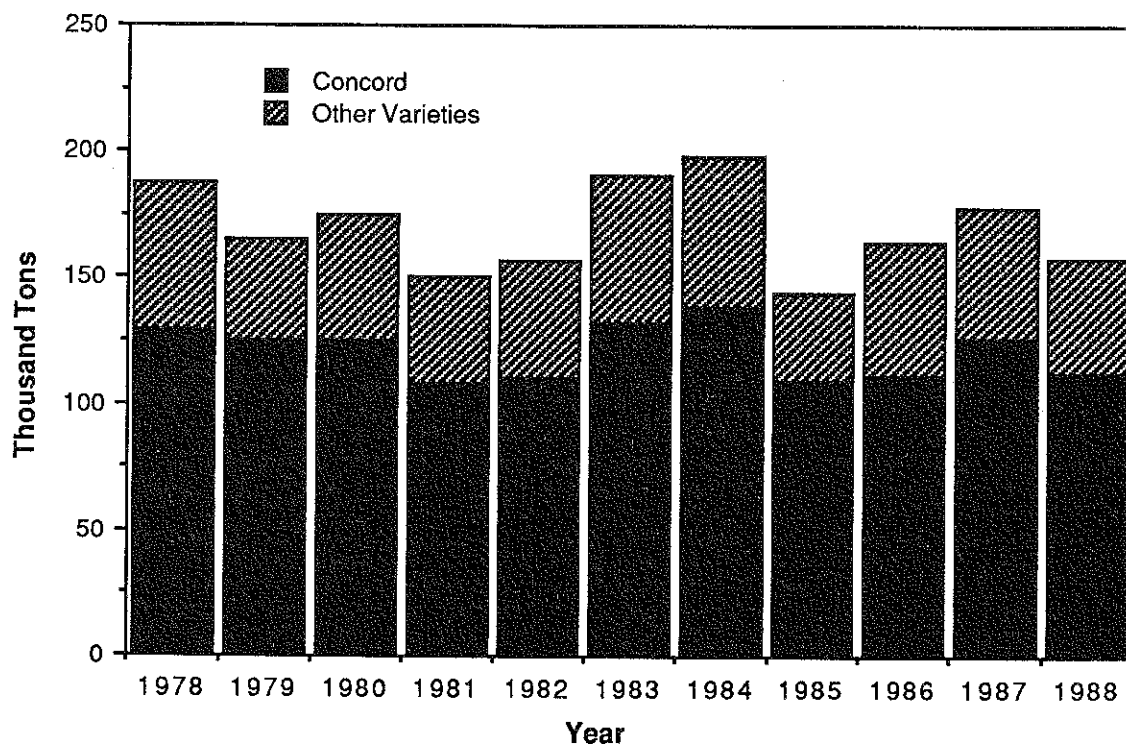
For the 1988 season, with production estimated at a relatively low 158,000 tons and weakened demand for grapes for wine coolers, the utilized value of grapes is likely to fall slightly below the \$40.5 million realized in 1987.

VALUE OF UTILIZED PRODUCTION FOR GRAPES, 1978-1987



With strong demand for juice and nonfermented products and the use of Concords in wine coolers and other fermented products, Concords have continued to account for about 70 percent of New York grape production.

**TOTAL PRODUCTION OF GRAPES IN NEW YORK, CONCORD AND
OTHER VARIETIES, 1978-1987 AND 1988 (Estimated)**



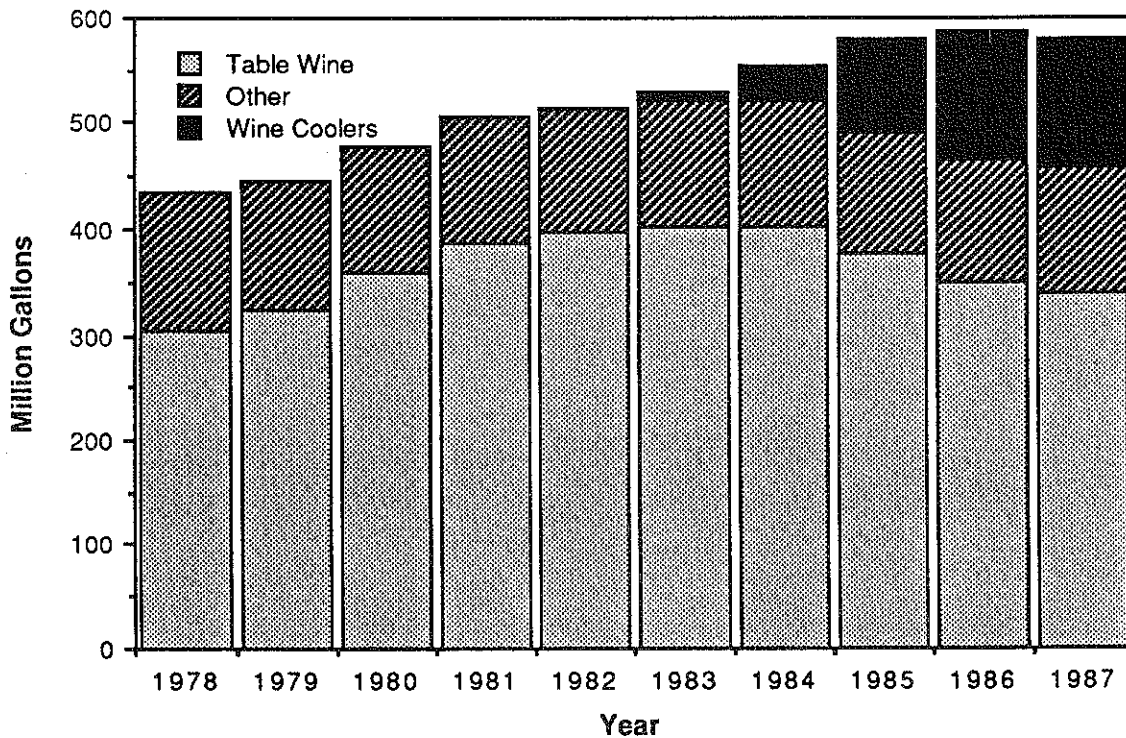
Wine

Some changes have occurred in the market for wine which have serious implications for New York's growers. These are shown in the next three charts.

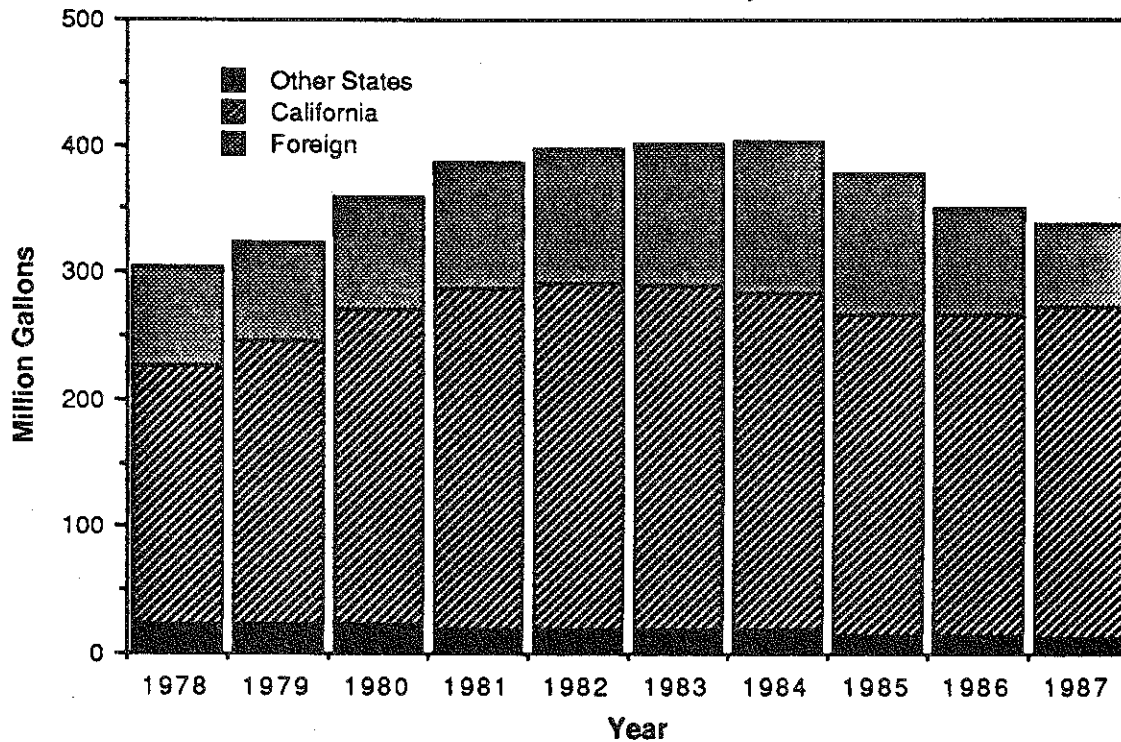
- 1) The total consumption of all wine has been stagnant, and actually declined in 1987. Growth in recent years was attributable to the wine cooler segment.
- 2) Table wine consumption has been decreasing for three consecutive years. California has managed to hold its volume, while imports and wine produced in "other states" have shown declining shares. [Note: "Other states" refers primarily to New York when considered on a volume basis.]
- 3) In 1987, wine cooler consumption leveled off after several years of dramatic growth. "Other states", again primarily New York, had been a strong beneficiary of the growth in the cooler market. Through the first eight months of 1988, wine cooler consumption was down nine percent.

