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LIVESTOCK
COSTS AND RETURNS
FROM
FARM COST ACCOUNTS

28 FARMS-1981
NEW YORK STATE

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REPORTS
from
FARM COST ACCOUNTS

28 Farms, 1981

Enterprise data from the 1981 New York Farm Cost Account Project have been published in the following reports. Additional copies may be obtained from County Extension offices or directly from the Department of Agricultural Economics, Cornell University, Ithaca, New York 14853-0398.

Overhead Costs	A.E. Res. 82-33
Livestock Costs and Returns	A.E. Res. 82-34
Field Crops Costs and Returns	A.E. Res. 82-35
Fruit and Vegetable Crops Costs and Returns	A.E. Res. 82-36

LIVESTOCK COSTS AND RETURNS, A.E. Res. 82-34

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INTRODUCTION

The New York Farm Cost Account Project is a research project which serves as a means of obtaining primary cost data for enterprises common on New York farms. It provides data on labor requirements and costs, machinery costs, and production costs for crop and livestock enterprises. The data is published from detailed enterprise records kept by New York farmers in cooperation with the Department of Agricultural Economics at Cornell University. These publications provide College and field staff, as well as farmers and others interested in agriculture, with a continuous record of economic changes taking place on New York farms.

The farms are located in most of the farming areas of the State. They are generally well-managed, full-time, commercial farm businesses. They provide an indication of economic factors experienced by some of the "better" farmers in New York.

The reports present the results of individual enterprises and the averages of the enterprise costs and returns for all farms. They show not only the averages of cost and returns but also indications of the variations and reasons for them. The factors for individual enterprises are arranged according to size of enterprise. The annual averages of the various factors are not averages of average costs but are weighted by the size of the enterprise.

Acknowledgements

The project was under the supervision of Darwin Snyder, who also did the field work necessary to complete the records. Editing and processing the data, closing the books, and the preparation of these reports was done by Barbara Wilcox and Florence Blodgett assisted by Oneta Shipe. Mary Chaffee assisted in processing the data.

The material on pages 2, 3, and 4 of this report was taken from A.E. Res. 82-24, Dairy Farm Management Business Summary, New York, 1981, by Stuart F. Smith.

Special acknowledgement is due the group of farmers who are willing to keep the detailed records so essential to such a system of enterprise cost accounting. Without their continuing efforts and willingness to provide this information, this important and accurate source of real farm data would not exist.

Inflation, appreciation, supply and demand all have a direct affect on the inventory values on New York dairy farms. Machinery and real estate prices have risen steadily during the past six years with machinery prices increasing more rapidly. Dairy cow prices have changed most dramatically since 1975 as the demand for replacements jumped in 1978 and 1979 and weakened in 1981.

Table 1. UNIT VALUES OF NEW YORK DAIRY FARM INVENTORY ITEMS, 1975-1981

Year*	New York Dairy Cows		Machinery*		N.Y. Farm Real Estate	
	Value/Head	1977=100	Value/Head	1977=100	Value/Acre	1977=100
1975	\$ 450	91	82	82	\$510	88
1976	485	98	91	91	553	95
1977	495	100	100	100	587	100
1978	800	162	109	109	600	102
1979	1,105	223	122	122	670	113
1980	1,240	251	136	136	708	119
1981	1,120	226	152	152	749	126

*Annual average for U.S.

Table 1 shows New York year end (December) price received for dairy cows (replacements), an index of the same cow prices, an index of U.S. machinery prices, and the average per acre value of New York farmland and buildings reported in February. Chart 1 illustrates the annual changes in cow, machinery, and real estate values that have occurred over the last six years.

Chart 1. ANNUAL CHANGES IN DAIRY COW, FARM MACHINERY, & FARM REAL ESTATE VALUES
New York Dairy Farms, 1975-1981

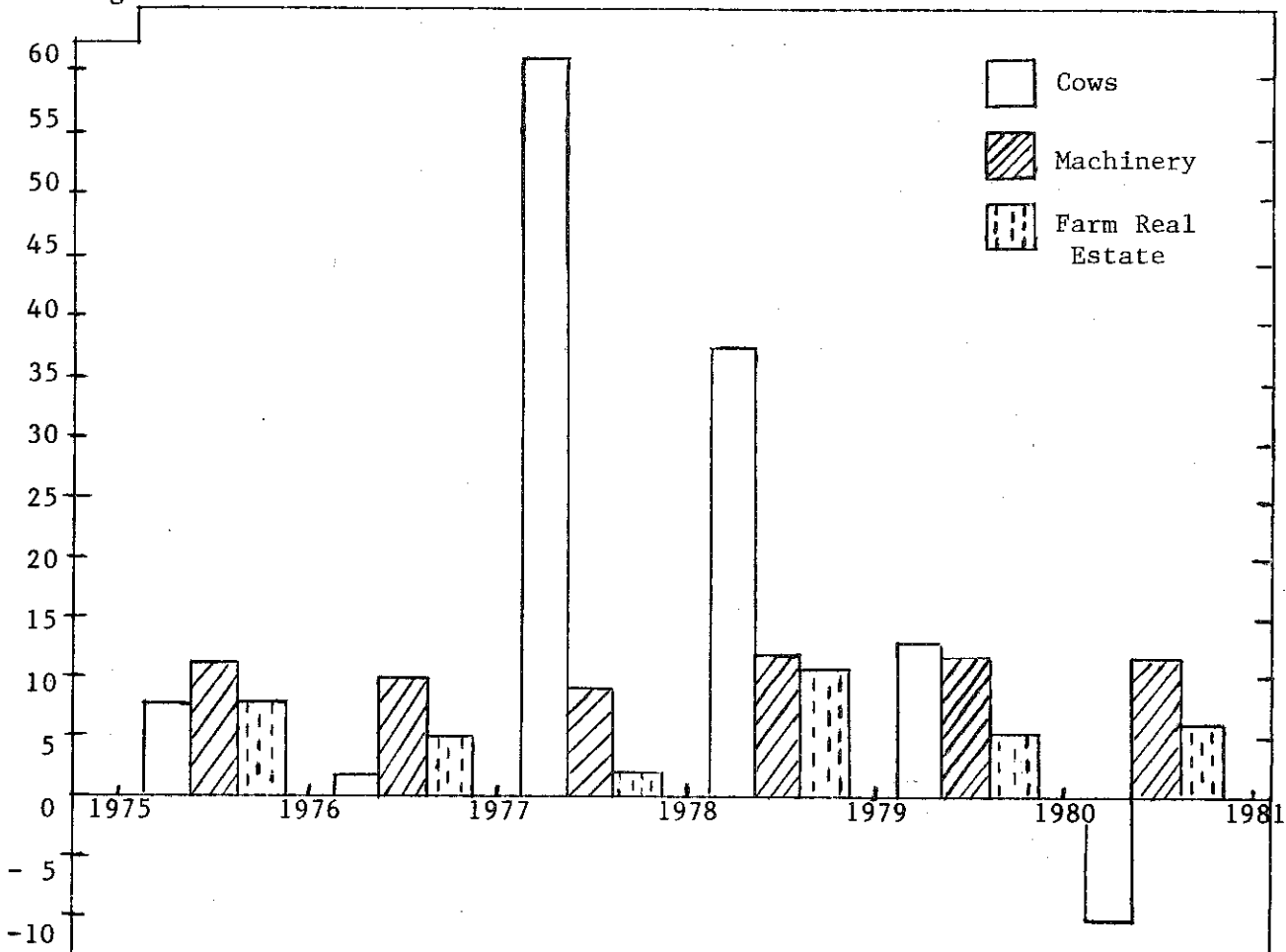
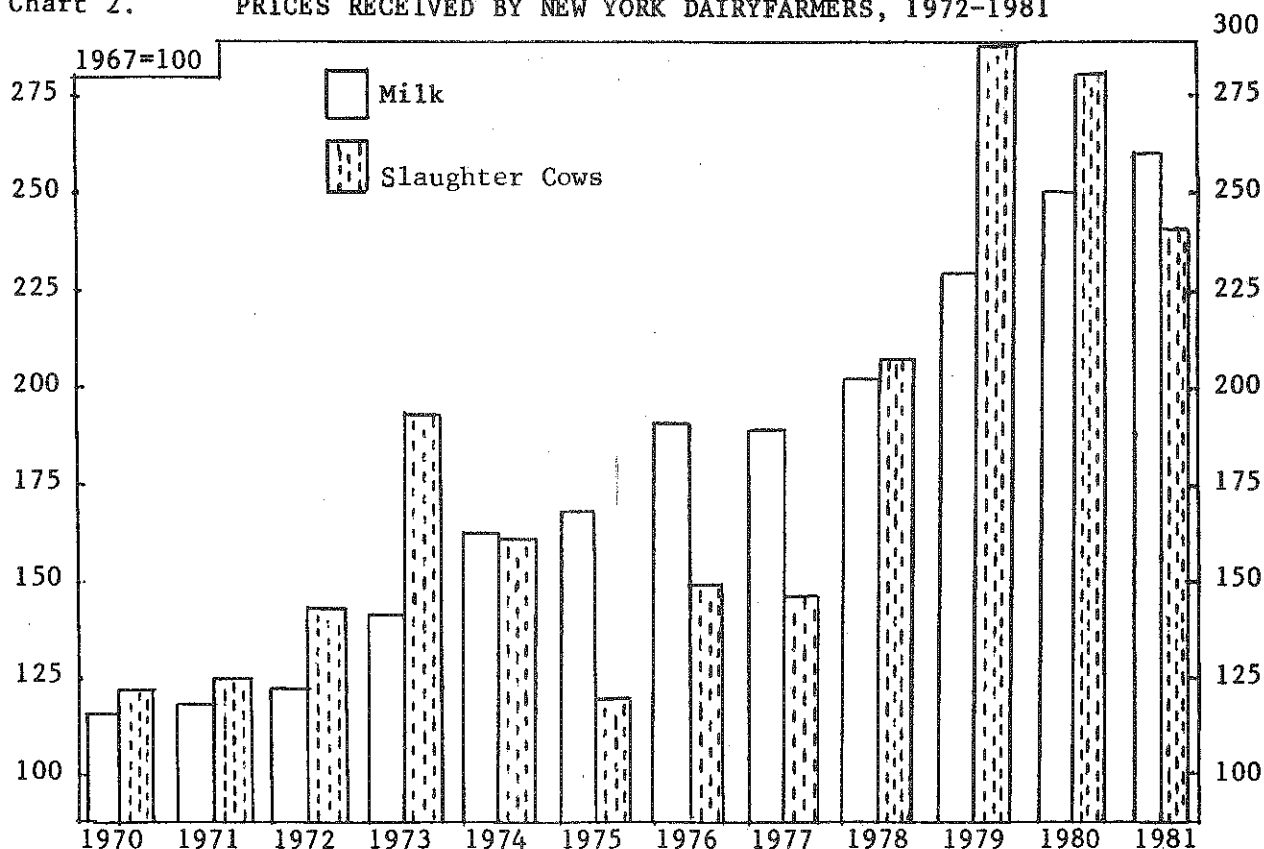


Chart 2. PRICES RECEIVED BY NEW YORK DAIRYFARMERS, 1972-1981



The prices dairyfarmers receive for milk, cattle, and other commodities they sell have a major effect on dairy farm profits. Chart 2 shows what has happened to average milk and slaughter cow prices paid to New York farmers since 1970. Milk prices have increased at a more constant rate showing only one year of decline since 1970. Slaughter cow prices have shown wide fluctuations over the period but have not moved in the same direction for more than three consecutive years.