Considered together, these three trends have spelled a decreased demand for New York grapes used for nonpremium wines.

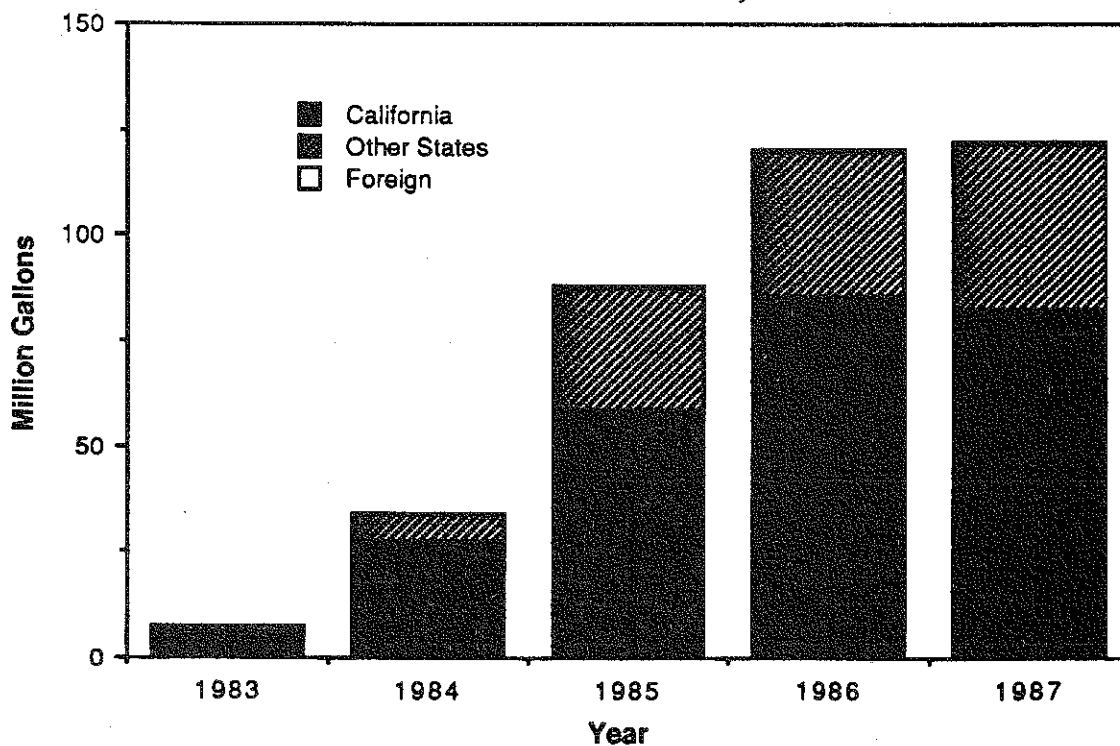
**ALL WINE ENTERING DISTRIBUTION CHANNELS IN THE U.S.,
BY WINE TYPE, 1978-1987**



**TABLE WINE ENTERING DISTRIBUTION CHANNELS IN THE U.S.,
BY AREA PRODUCED, 1978-1987**



**WINE COOLERS ENTERING DISTRIBUTION CHANNELS IN THE U.S.,
BY AREA PRODUCED, 1983-1987**



GRAPES: NEW YORK GROWN, RECEIVED BY WINERIES AND PROCESSING PLANTS, 1983-87

Variety	1983	1984	1985	1986	1987
	----- tons -----				
Concord	128,390	128,746	105,088	107,326	122,688
Catawba	14,286	10,901	7,745	12,262	12,939
Niagara	9,874	9,990	5,614	9,663	10,243
Delaware	7,412	7,170	2,655	5,562	4,722
Aurore	8,901	10,652	5,978	7,794	8,189
de Chaunac	3,611	2,478	2,839	2,911	2,664
Baco Noir	1,775	1,692	1,084	1,419	1,148
Seyval Blanc	1,086	1,031	1,226	1,514	1,278
Rougeon	795	810	559	692	788
Vitis Vinifera (all)	729	1,412	1,364	1,960	1,637
Total of all varieties	186,500	184,000	140,000	159,600	173,500

SOURCE: Fruit, New York Crop Reporting Service, 2-84, 1-85, 1-86, 975-1-87, and 975-2-88, and New York Agricultural Statistics, 1987-1988.

GRAPES: PRICES PAID FOR NEW YORK GROWN GRAPES PROCESSED, 1981-85

Variety	1983	1984	1985	1986	1987
<u>American Varieties</u>					
Catawba	271	244	161	205*	233*
Concord	143	125	120	170*	208*
Delaware	316	311	152	225	266
Dutchess	409	445	138	259	275
Elvira	211	207	203	210	216
Niagara	216	182	173	187*	195*
<u>French Hybrids</u>					
Aurore	357	347	195	236	244
Baco Noir	362	377	217	289	283
de Chaunac	205	199	162	167	192
Rougeon	226	218	156	245	241
Seyval Blanc	423	381	251	283	289
<u>Vitis Vinifera</u>					
All varieties	821	871	856	925	1,008
Average all varieties	187	174	139	194*	222*

*Preliminary estimates of future payments by cooperatives have been included based upon historical data.

SOURCE: Fruit, New York Crop Reporting Service, No. 1-85, 1-86, 975-1-87, and 975-2-88.

Concords are by far the predominant variety grown and processed in New York. There were 122,688 tons of Concords from New York processed in 1987. Over the past five years, Concords have comprised 70 percent of total tonnage utilized. The second leading variety is Catawba (11.6 thousand tons, 6.9 percent) and Niagara (9.1 thousand tons, 5.4 percent).

In general, the prices for red varieties (e.g., Concord, de Chaunac) trended downward during the late 1970's and early 1980's while white varieties (e.g., Niagara, Aurore, Seyval Blanc) trended upward. For 1983 and 1984, however, with large crops and large inventories held by wineries and processors, prices were down for most white as well as red varieties.

Following a bottoming out of prices in 1985, prices for most varieties showed improvement in 1986 and 1987. In 1988, however, prices were generally lower than for the preceding year. This is due to a leveling off in cooler sales and a continued decline in demand for table wine. Demand for Concord and Niagara for juice continues to be strong.

The prices of grapes for fresh use, wine, and juice are shown below. All prices show a decreasing trend over a 10 year period.

In the early 1980's, the price of grapes for wine generally exceeded the price of grapes used for juice by \$100 or more per ton. In 1987, the difference narrowed to \$8.00 per ton.

In 1988, with continued strong demand for juice and lagging cooler sales, the price for grapes used for juice will probably surpass the average wine grape price.

AVERAGE PRICE FOR GRAPES IN NEW YORK, UTILIZED FOR FRESH GRAPES, WINE AND JUICE, 1978-1987

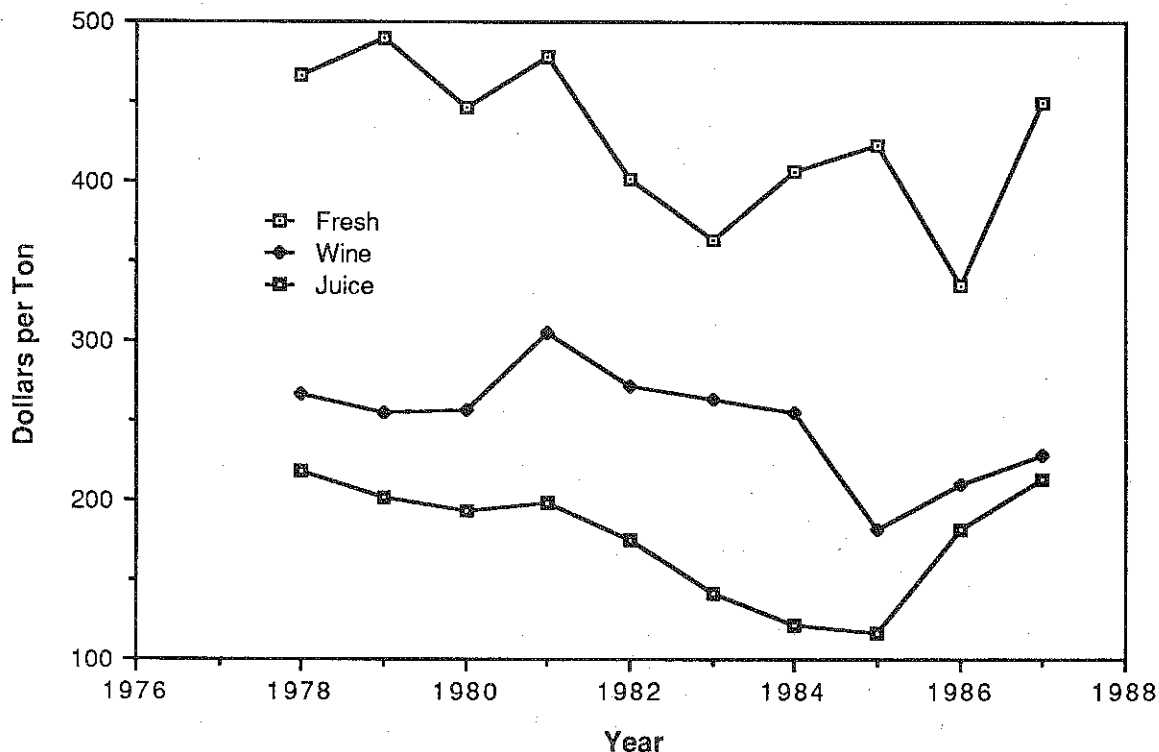


TABLE I.....POTATOES AND VEGETABLES: NEW YORK STATE FARM VALUE OF PRODUCTION, 1983-1988

	1983	1984	1985	1986	1987 ¹	1988 ²	Five-Year Average (1983-1987)
----- millions of dollars -----							
Potatoes:							
Long Island	32.6	19.3	11.4	18.0	11.5	14.1	18.58
Upstate	43.7	41.8	28.2	41.3	36.1	32.6	38.22
Subtotal	76.3	61.1	39.6	59.3	47.6	46.7	56.78
Vegetables:							
Fresh Market	173.6	139.7	135.7	162.3	164.2		155.1
Processing	31.7	33.8	37.6	26.5	30.9		32.10
Subtotal	205.3	173.5	173.3	188.8	195.1		187.2
TOTAL	281.6	234.6	212.9	248.1	242.7		243.98

¹ Preliminary.² Estimated.

Sources: USDA, Potatoes, Agricultural Statistics Board, National Agricultural Statistical Service. September 28, 1988.

New York Agricultural Statistics 1987, New York State Agriculture and Markets, Division of Statistics, June 1988.

Production of New York potatoes again declined in Long Island, but Upstate production was up in 1987. In sum, state production was up 4-percent in 1987. This year's crop appears to be smaller than last in both production regions--21 and 23-percent in Long Island and Upstate, respectively. Overall state production in 1988 declined 22.7-percent. Total U.S. production of fall potatoes increased 7.8-percent in 1987 and the 1988 crop is forecast to be 9.5-percent lower than the 1987 crop. In both years, state production declined more than national production, therefore the state's share of national production continued its downward slide. Although the drought severely affected output of fall potatoes in some regions of the country, winter and spring potato output was strong in 1988.

In value terms, state production value dropped 19.7-percent in 1987 and is forecast to drop 1.2-percent in 1988. In Long Island, the value of the crop dropped 36-percent in 1987, but is forecast to increase (based on fall prices) 22.6-percent in 1988. Upstate production value dropped 12.3-percent in 1987 and 9.7-percent in 1988. The prices used for forecasting the value of the 1988 crop are simply spot prices and therefore may not be good indicators of the crops average price. The value of national production dropped 15.2-percent in 1987 and therefore not only did the state lose production market share, but the state's growers received a relatively lower price in 1987 than the average national producer. Upstate prices were 20-percent higher than Long Island's in 1987, but the reverse appears to be true for the 1988 crop. Table I. presents the relevant statistics.

Table II. presents the production and value of the nation's major producers of fall potatoes. Idaho and Washington produced nearly 50-percent of the nations fall potatoes in 1987. In contrast to this market dominance, eastern states (Maine, Michigan, New York, and Pennsylvania) produced only 13-percent of national output. However, in value terms, the eastern states produced 17.5-percent of the national crop. The national average price per cwt in 1987 was \$4.35 whereas the New York State price was \$5.85. The price ranged from \$2.10 in Colorado to \$16.60 in Florida. National shrinkage and loss averaged 8-percent of the crop while the New York State average was 7-percent. New York's share of national production was 2.1 and 2.8-percent in volume and value, respectively.

TABLE II....U.S. FALL POTATOES: PRODUCTION AND CROP VALUE

	Production				Crop Value			
	1985	1986	1987	1988 ¹	1985	1986	1987	1988 ²
	----- 1,000 cwt. -----				----- million dollars -----			
New York:								
L.I.	3,870	2,537	2,225	1,760	11.2	18.0	11.5	14.1
Upstate	6,375	5,288	5,875	4,500	28.4	41.2	36.1	32.6
California	8,385	6,887	7,869	6,105	51.1	44.1	32.7	
Colorado	17,920	18,810	19,500	19,338	40.3	79.0	34.1	
Idaho	102,515	90,220	99,710	99,500	338.3	38.9	349.0	
Maine	28,215	21,930	23,240	22,550	79.0	131.6	98.8	
Michigan	12,100	9,625	8,910	7,200	53.8	58.2	45.4	
Minnesota	14,145	13,650	16,330	12,920	41.7	58.0	52.3	
North Dakota	23,630	21,600	23,125	14,375	75.6	90.7	80.9	
Oregon	26,888	23,172	25,924	20,735	95.6	97.0	90.0	
Pennsylvania	5,720	5,160	4,730	3,690	26.0	35.1	28.9	
Washington	63,630	61,950	66,960	63,250	219.5	266.4	244.4	
Wisconsin	24,130	20,125	21,908	20,000	76.0	92.6	84.3	
Other	16,115	16,817	16,165	13,963	71.6	88.0	71.4	
Total Fall	353,638	317,771	342,471	309,886	1,208.3	1,487.8	1,261.8	

¹ November 1, 1988 estimates² Based on Fall pricesSource: USDA, Potatoes, Agricultural Statistics Board, National Agricultural Statistical Service. September 28, 1988.

State production of onions dropped 9.4-percent in 1987 and will drop by approximately 19-percent in 1988. The drought is mostly responsible for the drop. National storage onion production increased in 1987 by 8.2-percent, but will most likely drop by 3-percent in 1988. Somewhat surprisingly, the value of onion production increased in 1987. This indicates that the demand for onions increased more than the 8.2-percent increase in supply. Given this, the 1988 national crop may command a higher price than the 1987 price. However, fall prices for New York onions are around \$12.00/cwt while last year's prices were near \$16.00/cwt. This year's most limiting constraint has been a sizing problem. Due to the drought and diseases, many onions have not sized out at acceptable levels for the fresh market. This coupled with the reduction in demand for the small onions has put onion producers in a difficult situation. However, it appears the situation will reverse itself if normal precipitation occurs next year.

Orange county onion production decreased for the third consecutive year even though last year was a good revenue year. Of all the production regions of the state, only Genesee, Orleans, and Oswego counties have had stable production over the last five years. All others have tended to decrease production.

TABLE III....U.S. STORAGE ONIONS: PRODUCTION AND CROP VALUE

	Production				Crop Value			
	1985	1986	1987 ¹	1988 ¹	1985	1986	1987 ²	1988 ³
	----- 1,000 cwt. -----				----- million dollars -----			
New York	3,960	3,456	3,132	2,530	39.3	44.7	51.2	30.4
Colorado	5,355	4,590	4,688	5,535	31.1	48.8	45.0	
Idaho & Malheur Co.	9,020	8,215	10,140	9,116	40.3	83.7	82.6	
Michigan	2,535	1,653	1,900	2,000	14.2	15.0	18.9	
Oregon	1,505	1,440	1,512	1,360	6.9	16.6	16.3	
Washington	1,763	1,848	2,300	2,132	6.8	19.7	20.5	
Other	1,571	1,224	1,495	1,291	10.9	12.5	12.6	
Subtotal	25,709	22,426	25,167	23,964	149.5	241.0	247.1	
California	9,250	9,953	9,860	9,975	65.9	76.8	72.8	
TOTAL	34,959	32,379	35,027	33,939	215.4	317.8	319.9	

¹ October 13, 1988 estimate.² Preliminary.³ Based on Fall prices.