Table 2. PRICES RECEIVED BY NEW YORK DAIRYFARMERS, 1970-1981

Year	All Milk	Slaughter Cows	Calves	Monthly Farm Price Per 100 Lbs. of Milk, 1981	
	(cwt.)	(cwt.)	(cwt.)		
1970	\$ 5.99	\$20.70	\$34.70	January	\$14.00
1971	6.12	21.20	36.20	February	13.90
1972	6.33	24.50	44.80	March	13.60
1973	7.32	32.80	54.60	April	13.40
1974	8.35	27.10	40.80	May	13.20
				June	13.00
1975	8.71	20.60	26.20	July	13.50
1976	9.83	25.40	34.50	August	13.90
1977	9.75	25.00	37.50	September	14.10
1978	10.50	35.30	58.20	October	14.40
1979	11.90	49.80	88.80	November	14.20
				December	13.90
1980	13.00	46.30	78.00		
1981	13.80	41.30	66.20		

Table 3. PRICES PAID BY FARMERS FOR SELECTED ITEMS, 1972-1980

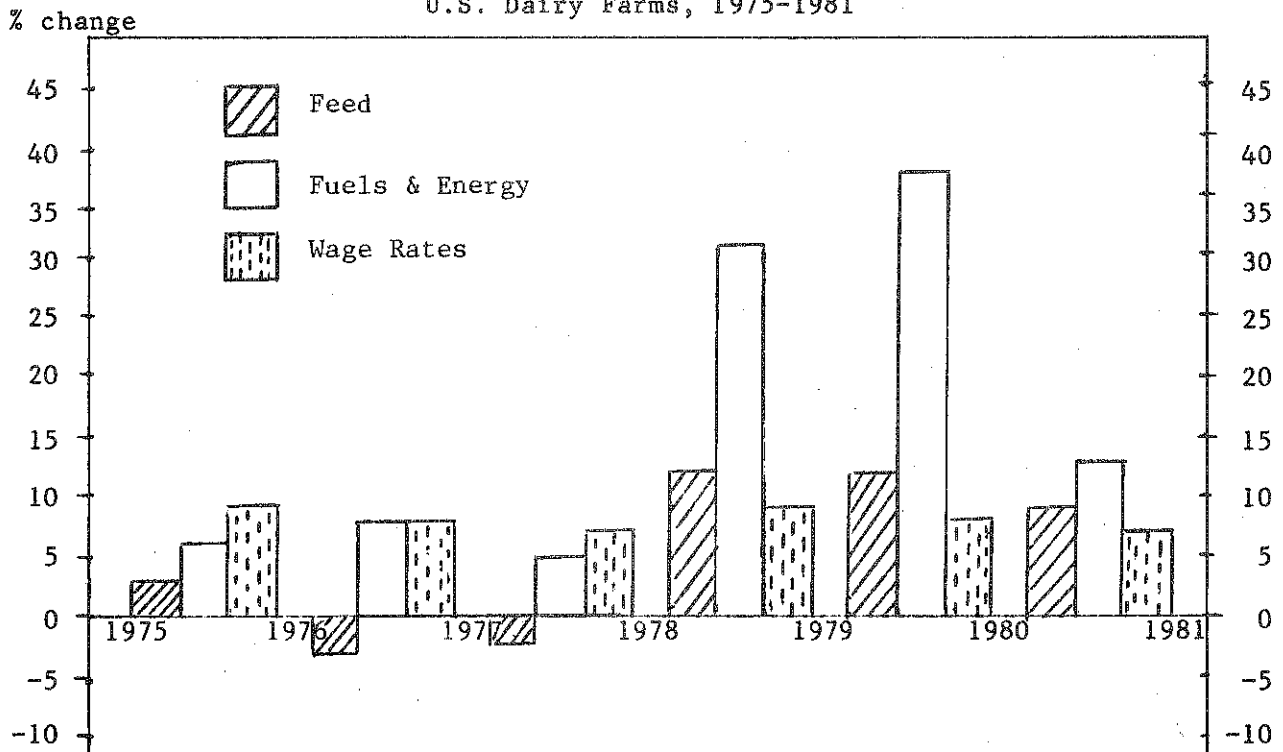
Year	Index 1977=100					
	Feed	Fert.	Fuel & Energy	Wage Rates	Taxes	Interest
1972	57	52	54	63	75	46
1973	86	56	57	69	77	54
1974	104	92	79	79	81	65
1975	100	120	88	85	87	76
1976	103	102	93	93	94	87
1977	100	100	100	100	100	100
1978	98	100	105	107	100	118
1979	110	108	137	117	107	144
1980	123	134	188	127	114	179
1981	134	144	213	136	124	195

SOURCE: USDA Agricultural Prices

The prices dairyfarmers pay for a given quantity of goods and services has a major influence on farm production costs. The astute manager will keep close tabs on unit costs and substitute the most economical goods and services for those that are too expensive.

Table 3 shows the unit cost indexes of selected goods and services used on New York dairy farms. The changes in feed prices, fuels and energy costs, and wage rates between years are illustrated in Chart 3.

Chart 3. ANNUAL CHANGES IN PRICES OF THREE MAJOR PRODUCTION ITEMS
U.S. Dairy Farms, 1975-1981



Although all three major cost items have increased since 1975. Feed prices have been through a cycle, fuel and energy costs show the greatest increases, and wage rates have increased at a relatively slow but constant rate.

Growing Conditions

Table 1. TEMPERATURE, PRECIPITATION, AND GROWING SEASON
Selected Stations, New York, 1941-70 and 1981

Station	Average temperature		Precipitation				Length of growing season*	
	May - Sept.		May - Sept.		Total Annual		1947-67 1981	
	1941-70	1981	1941-70	1981	1941-70	1981	1947-67	1981
	degrees		inches				days	
Albany	65.7	64.4	15.4	13.9	33.4	30.4	---	133
Alfred	61.8	60.8	17.2	19.3	36.7	49.8	125	132
Aurora	64.6	63.3	13.8	21.1	40.0	37.7	160	134
Batavia	64.1	64.4	15.3	----	32.6	39.8	154	159
Binghamton	63.3	63.6	17.9	12.7	37.4	30.3	154	156
Canton	63.0	62.0	16.5	20.2	34.5	34.7	127	133
Glens Falls	----	64.1	17.8	17.8	39.3	30.4	---	134
Ithaca	63.8	62.7	17.2	17.0	34.8	39.1	145	133
Lowville	62.5	60.7	16.5	----	38.5	37.6	123	133
Utica	63.5	63.8	18.1	23.3	40.6	41.9	157	135

*Days between the last temperature of 32 degrees in the spring and the first in the fall.

Source: Climatological Data, NOAA, Environmental Data Service, Annual Summary, New York, 1981, Vol. 93, No. 13.

Weather is a factor to be considered when studying a farm business for specific year. The growing conditions have a marked effect on the crops for that year. It is for this reason that data are presented on the growing conditions for 1981 and for the period 1941-70.

The 1981 growing season, generally, produced good crops although the harvest season, particularly September, was cool and wet. Variability was a key word to describe both temperatures and precipitation in most parts of the State throughout the season. Table 2 illustrates weather stations which show conditions that deviated significantly from the average.

Data in Tables 1 and 2 are presented for 10 weather stations located throughout the State.

Table 2. GROWING SEASON RAINFALL
Selected Stations, New York, 1941-70 and 1981

	May		June		July		August		September	
	1941-70	1981	1941-70	1981	1941-70	1981	1941-70	1981	1941-70	1981
	inches									
Albany	3.26	2.44	3.00	2.78	3.12	3.50	2.87	1.76	3.12	3.45
Alfred	3.76	2.55	3.76	3.52	3.73	6.53	3.00	1.70	2.93	4.96
Aurora	2.98	1.95	2.54	3.82	3.03	4.07	2.81	4.34	2.46	6.95
Batavia	3.17	----	2.69	----	3.05	3.20	3.50	5.07	2.87	5.67
Binghamton	3.83	1.94	3.59	3.42	3.83	1.99	3.61	1.99	3.02	3.40
Canton	3.37	2.90	2.91	3.88	3.43	2.27	3.47	5.23	3.31	5.93
Glens Falls	3.63	2.81	3.77	2.47	3.68	3.81	3.42	2.35	3.31	6.40
Ithaca	3.55	1.78	3.40	2.57	3.67	4.03	3.49	3.63	3.08	4.98
Lowville	3.42	2.98	2.94	3.20	3.26	5.11	3.58	----	3.31	5.27
Utica	3.52	2.01	3.55	3.42	4.17	4.06	3.54	2.75	3.32	11.09

Source: Climatological Data, NOAA, Environmental Data Service, Annual Summary, New York, 1981, Vol. 93, No. 13.

YIELDS FOR CROPS AND LIVESTOCK
New York State and Farm Cost Account Averages

Item	Unit	New York State*				Cost Account 1981
		1957-61	1967-71	1977-81	1981	
Hay, Alfalfa mix.	tons	2.2	2.6	2.7	2.7	3.2
Corn silage	tons	11	14	14	14.5	16.0
Corn grain	bu.	57	85	90	93	93
Oats	bu.	52	60	60	64	--
Wheat	bu.	32	39	40	44	56
Milk per cow	lbs.	7,914	10,361	11,742	12,265	15,493

*Source: New York Agricultural Statistics, 1981; Crop Reporting Service, USDA.

FARM COST ACCOUNT SUMMARY, 1981
Crop Enterprises

Crop	Number of enterprises	Average acres per enterprise	Yield per acre	Hours of labor per acre*	Return per		Profit per acre	Profit on enterprise
					Hour of labor	Dollar of cost		
<u>Forage:</u>								
Hay	18	52	3.2 tn.	7	1.70	0.86	-32	-1,710
Hay crop silage	18	149	7.9 tn.	4	2.79	0.94	-14	-2,129
Corn silage	20	111	16.0 tn.	5	5.97	0.99	- 5	- 556
<u>Grain:</u>								
Corn for grain	9	82	93 bu.	3	-12.79	0.77	-70	-5,778
High moist. corn	21	126	3.6 tn.	4	-0.45	0.92	-23	-2,819
Wheat	11	146	56 bu.	2	15.26	1.10	17	2,509
<u>Fruit:</u>								
Apples	12	99	406 bu.	84	8.97	1.13	191	18,721
Red tart cherries	7	38	2,815 lb.	37	13.76	1.35	291	11,008

*To grow and harvest the crop.

ENTERPRISE RATES OF RETURN
FARM COST ACCOUNT RECORDS, 1978-81

Enterprise	Return per hour of labor				Return per dollar of cost			
	1978	1979	1980	1981	1978	1979	1980	1981
	\$	\$	\$	\$	\$	\$	\$	\$
<u>Livestock:</u>								
Dairy cows	9.01	10.77	10.64	7.89	1.13	1.15	1.11	1.04
Dairy heifers	2.23	3.97	5.94	0.25	0.92	0.96	0.99	0.87
<u>Forage:</u>								
Hay	3.31	0.90	0.02	1.70	0.94	0.84	0.81	0.86
Hay crop silage	-2.52	0.39	5.82	2.79	0.79	0.87	1.00	0.94
Corn silage	4.46	9.05	5.86	5.97	0.98	1.07	0.99	0.99
<u>Grain:</u>								
Corn for grain	0.00	5.12	23.76	-12.79	0.92	1.00	1.28	0.77
High moisture corn	6.98	18.84	22.68	0.45	1.04	1.22	1.23	0.92
Oats	-3.92	-18.35	NA	NA	0.77	0.63	NA	NA
Wheat	-4.11	22.68	22.46	15.26	0.75	1.26	1.21	1.10
<u>Fruits:</u>								
Apples	7.61	7.39	5.52	8.97	1.19	1.07	0.91	1.13
Sweet cherries	7.45	NA	NA	NA	1.29	NA	NA	NA
Red tart cherries	43.59	33.16	17.29	13.76	3.43	2.80	1.62	1.35

Dairy Cows -

According to New York Crop Reporting Service figures, the value of dairy cows reached an all time high of \$1,250 per cow in November 1980. From that point, cow values declined throughout 1981 with the exception of a brief mid-year rally. At the end of 1981, cow values had dropped over \$100 per head to \$1,120. Average value for the year was slightly below the average for 1980. Cull beef prices also declined throughout the year to end at \$36.70 per cwt. - the lowest price since August, 1978. Bob calf prices continued their downward trend from mid-1979. Prices averaged \$66.81 per cwt. for the year and brought \$57.80 per cwt. in December 1981.

These dairy enterprises represent commercial herds where herd dispersals are not a factor. Cow values were held at a constant, conservative level for the year to prevent the declining cow values from affecting enterprise profits. However, profits were affected by the decline in cull beef and bob calf prices as dairymen disposed of livestock in the normal conduct of their herd management practices.