Source: USDA, Agricultural Marketing Service. October 1988

The state's production of fresh market vegetables continued to increase in 1987. The five-year average of production value is \$155.1 million. The 1987 production value was \$164.2. The increase in due primarily to stronger prices rather than increased yields or increased acreage. Although the annual increase in value of production was only 1.2-percent, the increase relative to the five-year average is 5.9-percent--indicating that 1986 was also a good year for the state's fresh vegetable producers. For the most part, the drought did not appear to significantly reduce yields for fresh market vegetables. The state's fresh market vegetable producers have had relatively good years and the prognosis is for the same in 1988 and 1989. The growth has not been dramatic, rather it has been steady and consistent.

Much the reverse is true for state producers of processing vegetables. Relative to 1986, the value of the 1987 crop was 16.6-percent higher, but relative to the five-year average it was 3.7-percent lower. Comparing the figures, it is clear that 1986 was a bad year for the state's processing vegetable producers. Not only has acreage decreased, but yields have not been at normal levels. Also, the closing of processing plant capacity in parts of the state has sent a distressing signal to some producers. Alternatively, sweet corn for processing has had rather strong demand. In 1978, 90,000 acres were planted to processing vegetables, whereas in 1987 the comparable figure was 74,000. Almost the entire drop was in snap bean acreage. Table I. presents the figures.

The preliminary forecast for 1988 is that the drought did significantly affect yields during the early part of the year, but late season crop yields were near normal. Particularly hard hit were processing crops, but higher prices for this year's crop (and most likely next year's) will improve the value of the crop. The fresh market was not as severely affected as the processing market and prices for this year's crop were average or better. Particularly strong were cabbage, cucumber, and pumpkin prices.

TABLE IV....NEW YORK ONION PRODUCTION BY AREA, 1984-1988

	1984	1985	1986	1987	1988 ¹	Five-Year Average 1984-1988
----- 1,000 hundredweight -----						
Orange	1,650	2,331	1,988	1,652	1,050	1,734
Orleans-Genesee	696	644	650	660	648	660
Oswego	408	494	392	458	448	440
Madison	200	173	160	144	140	163
Steuben-Yates-						
Ontario	285	210	182	135	156	194
Wayne and Other	<u>145</u>	<u>108</u>	<u>84</u>	<u>83</u>	<u>88</u>	<u>102</u>
TOTAL	3,384	3,960	3,456	3,132	2,530	3,292

¹ October 13, 1988 estimate.

Source: New York Agricultural Statistics 1987, New York State Agriculture and Markets, Division of Statistics, June 1988.

Table VI. has changed somewhat from last year. First the per capita figures for onions now account for shrinkage and loss whereas last year the figures did not account for it. Secondly, the potato figures are now crop year figures rather than calendar year figures. And lastly, frozen sweet corn figures now take into account exports. Given these explanations, canned snap bean and sweet corn consumption continued to decline. Since 1970 per capita consumption has declined 21.3 and 26.6-percent for canned snap beans and sweet corn, respectively. However, frozen consumption has increased for both products, but not quite making up for lost canned consumption. Onion consumption has increased 31-percent since 1970, but fresh potato consumption has declined 24.5-percent.

The USDA this year is reporting that total per capita consumption of vegetables--potatoes, sweet-potatoes, mushrooms, and dry lentils and peas is at 325 pounds per person. This is an extraordinary number. The highest reported number in previous years has been in the neighborhood of 270 lbs.

Table V. is new this year. It is an attempt to represent the New York State vegetable industry by the economic importance of various vegetables. The farm gate value (including potatoes) is currently at a quarter-of-a-billion dollars a year. These figures do not include the significant quantities of fresh vegetables that are sold directly to consumers. Including these values would certainly increase the figure--particularly since a good amount of product sold directly to the consumer commands a higher price than commercial sales. The presentation of this table each year will reflect the relative positions of vegetables. The column furthest to the right, "Ten year value trend (per year)", is a statistically derived figure. The value in this column can be said to be statistically defensible and it indicates the per year growth/decline in value of production. A zero figure indicates no trend.

TABLE V.....RANKING OF VEGETABLE PRODUCTION VALUE IN 1987.

Commodity	Value of 1987 Production	1983-1987 Average Value	Highest Value In Last Ten Years	Value Share In 1987	Ten Year Value Trend (per year)
	----- millions of dollars -----				Dollars
Onions	51.68	42.763	(1980) 62.62	25.2%	+ 5,400
Cabbage (fresh)	32.062	31.628	(1983) 48.828	15.6%	+ 3,900
Sweet Corn (fresh)	21.778	21.71	(1984) 24.037	10.6%	+ 2,050
Snap Beans (processed)	11.656	13.872	(1980) 19.134	5.67%	Zero
Sweet Corn (processed)	11.005	9.140	(1987) 11.005	5.36%	+ 1,100
Tomatoes	10.332	10.405	(1980) 11.898	5.03%	+ 894
Lettuce	10.132	10.412	(1981) 13.412	4.93%	+ 1,150
Strawberries	9.104	7.769	(1987) 9.104	4.43%	+ 600
Cauliflower	8.299	5.704	(1984) 7.163	4.04%	+ 600
Cucumbers	5.995	5.218	(1985) 5.851	2.92%	+580
Snap Beans (fresh)	5.672	6.980	(1983) 9.283	2.76%	Zero
Carrots	5.555	5.027	(1986) 7.266	2.70%	+ 670
Green Beans (processed)	4.239	5.160	(1985) 8.564	2.06%	+ 660
Celery	3.558	3.952	(1978) 4.569	1.73%	Zero
Cabbage for Kraut	2.319	2.357	(1981) 3.199	1.13%	Zero
Beets	1.679	1.577	(1979) 2.950	0.82%	Zero
Others	10.365			5.05%	
	205.43			100%	
Potatoes	46.115	56.524	(1980) 97.628	-----	Zero

TABLE VI....PER CAPITA UTILIZATION, IN POUNDS - 1970-1987

Year	Onions	Potatoes	Snap Beans		Sweet Corn			Total
	(Fresh & Processed)*		Canned	Frozen	Canned	Frozen	Fresh	
1970	12.4	62.3	4.7	1.2	14.3	5.8	7.77	27.87
1971	13.1	56.1	4.6	1.3	14.8	5.5	7.45	27.75
1972	12.6	57.9	4.6	1.36	15.0	5.4	7.77	28.17
1973	12.5	52.4	4.9	1.7	14.5	6.0	7.91	28.41
1974	13.3	49.3	4.9	1.7	13.5	5.9	7.73	27.13
1975	13.4	52.6	4.4	1.4	12.0	6.3	7.77	26.07
1976	13.1	49.4	4.9	1.3	13.1	5.9	8.15	27.15
1977	13.5	50.1	4.8	1.2	14.1	7.4	7.76	29.26
1978	13.7	46.1	4.8	1.4	13.2	6.3	7.41	26.91
1979	14.7	49.6	4.7	1.5	12.5	6.8	7.32	26.62
1980	13.7	51.0	4.5	1.6	12.9	6.4	7.32	26.62
1981	13.1	45.7	4.6	1.5	12.1	6.2	7.24	25.54
1982	15.2	46.6	4.2	1.53	11.4	5.7	7.24	24.34
1983	15.3	49.3	4.0	1.70	11.5	6.6	7.39	25.49
1984	16.1	48.8	3.6	1.7	10.1	7.9	7.70	25.70
1985	16.5	46.6	3.7	1.7	11.7	7.8	7.70	27.20
1986	17.88	49.6	3.8	1.5	11.9	7.9	7.2	26.91
1987	16.3	47.0	3.7	2.0	10.5	7.9	7.3	25.70

* Shrinkage and loss accounted for.

+ Crop year not calendar year.

Source: Vegetable: Situation and Outlook Yearbook, USDA, Economic Research Service, TUS-243, November 1988.

There were some significant developments this past year in the fresh vegetable industry in the state. First, the seal of quality program expanded to cover additional commodities. However, the onion growers in the state petitioned to have the size standards lowered. Also, some Hudson Valley apple producers voiced concern over the efficacy of the program and the potential returns to growers. Secondly, there was considerable concern voiced by some western New York growers of processing vegetables because of the closure of processing capacity in the region.. As a result of this, a study to investigate the feasibility of converting this processing acreage to fresh market acreage will be conducted by Cornell University in the following year. Lastly, the Syracuse terminal market most likely will be renovated. The renovation will expand the terminal market as well as expand the farmers market. The project plan calls for funding from local, state, and federal sources. If the project is implemented, it will certainly increase the opportunities for central and western New York fruit and vegetable producers.

As can be seen from Table V., onions are the most valuable vegetable in the state (excluding potatoes). Even though the state's share of national production has been declining, it is nonetheless a production enterprise that has been increasing in value--\$5,400.00 per year. Fresh market cabbage is the next leading vegetable and one can attribute the growth to both increased acreage and some slight increases in price. The same is true for fresh market sweet corn. Snap bean acreage has declined significantly, but prices have been up and down--thereby the value trend is zero.

The ornamentals industry in the state continues on a relatively good growth path. Although the data to substantiate the preceding statement is not readily available, industry participants seem to confirm the statement. Across the board--1.) arboriculture; 2.) bedding plant production; 3.) Christmas tree production; 4.) flower production--cut and potted; 5.) garden center sales and management; 6.) landscaping--exterior and interior--installation and maintenance; 7.) nursery stock production--field grown and containerized; 8.) park and golf course management; 9.) retail florist; and 10.) sod production all appear to be rather healthy sectors. Moreover, the sod and bedding plant sectors have experienced significant increases in demand for their respective products.

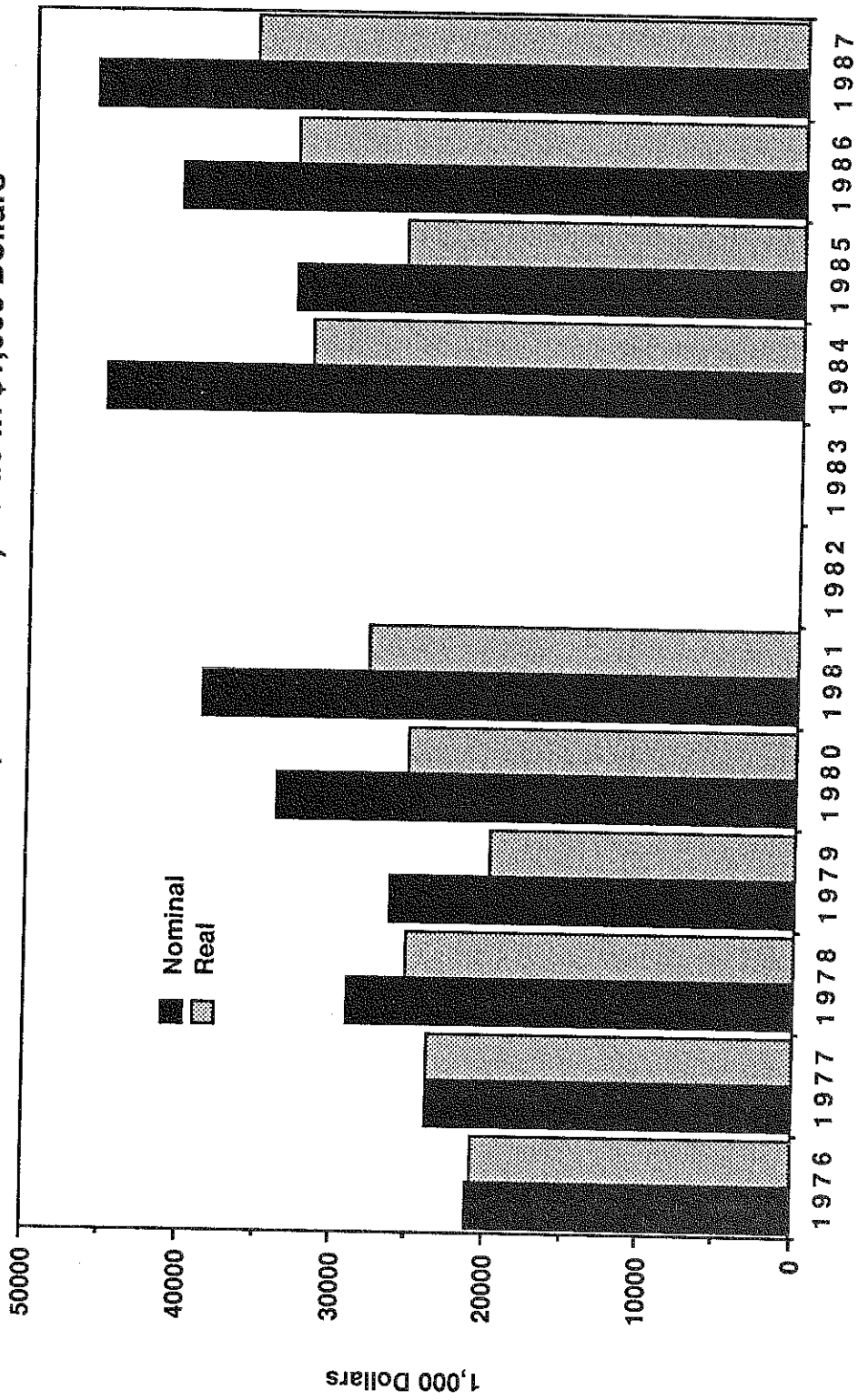
Because the industry is so diverse and because historically, industry participants have been disinclined to want nor participate in data gathering exercises, the industry suffers from an inability to document the contribution of the industry to the economy of the state. In addition, comparing landscaping to flower production is not as easy as it may seem because one is essentially a wholesale enterprise while the other is a retail enterprise. Nonetheless, it now appears that industry participants are interested in documenting and substantiating the size and scope of the ornamentals industry. At the state level, New York State Agriculture and Markets will conduct another nursery industry survey in 1989; this author will conduct a survey of the woody ornamental production sector; and nationally, the USDA will conduct a horticultural survey in 1989.

The impetus for the desire for more documentation of the industry comes from the following. The significant growth of the industry in the last decade. Growth not only in total, but also of individual firms. It is no longer a minor contributor to the economic well being of the agricultural sector. In certain states, Florida and California, it is an important sector. Two, the increased pressures put on the industry by environmental regulations. There is a need to be able to say that if this regulation takes effect, then the economic impact on the industry will be thus. And thirdly, the industry culture of wanting to be both insulated and isolated from the statisticians has changed. This is mostly due to an infusion of younger and more formally educated business managers.

Table I. graphically presents the last ten years of industry performance in New York State in both nominal and real dollars. In 1987, the wholesale value of all the products listed was \$50 million dollars (Table III. presents more products and the total there is \$70.5) while the comparable value in 1978 was \$35.5 million. This represents a growth of 41-percent. The 1982 and '83 figures are missing because funding for the data gathering program was cut during those two years. There is no way of knowing what occurred during those two years, but there is also no evidence to indicate that the trend dramatically changed during the period.

Within the sector, flowering bedding plant production is the product that has the largest economic value. This is followed by rose production and potted geranium production. The number of producers has declined from a total of 2,133 in 1978 to 1,227 in 1987--a 43-percent drop. This figure coupled with the growth in value of production indicates that the floriculture industry is significantly more concentrated and that the value of production per producer has increased. This is particularly true of rose producers.

TABLE I.....WHOLESALE VALUE OF NEW YORK STATE FLORICULTURE* PRODUCTS
Nominal and Real (1977 Dollars) Value in \$1,000 Dollars



*Chrysanthemums: Standard, Pompon, and Potted
Roses: Hybrid Tea, Miniature, and Sweetheart
Potted Lillies, Geraniums, and Poinsettias
Bedding Plants: Flowering and Vegetables

TABLE II.....SUMMARY OF U.S. FLORICULTURE CROPS WHOLESale VALUE OF SALES, 1986 AND 1987 - 1,000 DOLLARS

	1986		1987		De/Increase Over 1986 Percentage
	Value	Percent of Total	Value	Percent of Total	
Cut Flowers	359,826	18.9%	406,555	18.9%	+ 13.0%
Potted Flowering	388,727	20.4	459,950	21.4	+ 18.3
Foliage Plants	521,374	27.3	513,465	23.9	- 1.5
Bedding Plants	560,126	29.4	681,599	31.7	+ 21.7
Cut Greens	76,884	4.0	88,256	4.1	+ 14.8
Total Value	1,906,937	100.0%	2,149,825	100.0%	+ 12.7

Source: Floriculture Crops - 1987 Summary, USDA, National Agricultural Statistics Service, Agricultural Statistics Board, April 1988.