DAIRY CCWS, 1981
COSTS AND RETURNS PER DAIRY COW
3,570 CCWS ON 22 COST ACCOUNT FARMS

ITEM	AVERAGE PER COW
CCSIS:	
DEPRECIATION - - - - -	\$ 179
FEED - 3,891 LBS CF DRY GRAIN - - - - -	\$ 424
2.2 TONS OF HIGH MOISTURE CORN - - -	186
0.5 TONS OF HAY - - - - -	31
5.6 TONS OF HAY CRGP SILAGE - - -	154
7.7 TONS OF CORN SILAGE - - - - -	161
PASTURE AND ALL OTHER FEED - - - -	45
TOTAL FEED COST PER COW - - - - -	1,001
LABOR - 51 HOURS - - - - -	323
TRACTOR, TRUCK - - - - -	34
EQUIPMENT - - - - -	96
BEDDING - - - - -	17
BREEDING - - - - -	27
VET AND MEDICINE - - - - -	41
MILK HAULING - - - - -	66
MILK TESTING - - - - -	12
SUPPLIES - - - - -	31
UTILITIES - - - - -	31
INSURANCE - - - - -	7
INTEREST ON VALUE CF COW - - - - -	88
BUILDING USE - - - - -	87
ALL CTHER - - - - -	118
TOTAL OTHER THAN DEPREC, FEED, LABCR -	655
TOTAL COSTS - - - - -	\$ 2,158
RETURNS:	
15,414 POUNDS OF MILK SOLD - - - - -	\$2,141
79 POUNDS CF MILK USED ON FARM - - -	11
CALVES - - - - -	81
CTHER RETURNS - - - - -	4
TOTAL RETURNS - - - - -	\$ 2,237
PROFIT: - - - - -	\$ 79
OTHER FACTORS - AVG PER CWT CF MILK:	
ALL GRAIN COST	\$ 3.94
TOTAL FEED COST	6.46
LABCR COST	2.08
TOTAL COST	\$ 13.38
RETURNS	13.89
MILK PRCDUCED PER HOUR OF LABOR	304 LB
RETURN PER HOUR CF LABOR	\$ 7.89
RETURN PER DOLLAR CF COST	1.04

FACTORS FROM 23 DAIRY COW ENTERPRISES
22 COST ACCOUNT FARMS, 1981
(ARRANGED BY NUMBER OF COWS)

FARM NO	HERD SIZE NG	MILK			FEED PER COW					VET MED COST/ COW \$
		MILK PER COW LB	LABOR PER COW HR	PER HR OF LABOR LB	DRY GRAIN LB	HIGH MSTR CORN TN	HAY CROP TN	SILG TN	CORN SILG TN	
834	604	14,312	41	353	964	4.1	.1	7.3	7.3	22
827	395	15,608	45	346	2,304	1.8	.3	4.6	7.3	35
812	292	19,437	38	505	6,952			5.6	12.3	62
806	263	15,648	38	410	2,821	2.3	.1	4.5	8.0	32
824	217	14,499	41	353	1,806	3.3	.1	5.3	4.0	57
830	187	16,226	59	275	3,775	3.3	.4	10.6	2.4	36
821	148	13,394	50	271	4,838	2.2	.7	3.2	11.6	21
840	146	15,215	44	342	6,767		.1	5.8	13.4	45
804	142	14,052	51	278	6,423		.4	5.0	10.6	47
105	131	14,776	62	239	3,099	4.5	1.0	4.1	5.7	50
835	130	13,353	44	303	4,785	2.4	.9	6.2	6.7	67
105*	113	16,031	79	203	7,841		.7	4.4	7.4	74
112	111	16,740	60	281	5,802	1.1	1.2	4.7	7.6	21
111*	101	17,220	73	235	2,535	4.5	.4	11.9	2.7	11
208*	98	14,904	61	246	7,388		.8	4.4	9.8	64
203*	96	16,115	61	262	7,396		.7	4.5	10.0	73
836	84	14,552	55	263	6,238		2.2		8.0	32
867*	68	19,007	72	266	2,441	4.0	2.1	4.6	4.9	53
153*	60	16,255	69	236	3,033	4.2	1.7	7.2	4.5	8
146*	53	13,358	120	111	4,830	1.8	.7	4.5	3.7	35
828*	47	15,474	86	180	723	4.7	1.5	6.7	3.0	108
127*	46	16,128	48	339	6,304		1.2	4.3	11.7	36
111*	38	15,150	71	213	5,579	1.2	2.2	2.6	9.2	16

1981 GROUP AVERAGES, ACCORDING TO NUMBER OF COWS:

THIRDS

HIGH	282	15,543	45	357	3,779	2.2	.3	5.9	8.3	39
MED	118	15,297	62	256	5,411	1.8	.8	5.9	7.3	48
LOW	62	15,756	73	234	4,569	2.0	1.6	4.3	6.9	45

ANNUAL AVERAGES, ALL ENIR, WEIGHTED BY NUMBER OF COWS:

1981	155	15,493	51	304	3,891	2.2	.5	5.6	7.7	41
1980	155	15,894	51	311	3,686	2.2	.6	4.3	7.2	34
1979	150	15,372	51	303	4,521	1.8	.7	3.6	8.0	37
1978	142	15,051	50	300	4,357	1.5	.6	3.6	7.8	33
1977	130	14,344	54	264	4,272	1.7	.7	4.1	7.5	26

* STANCHION BARNS

See note on page 8.

FACTORS FROM 23 DAIRY COW ENTERPRISES
22 COST ACCOUNT FARMS, 1981
(READ ACROSS BOTH PAGES)

	AVG COST PER COW		AVG PER CWT OF MILK		AVERAGE PER COW			RETURN PER HOUR		PROFIT ON ENTERPRISE		FARM NO
	FEED	LABOR	COST	RETURN	COST	RE- TURN	PRO- FIT	OF LABOR	OF COST	ENTER- PRISE		
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
958	286	12.67	13.75	1889	2043	154	10.87	1.08	93,155	834		
827	371	12.77	13.90	2066	2243	177	12.12	1.09	69,696	827		
1,192	392	12.77	13.55	2569	2721	152	14.14	1.06	44,364	812		
944	275	12.56	14.71	2044	2380	336	16.03	1.16	88,558	806		
788	235	11.87	13.19	1817	2008	191	10.36	1.11	41,454	824		
1,058	315	12.72	13.82	2179	2359	180	8.39	1.08	33,632	830		
1,140	268	15.27	14.32	2129	2001	128-	2.82	0.94	18,969-	821		
1,127	290	13.32	13.74	2100	2165	65	7.97	1.03	9,411	840		
1,069	354	15.46	14.84	2263	2176	87-	5.28	0.96	12,396-	804		
1,045	329	14.86	13.98	2272	2141	131-	3.20	0.94	17,181-	105		
1,084	215	14.26	13.87	1983	1931	52-	3.69	0.97	6,766-	835		
1,047	405	16.16	13.72	2720	2329	391-	0.18	0.86	44,169-	105		
1,025	271	12.66	12.93	2204	2249	45	5.31	1.02	5,051	112		
1,094	436	12.97	14.55	2309	2582	273	9.69	1.12	27,510	111		
1,138	271	15.69	14.61	2469	2308	161-	1.82	0.93	15,747-	208		
1,143	292	15.46	14.66	2615	2487	128-	2.67	0.95	12,256-	203		
711	534	13.26	13.39	1988	2007	19	9.97	1.01	1,581	836		
1,066	322	12.06	13.59	2405	2697	292	8.59	1.12	19,859	867		
1,037	329	12.49	13.03	2069	2156	87	6.05	1.04	5,221	153		
874	473	15.37	13.59	2111	1875	236-	1.96	0.89	12,558-	146		
904	379	13.80	13.48	2227	2177	50-	3.84	0.98	2,322-	828		
1,107	264	14.70	14.41	2465	2418	47-	4.56	0.98	2,166-	127		
1,133	449	16.25	14.34	2514	2224	290-	2.25	0.88	10,995-	111		