Table II. presents the national summary of floriculture crop sales in 1986 and 1987. The industry generates \$2.1 billion dollars in wholesale value and this is 12.7-percent greater than 1986 sales. The most dramatic growth occurred in bedding plant production while the only crop to drop in value was foliage plant production--1.5-percent. The drop had been somewhat anticipated because the sector had been increasing so dramatically over the last decade. Although much concern has been expressed about cut-flower imports, national output value nonetheless increased 13-percent over 1986 sales. This is in sharp contrast to the 3.3-percent drop in 1986. Overall the industry has done well and it is forecast to continue its healthy growth--particularly cut flowers and bedding plants.

Table III. presents similar data to Table I., except this table has somewhat more detail. First, relative to what occurred between 1985 and '86, there were some significant reversals in value of production. "Total cut flower" wholesale value dropped 18.6-percent in '86-'85, while it increased 6.5-percent in '87-'86. Opposite outcomes are evident for "potted flowering plants"--a 89.4-percent increase two years ago, while last year value declined 23.6-percent. Similarly, "bedding garden plants" increased 10.3-percent and dropped 12.2-percent the subsequent year. "Foliage for indoor/patio use" exhibited the same pattern as two years ago--38-percent declines, while "other potted plants" continued the same rate of growth as two years ago--21-percent. "Total of reported floriculture crops" increased 30.5-percent between 1985 and '86 whereas it declined this past year by 14.3-percent.

The \$20.5 million dollar discrepancy between Table I. and Table III. is the result of two different reporting entities, but more realistically it can be attributed to the different products reported. Table III. is more inclusive and thereby you would expect larger figures. Comparing the figures in Table III. to Table II.'s, one can deduct that New York produced 3.3-percent of the nation's floriculture products in 1987 and 4.4-percent in 1986. On a category basis, the state's largest share--5.0%--was in potted flowering plants, while the smallest share--0.7%-- was in foliage plant production.

TABLE III.....COMMERCIAL PRODUCERS, QUANTITIES SOLD, AND WHOLESALE
VALUE OF SELECTED FLORICULTURE CROPS, NEW YORK, 1987

	Commercial Producers ¹ Number	Quantity Sold	Wholesale Value \$1,000
<u>Cut Flowers</u>			
Carnations			
Standard	4	91,000 blooms	30
Chrysanthemums			
Standard	23	614,000 blooms	423
Pompon	45	371,000 bunches	864
Roses			
Hybrid Tea	15	14,333,000 blooms	8,284
Sweetheart	12	6,162,000 blooms	2,224
Other Cut Flowers	33	----	1,239
Total			13,064 (+6.5%) ²
<u>Potted Flowering Plants</u>			
African Violets	18	1,146,000 pots	2,098
Chrysanthemums	82	1,657,000 pots	3,600
Finished Florist Azaleas	49	1,126,000 pots	4,020
Easter Lilies	88	401,000 pots	1,243
Other Lilies	20	46,000 pots	203
Poinsettias	172	1,882,000 pots	5,600
Other Flowering Plants	73	2,410,000 pots	6,291
Total			23,055 (-23.6%)
<u>Foliage For Indoor/Patio Use</u>			
Potted Foliage	61	----	1,502
Foliage Hanging Baskets	138	475,000 baskets	1,990
Total			3,492 (-37.8%)
<u>Bedding Garden Plants (flats)</u>			
Geraniums	75	218,000 flats	1,631
Flowering Foliage Plants	257	1,869,000 flats	11,775
Vegetable Type Plants	233	452,000 flats	2,698
Total			16,104 (-12.2%)
<u>Other Potted Plants</u>			
Hardy Garden Mums	128	796,000 pots	1,715
Geraniums (cuttings)	239	7,500,000 pots	7,377
Geraniums (seed)	70	3,036,000 pots	2,068
Other Foliar Plants	110	2,526,000 pots	3,216
Vegetable Plants	50	769,000 pots	494
Total			14,870 (+22.7%)
Total of Reported Floriculture Crops			70,585 (-14.3%)

¹ More than \$10,000 in gross sales of all floriculture crops.² Percentage change from 1986 sales.Source: Floriculture Crops 1987 Summary, U.S. Department of Agriculture, National
Agriculture Statistics Service, Agricultural Statistics Board, April 1988.

SITUATION & OUTLOOK SUMMARY

Up until a few decades ago, the American Poultry Industry consisted of little more than small flocks kept primarily for egg production. Today, the industry could best be described as a highly concentrated and industrialized agribusiness giant dedicated to both egg and meat production. It is an industry which generates \$26 billion in retail sales, 6% of the total U.S. expenditures for food. Of that total, \$2 billion is sold in the state of New York. With the retail value of state poultry production less than \$100 million, New York is the largest importer of poultry from other states in the nation.

1988 U.S. Poultry Product Sales in Billions of Dollars

	<u>Retail</u>	<u>Wholesale (Processor)</u>
Broiler	\$ 16.00	\$ 10.00
Egg	5.00	3.75
Turkey & Other	5.00	3.25
Total	\$ 26.00	\$ 17.00

In spite of being a huge importer of poultry products, New York has been a leading producer of ducks, a significant producer of eggs, and a small producer of broilers and turkeys. The 1989 outlook for these poultry products in New York and in the country as a whole is affected by an ongoing decline in per capita egg consumption and a concurrent but unrelated expansion in poultry meat production. In a nutshell, the egg outlook is clouded by weak demand while the poultry meat outlook is bright.

EGG INDUSTRY

The egg industry has endured a 40 year long steady erosion in demand which has cut per capita consumption from an unusually high 33 dozen during World War II to just 20 dozen today. The reasons for this dramatic decline are many but probably the most important is the disappearance of the American breakfast. At one time the nation woke every morning to a large "American Style" breakfast that almost always included eggs. Now, for a great number of Americans, the day begins with another type of breakfast or no breakfast at all. In addition, in these days of branded convenience foods, eggs are seen as an ingredient and people want foods.

Declining per capita consumption and increasing production per hen have brought about periodic downsizings of the national layer flock. This process has been affected almost exclusively by the retirement of the highest cost producers. In the state of Georgia, for example, the state table egg laying flock has dropped from 20 million just 8 years ago to 12 million today.

During the last year the national flock has been reduced by 7% or 16 million hens. As can be seen on figure 1, during the first 10 months of 1988, hen numbers have been consistently lower than year earlier levels. In addition, the number of pullet chicks hatched has also been lower as shown on figure 2.

FIGURE 1.

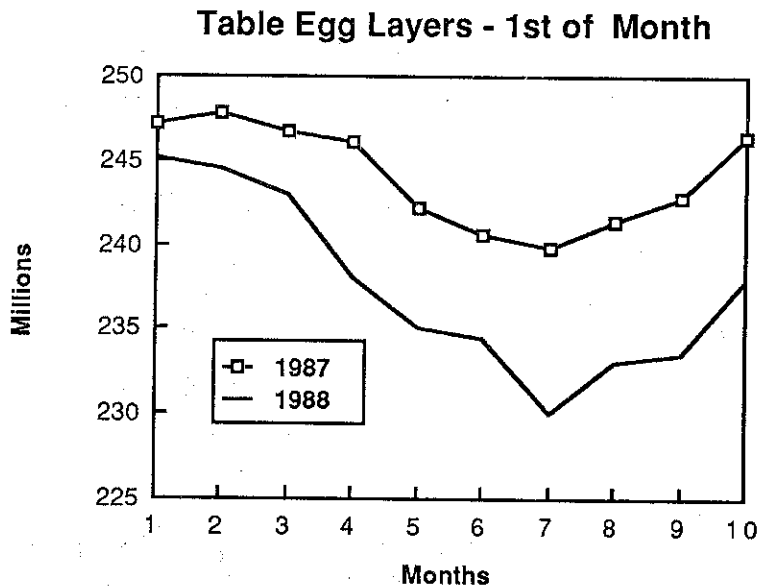
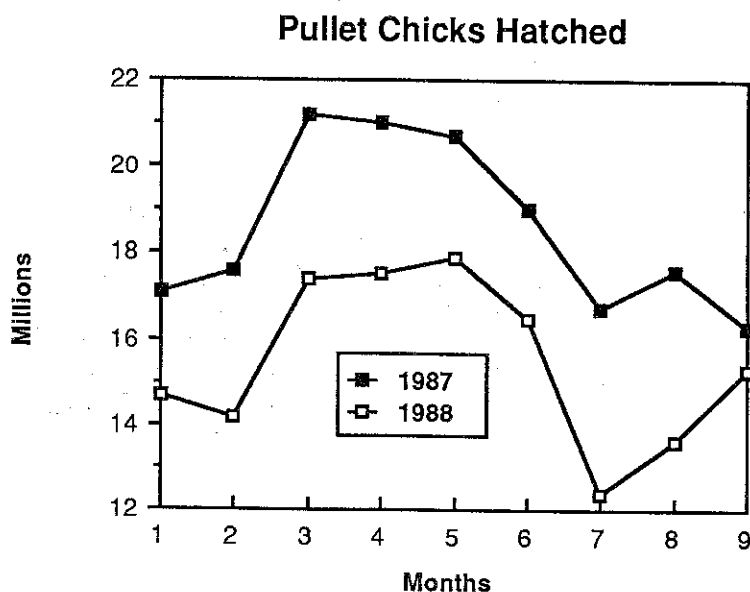