1981 GROUP AVERAGES, ACCORDING TO NUMBER OF COWS:

											THIRDS
1,005	304	12.99	13.87	2100	2240	141	10.34	1.07	45,163		HIGH
1,072	326	14.58	14.07	2318	2246	71-	4.17	0.97	9,099-		MED
997	381	14.17	13.81	2300	2256	43-	4.99	0.98	1,704-		LOW

ANNUAL AVERAGES, ALL ENTR. WEIGHTED BY NUMBER OF COWS:

1,001	323	13.38	13.89	2158	2237	79	7.89	1.04	12,346	1981
881	320	11.74	13.15	1957	2182	225	10.64	1.11	34,711	1980
796	281	10.47	12.19	1713	1978	265	10.77	1.15	39,786	1979
709	253	9.53	10.86	1501	1700	199	9.01	1.13	28,352	1978
695	229	9.58	9.90	1413	1460	47	5.07	1.03	6,085	1977

STANCHION BARN HERDS
DAIRY COWS, 1981
COSTS AND RETURNS PER DAIRY COW
720 COWS ON 9 COST ACCOUNT FARMS

ITEM	AVERAGE PER COW
COSTS:	
DEPRECIATION - - - - -	\$ 174
FEED - 5,161 LBS CF DRY GRAIN - - - - -	\$ 531
1.9 TONS OF HIGH MOISTURE CORN - -	158
1.0 TONS OF HAY - - - - -	70
5.8 TONS OF HAY CROP SILAGE - - -	158
6.8 TONS OF CORN SILAGE - - - - -	141
PASTURE AND ALL OTHER FEED - - - -	8
TOTAL FEED COST PER COW - - - - -	1,066
LABOR - 73 HOURS - - - - -	358
TRACTOR, TRUCK - - - - -	20
EQUIPMENT - - - - -	118
BEDDING - - - - -	23
BREEDING - - - - -	44
VET AND MEDICINE - - - - -	50
MILK HAULING - - - - -	87
MILK TESTING - - - - -	19
SUPPLIES - - - - -	44
UTILITIES - - - - -	38
INSURANCE - - - - -	7
INTEREST ON VALUE OF COW - - - - -	108
BUILDING USE - - - - -	127
ALL OTHER - - - - -	143
TOTAL OTHER THAN DEPREC, FEED, LABOR -	828
TOTAL COSTS - - - - -	\$ 2,426
RETURNS:	
15,970 POUNDS OF MILK SOLD - - - - -	\$2,246
112 POUNDS OF MILK USED ON FARM - - - -	16
CALVES - - - - -	96
OTHER RETURNS - - - - -	2
TOTAL RETURNS - - - - -	\$ 2,360
PROFIT: - - - - -	\$ 66-
OTHER FACTORS - AVG PER CWT OF MILK:	
ALL GRAIN COST	\$ 4.28
TOTAL FEED COST	6.63
LABOR COST	2.23
TOTAL COST	\$ 14.47
RETURNS	14.06
MILK PRODUCED PER HOUR OF LABOR	221 LB
RETURN PER HOUR OF LABOR	\$ 4.01
RETURN PER DOLLAR OF COST	0.97

13
 FREESTALL BARN HERDS
 DAIRY COWS, 1981
 COSTS AND RETURNS PER DAIRY COW
 2,850 COWS ON 13 COST ACCOUNT FARMS

ITEM	AVERAGE PER COW
COSTS:	
DEPRECIATION - - - - -	\$ 180
FEED - 3,570 LBS CF DRY GRAIN - - - - -	\$ 397
2.3 TONS OF HIGH MOISTURE CORN - -	192
0.4 TONS OF HAY - - - - -	21
5.6 TONS OF HAY CROP SILAGE - - -	153
7.9 TONS OF CORN SILAGE - - - - -	166
PASTURE AND ALL OTHER FEED - - - -	56
TOTAL FEED COST PER COW - - - - -	985
LABOR - 45 HOURS - - - - -	314
TRACTOR, TRUCK - - - - -	38
EQUIPMENT - - - - -	90
BEDDING - - - - -	15
BREEDING - - - - -	23
VET AND MEDICINE - - - - -	38
MILK HAULING - - - - -	61
MILK TESTING - - - - -	11
SUPPLIES - - - - -	28
UTILITIES - - - - -	30
INSURANCE - - - - -	6
INTEREST ON VALUE OF COW - - - - -	82
BUILDING USE - - - - -	78
ALL OTHER - - - - -	111
TOTAL OTHER THAN DEPREC, FEED, LABOR -	611
TOTAL COSTS - - - - -	\$ 2,090
RETURNS:	
15,273 POUNDS OF MILK SOLD - - - - -	\$2,115
71 POUNDS OF MILK USED ON FARM - - - -	10
CALVES - - - - -	77
OTHER RETURNS - - - - -	4
TOTAL RETURNS - - - - -	\$ 2,206
PROFIT: - - - - -	\$ 116
OTHER FACTORS - AVG PER CWT OF MILK:	
ALL GRAIN COST	\$ 3.84
TOTAL FEED COST	6.42
LABOR COST	2.04
TOTAL COST	\$ 13.09
RETURNS	13.85
MILK PRODUCED PER HOUR OF LABOR	337 LB
RETURN PER HOUR OF LABOR	\$ 9.46
RETURN PER DOLLAR OF COST	1.06