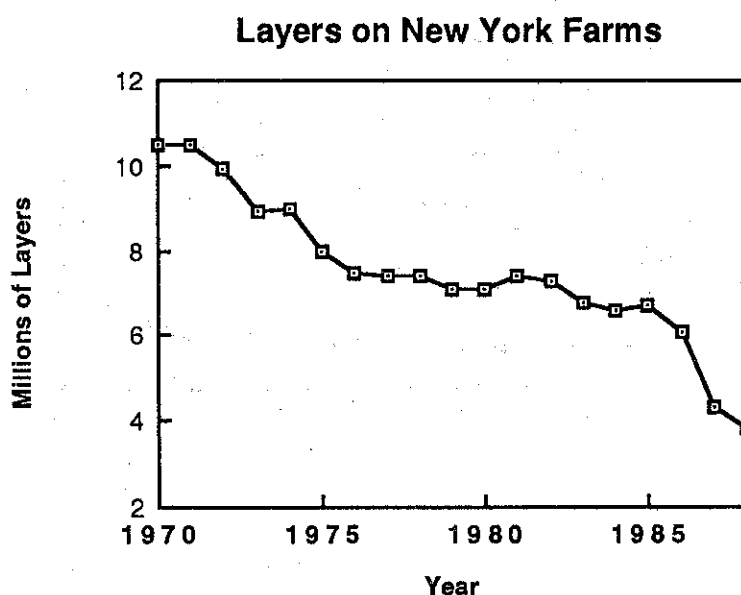
FIGURE 2.



Without the declining demand for eggs, a one year reduction of this magnitude would have paved the way for an optimistic egg forecast for the following year. This year, however, there was such a sudden drop-off in consumption (about a dozen eggs per capita) that the first and second quarters of 1989 are likely to be weak. The third quarter however looks better and will probably be profitable for most egg producers.

As can be seen in figure 3, the New York State flock has followed national trends, declining for the last 20 years from over 10 million in the late 1960's and early 1970's to less than 4 million in 1988. The New York Agricultural Statistics Service has been reporting some of the lowest monthly egg production figures this year since records began in 1925. The state flock will probably bottom out at current levels and could see some growth in the next few years.

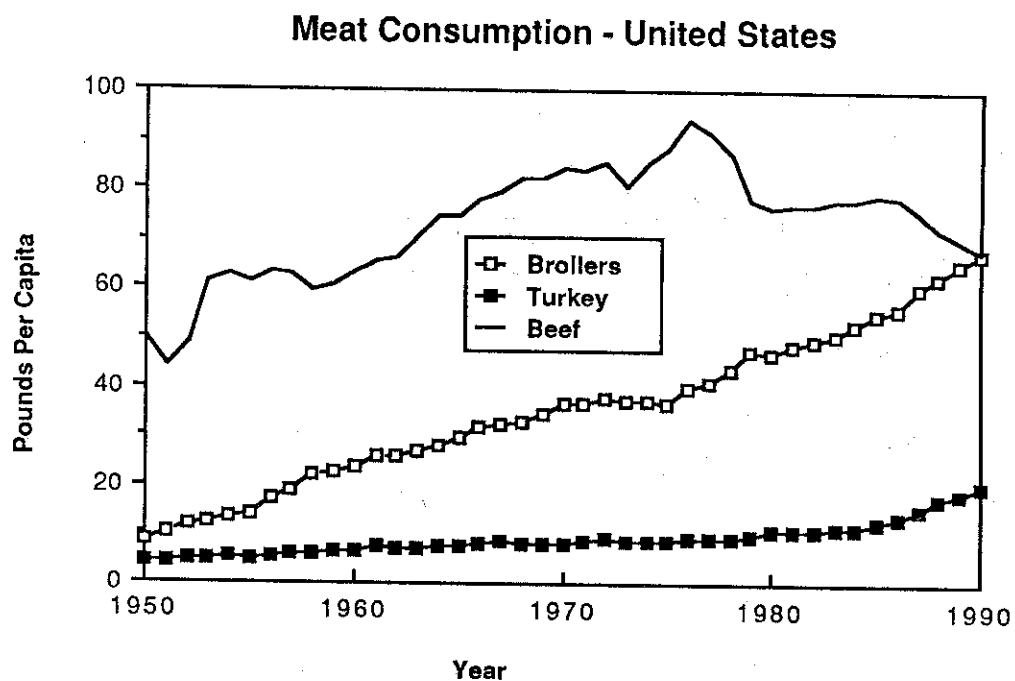
FIGURE 3.



POULTRY MEAT INDUSTRY

In marked contrast to the egg industry, the poultry meat industry has experienced rapid growth during the last 40 years. Broiler consumption per capita has grown from 8 pounds in 1950 to over 60 pounds today and is likely to exceed the consumption of beef within two years. Turkey consumption during the same period has risen from 4 to 20 pounds per capita. (see figure 4)

FIGURE 4.



This remarkable shift in the nation's eating habits has occurred primarily because of improved production efficiency which has brought down poultry prices added to intensive marketing efforts on behalf of a number of new products. The average retail price of poultry meat is now only one third the average retail price of beef, and poultry is offered in a variety of fresh, frozen, cooked, uncooked and microwavable products.

Having survived losses in early 1988, the turkey and broiler industries should have a good year in 1989. The turkey industry may see a weak 1st and 2nd quarter in 1989 due to the rapid increase in new turkey production capacities, however, the 3rd and 4th quarters will be profitable for most producers. The broiler business looks positive for the entire year. Following the typical annual cycle, the 1st quarter will be the least profitable and the 3rd quarter will be the most profitable.

As can be seen on figure 5, producers in New York have been able to participate to some extent in the increased popularity of poultry meat. Both broiler and turkey production in the state have risen and there is potential for additional growth in niche markets. Long Island duck production (figure 6) has been declining due to the increasing difficulty of continuing to produce in that populated part of the state.

FIGURE 5.

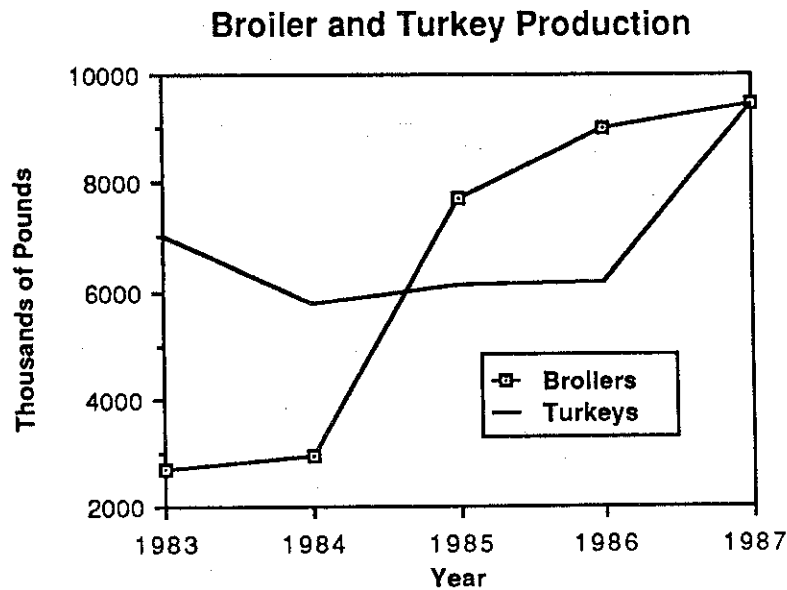
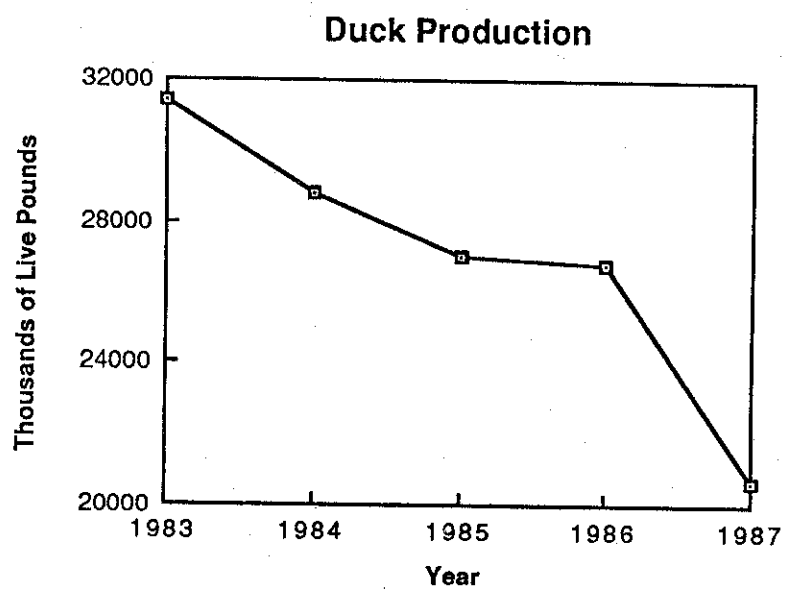


FIGURE 6.



1989 OUTLOOK FOR RED MEAT ANIMALS

An expected strong economy led by strength in manufacturing jobs and the lowest unemployment levels since the mid 1970's are expected to increase consumer income 6% in 1989. This should provide the base for a stronger meat demand in 1989. Each 1% change in consumer spending for beef directly affects the value of a fed steer by \$1/cwt. and a feeder calf by up to \$5/cwt. On the supply side, total red meat and poultry production in 1989 is expected to decline 1% from 1988. Total meat supplies are record large in 1988 because of increases in pork and poultry output. Per capita consumption for beef, pork and poultry is expected to be 73.4, 63.5, and 83.0 lb., respectively for the year. Average per capita meat consumption has increased by more than 15 lb. since 1980, but this trend should end during 1988 because of declining beef production. Fed beef production is expected to decline about 6% in 1989, which will be the lowest level since 1980-81. Cow slaughter may decline another 2 to 3%, with a small decrease in total nonfed slaughter. Pork production is expected to decline about 1% in 1989, but will still be 8% above 1987. Broiler production is expected to rise about 4% above 1988 levels. Even though poultry feed prices increased significantly in 1988, the industry in total remained profitable. Declining beef supplies will continue to support poultry and pork prices in 1989.

Beef Cattle

The sharpest drop in total beef production is expected in the spring and summer of 1989 (6-8% less than the same period in 1988). This could trigger record highs in cattle prices at that time with choice steers reaching \$75-\$80/cwt. Choice steers should average in the low to mid 70's for the year, compared with 1988 prices mostly ranging from \$68-71, which was nearly \$20/cwt. above 1985-1986. This expectation of higher prices and a short supply of feeder cattle has driven yearling steer prices into the \$80's and steer calves into the \$90's this fall, which along with corn prices expected to be in the \$3/bu. range has driven breakeven sale prices for choice steers into the mid \$70's. In attempting to keep lots full plus future expectations for prices cattle feeders are bidding feeder cattle to what may be breakeven sale prices. Competition in the industry tends to force feeder cattle prices to the average industry breakeven price levels based on average costs and future expectations.

In response to a smaller beef supply, cull cow prices are expected to move \$1 to \$2/cwt. higher than the 1988 average of \$46 to \$48/cwt. However, in the first quarter, cows could be \$10 to \$15/cwt. higher above this base. Historical prices indicate cow prices rise 6% from November to January, 16% to February and 20 to 22% to March-May. However, cow numbers are at a 27 year low. In 1979 when the liquidation phase of the last cycle ended, cow prices rose 50% above the long term average as producers began rebuilding numbers. If liquidation ceases and choice steer prices move into the mid to upper 70's, March-May cow prices could reach into the high 50's to low 60's. However, because of this years drought, the current cattle cycle is not expected to reach the end of the herd liquidation phase until 1990 or 1991, and the next cycle is not expected to include as much expansion as the past 6 cycles.

Other factors that could affect the cattle market are changes in beef's share of total meat demand and exports. The decline in the demand for beef has

slowed. A 1% change in beef's share of total meat consumption changes the value of choice steer \$2/cwt. and a feeder calf by \$5/cwt. Negative factors that precipitated the decline in the demand for beef, including health concerns, less active lifestyles, the demand for more convenience foods and growth in the more cost competitive poultry industry, are still at work. However, because of higher consumer incomes and beef promotion and education, deflated beef prices are not expected to drop in 1989 as they did between 1979 and 1986, even though inflation adjusted demand may be flat. Beef exports have been growing; they have increased from 200 million pounds in the 1970's to 1988 levels of 620 million pounds and are expected to reach 670 million pounds in 1989. The proposed EEC ban on importation of meat products from countries that permit the use of growth promoting agents in the worst case would equate to a loss of about \$3/head. However, if a counter ban on EEC meat importation into the U.S. is invoked, the net effect could be positive, because our imports of European meat are greater than our exports of meat from animals given growth stimulants.

Implications for New York Beef Producers

Feeder cattle prices should be as good in 1989 as in 1988, unless corn prices move considerably higher than the expected peak of around \$3/bu. As feeder cattle supplies tighten, Holstein steers will become more competitive and profitable. Of concern is the reduced corn supply and our regional basis on corn price, which can be \$.25/bu. or more higher than the midwest. Corn carryover could be down to 1.5 billion bu. by next fall, which may drive corn prices upward and dampen feeder cattle prices. Feeder cattle prices decline about \$.45/cwt. for each \$.50/bu. increase in corn price. Utilization of regional by-products, which include food processing byproducts and Holstein steers, will become even more important to regional cattle feeders in order to be cost competitive. Most competitive advantages today are gained through accurate projections and effective marketing rather than production differences in the industry because of increased competition and widespread use of technologies available to the cattle industry. Therefore we must know our costs and determine whether we are competitive, and increase our abilities to market our cattle within the region.

Hogs

While beef supplies have been declining, pork supplies have been increasing the past two years, because of increased profitability. Pork supplies increased from 58.5 lb./capita in 1986 to 63.5 lb. in 1988, and are expected to be near that level in 1989. Profitability for pork producers has declined sharply this fall because of lower than expected prices and higher feed costs. Hog slaughter during the third quarter was 12% above a year ago, added to July 1 cold storage inventories that were 80% higher than the previous year. This could trigger some liquidation in 1989, adding to already large pork supplies. In the first quarter of 1989, pork production is likely to be about 3% above 1988 levels, because of an increase in the summer pig crop. However, because of tighter beef supplies and anticipation of lower production in the second half, prices should stay in the low to mid \$40's/cwt. Second quarter pork production is expected to be about the same as in 1988, with prices rising to the mid to upper \$40's. Third and fourth quarter supplies and prices will depend on the amount of herd liquidation that occurs the last quarter of 1988. Moderate liquidation is expected, resulting in a lower output of pork in the second half of 1989. Prices could rise to the low \$50's in the third quarter and the fourth quarter seasonal

decline may result in prices dropping to levels no lower than the mid to high \$40's.

Sheep and Lambs

Lamb and mutton production was 9% higher the first half of 1988, and average dressed weights were up 9% over a year ago. As a result of both increased supplies and discounting of heavier carcasses, Lamb prices dropped from \$157/cwt.(dressed weight basis) in January to \$124 in June. This dramatic drop is indicative of the price reduction needed to move increased lamb production in the retail market once the hotel, restaurant, and institutional trade is saturated. For the second half of 1988, lamb and mutton production is expected to average about 3% above 1987. Lamb and mutton production is expected to increase about 2 to 3% in 1989, and imports are expected to increase about 2 million pounds. The largest production is expected to occur in the first quarter to coincide with the spring religious holidays. Prices for slaughter lambs are expected to average in the mid \$60's/cwt. for 1989, depending on whether slaughter weights are lowered and consumers' willingness to purchase relatively expensive lamb with large supplies of other meats being available.