FACTORS FROM 23 DAIRY COW ENTERPRISES
22 COST ACCOUNT FARMS, 1981
(ARRANGED BY NUMBER OF COWS)

FARM NO	HERD SIZE NO	MILK PER COW LB	LABOR PER COW HR	MILK PER HR OF LABOR LB	FEED PER COW					VET MED COST/ COW \$
					DRY GRAIN LB	HIGH MSTR CORN TN	HAY CROP HAY TN	SILG CORN SILG TN	SILG CORN SILG TN	

10 STANCHION BARN HERDS

105	113	16,031	79	203	7,841		.7	4.4	7.4	74
111	101	17,220	73	235	2,535	4.5	.4	11.9	2.7	11
208	98	14,904	61	246	7,388		.8	4.4	9.8	64
203	96	16,115	61	262	7,396		.7	4.5	10.0	73
867	68	19,007	72	266	2,441	4.0	2.1	4.6	4.9	53
153	60	16,255	69	236	3,033	4.2	1.7	7.2	4.5	8
146	53	13,358	120	111	4,830	1.8	.7	4.5	3.7	35
828	47	15,474	86	180	723	4.7	1.5	6.7	3.0	108
127	46	16,128	48	339	6,304		1.2	4.3	11.7	36
111	38	15,150	71	213	5,579	1.2	2.2	2.6	9.2	16

ANNUAL AVERAGES, ALL ENTR. WEIGHTED BY NUMBER OF COWS:

1981	72	16,082	73	221	5,161	1.9	1.0	5.8	6.8	50
1980	56	15,094	79	191	3,582	2.2	1.3	4.7	7.3	28
1979	51	14,337	80	180	4,922	1.1	2.4	2.4	5.9	28
1978	51	14,178	89	160	3,741	1.4	1.7	3.6	4.4	30
1977	53	13,503	90	150	4,050	1.5	1.7	4.1	6.3	23

13 FREESTALL BARN HERDS

834	604	14,312	41	353	964	4.1	.1	7.3	7.3	22
827	395	15,608	45	346	2,304	1.8	.3	4.6	7.3	35
812	292	19,437	38	505	6,952			5.6	12.3	62
806	263	15,648	38	410	2,821	2.3	.1	4.5	8.0	32
824	217	14,499	41	353	1,806	3.3	.1	5.3	4.0	57
830	187	16,226	59	275	3,775	3.3	.4	10.6	2.4	36
821	148	13,394	50	271	4,838	2.2	.7	3.2	11.6	21
840	146	15,215	44	342	6,767		.1	5.8	13.4	45
804	142	14,052	51	278	6,423		.4	5.0	10.6	47
105	131	14,776	62	239	3,099	4.5	1.0	4.1	5.7	50
835	130	13,353	44	303	4,785	2.4	.9	6.2	6.7	67
112	111	16,740	60	281	5,802	1.1	1.2	4.7	7.6	21
836	84	14,552	55	263	6,238		2.2		8.0	32

ANNUAL AVERAGES, ALL ENTR. WEIGHTED BY NUMBER OF COWS:

1981	219	15,345	45	337	3,570	2.3	.4	5.6	7.9	38
1980	208	16,031	48	336	3,666	2.3	.5	4.3	7.3	35
1979	208	15,521	47	333	4,463	1.8	.4	3.8	8.3	38
1978	203	15,197	44	348	4,460	1.5	.4	3.6	8.3	33
1977	193	14,534	46	314	4,322	1.7	.5	4.1	7.8	27

FACTORS FROM 23 DAIRY COW ENTERPRISES
22 COST ACCOUNT FARMS, 1981
(READ ACROSS BOTH PAGES)

AVG COST PER COW FOR		AVG PER CWT OF MILK		AVERAGE PER COW			RETURN PER HOUR OF LABOR		PROFIT ON ENTERPRISE		FARM NO
FEED	LABOR	COST	RETURN	COST	TURN	RE-PRO-FIT	OF	OF	ENTERPRISE	PRISE	NO
\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	

10 STANCHION BARN HERDS

1,047	405	16.16	13.72	2720	2329	391-	0.18	0.86	44,169-	105
1,094	436	12.97	14.55	2309	2582	273	9.69	1.12	27,510	111
1,138	271	15.69	14.61	2469	2308	161-	1.82	0.93	15,747-	208
1,143	292	15.46	14.66	2615	2487	128-	2.67	0.95	12,256-	203
1,066	322	12.06	13.59	2405	2697	292	8.59	1.12	19,859	867
1,037	329	12.49	13.03	2069	2156	87	6.05	1.04	5,221	153
874	473	15.37	13.59	2111	1875	236-	1.96	0.89	12,558-	146
904	379	13.80	13.48	2227	2177	50-	3.84	0.98	2,322-	828
1,107	264	14.70	14.41	2465	2418	47-	4.56	0.98	2,166-	127
1,133	449	16.25	14.34	2514	2224	290-	2.25	0.88	10,995-	111

ANNUAL AVERAGES, ALL ENTR. WEIGHTED BY NUMBER OF COWS:

1,066	358	14.47	14.06	2426	2360	66-	4.01	0.97	4,761-	1981
868	384	12.81	13.35	2026	2109	83	5.88	1.04	4,589	1980
812	313	11.60	11.96	1754	1806	52	4.59	1.03	2,662	1979
669	310	10.25	10.47	1519	1550	31	3.83	1.02	1,566	1978
709	300	10.77	9.67	1493	1345	148-	1.69	0.90	7,911-	1977

13 FREESTALL BARN HERDS

958	286	12.67	13.75	1889	2043	154	10.87	1.08	93,155	834
827	371	12.77	13.90	2066	2243	177	12.12	1.09	69,696	827
1,192	392	12.77	13.55	2569	2721	152	14.14	1.06	44,364	812
944	275	12.56	14.71	2044	2380	336	16.03	1.16	88,558	806
788	235	11.87	13.19	1817	2008	191	10.36	1.11	41,454	824
1,058	315	12.72	13.82	2179	2359	180	8.39	1.08	33,632	830
1,140	268	15.27	14.32	2129	2001	128-	2.82	0.94	18,969-	821
1,127	290	13.32	13.74	2100	2165	65	7.97	1.03	9,411	840
1,069	354	15.46	14.84	2263	2176	87-	5.28	0.96	12,396-	804
1,045	329	14.86	13.98	2272	2141	131-	3.20	0.94	17,181-	105
1,084	215	14.26	13.87	1983	1931	52-	3.69	0.97	6,766-	835
1,025	271	12.66	12.93	2204	2249	45	5.31	1.02	5,051	112
711	534	13.26	13.39	1988	2007	19	9.97	1.01	1,581	836

ANNUAL AVERAGES, ALL ENTR. WEIGHTED BY NUMBER OF COWS:

985	314	13.09	13.85	2090	2206	116	9.46	1.06	25,507	1981
883	313	11.58	13.14	1948	2198	250	11.80	1.13	52,012	1980
793	277	10.32	12.22	1707	2003	296	12.29	1.17	61,442	1979
716	244	9.42	10.92	1498	1726	228	10.78	1.15	46,209	1978
692	213	9.33	9.95	1395	1486	91	6.56	1.06	17,538	1977

HEIFERS, 1981
 COSTS PER HEIFER EQUIVALENT
 1,288 MATURE-HEIFER EQUIVALENTS ON
 20 COST ACCOUNT FARMS*

ITEM	AVERAGE PER HEIFER RAISED TO 26.3 MONTHS
VALUE OF CALF AT BIRTH - - - - -	\$ 118
FEED - MILK AND MILK REPLACER- - - - -	-\$ 18
1,584 POUNDS OF DRY GRAIN - - - - -	137
0.4 TONS OF HIGH MOISTURE CORN- - - - -	26
1.1 TONS OF HAY - - - - -	61
2.7 TONS OF HAY CROP SILAGE - - - - -	72
6.8 TONS OF CORN SILAGE - - - - -	141
PASTURE AND ALL OTHER FEED- - - - -	37
TOTAL FEED COSTS - - - - -	492
LABOR - 24 HOURS - - - - -	149
TRACTOR, TRUCK - - - - -	36
EQUIPMENT- - - - -	15
BEDDING- - - - -	15
BREEDING - - - - -	12
VET AND MEDICINE - - - - -	11
UTILITIES- - - - -	6
INSURANCE- - - - -	8
INTEREST - - - - -	103
BUILDING USE - - - - -	68
ALL OTHER- - - - -	69
TOTAL OTHER THAN CALF, FEED, LABOR - - - - -	343
TOTAL COSTS - TO RAISE A HEIFER TO 26.3 MONTHS OF AGE-	\$1,100

*THERE WERE A TOTAL OF 2,861 HEIFERS OF ALL AGES ON THESE FARMS FOR A PART OR ALL OF THE YEAR. THEY WERE FED A TOTAL OF 33,875 NET HEIFER-MONTHS, WHICH, DIVIDED BY 26.3 MONTHS OF AGE AT FRESHENING EQUALS 1,288 MATURE-HEIFER EQUIVALENTS. (HEIFERS RAISED ON CONTRACT ARE NOT INCLUDED.)

FACTORS FROM 20 HEIFER ENTERPRISES
20 COST ACCOUNT FARMS, 1981
(ARRANGED BY NUMBER OF HEIFERS)

FARM NO	NUMBER OF HEIFERS	LABOR PER HEIFER HR	AVERAGE AGE AT FRESHENING MO	NET COST* PER HEIFER MCNIH \$	PER HEIFER AT FRESHENING COST \$	PER HEIFER AT FRESHENING VALUE \$	RETURN PER HOUR OF LABOR \$	RETURN PER \$ OF COST
834	564	5	27	35	1,057	900	17.32-	0.71
827	337	7	25	36	1,000	1,050	8.10	1.00
812	257	6	24	40	1,062	1,300	24.28	1.17
806	171	8	26	33	996	1,000	7.17-	0.74
830	163	12	25	42	1,221	1,100	4.90-	0.78
824	159	24	28	40	1,282	1,200	3.86	0.93
840	140	11	32	40	1,367	1,200	3.17-	0.79
111	127	17	29	47	1,462	1,100	2.25	0.91
821	123	7	25	30	866	800	8.04-	0.78
835	117	10	25	34	941	1,000	2.38	0.94
804	103	7	24	39	1,073	1,050	10.57	1.04
105	99	15	27	39	1,405	1,600	2.38-	0.81
112	96	10	26	37	1,111	1,100	6.13	1.03
105	95	23	25	39	1,065	1,000	0.69	0.79
836	64	18	30	38	1,224	900	1.29	0.69
867	53	18	24	40	1,120	1,000	7.23	1.08
146	52	23	28	32	978	734	2.13-	0.67
127	48	7	24	42	1,189	1,200	10.88-	0.78
828	47	11	27	22	696	800	2.08	0.91
153	46	25	27	40	1,179	850	3.99-	0.59

1981 GROUP AVERAGES, ACCORDING TO NUMBER OF HEIFERS:

THIRDS	NUMBER	LABOR PER HEIFER HR	AVERAGE AGE AT FRESHENING MO	NET COST* PER HEIFER MCNIH \$	PER HEIFER AT FRESHENING COST \$	PER HEIFER AT FRESHENING VALUE \$	RETURN PER HOUR OF LABOR \$	RETURN PER \$ OF COST
HIGH	256	11	27	38	1,141	1,108	0.53	0.87
MED	111	11	26	38	1,143	1,109	1.82	0.92
LOW	58	18	26	36	1,065	927	0.81-	0.79

ANNUAL AVERAGES- ALL ENIR, WEIGHTED BY NUMBER OF HEIFERS:

1981	151	11	26	37	1,100	1,051	0.25	0.87
1980	139	11	26	35	1,042	1,105	5.94	0.99
1979	120	12	27	34	1,048	960	3.97	0.96
1978	124	12	27	29	862	789	2.23	0.92
1977	113	13	27	25	739	605	1.43-	0.78

* Value of calf excluded.

Note - After two years of similar costs of raising heifers to freshening age, costs increased about five percent in 1981 to \$1,100 per heifer. Values for bred heifers, ready to freshen, declined about five percent during the year. These two factors caused heifer enterprise profits to retreat from the near break-even situation of 1980.