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FARM FINANCE AND REAL ESTATE MARKETS— SITUATION AND OUTLOOK

(By Larry A. Walker, Agricultural Economist, National Economic Analysis Division, ESCS, USDA)

Net farm income before inventory adjustment for 1978 is forecast at about \$26 billion—up about 30 percent from last year's and only 5 percent below the 1974 level. These net income prospects are restoring optimism within the farm sector and vitality to farmland buyer and seller expectations. The rate of land transfer appears to be above last year's, and lenders expect land values to increase from 8 to 10 percent for the year ending next February 1. These two factors will combine to assure strong demand for real estate loan funds into 1979.

Given this brief introduction, I now wish to share with you some

of my thoughts concerning the following five areas:

Real estate finance markets,
 Nonreal estate finance markets,
 The Revenue Act of 1978,

4. Effects of inflation on foreign demand for U.S. farmland, and 5. The relationship between net farm income and land values.

REAL ESTATE FINANCE MARKETS

Even though real estate lenders passed through the acricultural cost-price squeeze of 1977–78 relatively unscathed, the financial position of the borrowers is considered much improved over last year's and presently strong due to the considerable improvement in farmer cash flows. Loan repayment rates are as good or better than last year's, and delinquencies continue at low levels. Loan demand is increasing during the second half of 1978, but funds are

reported adequate.

Farm real estate debt outstanding is expected to reach \$72.2 billion by January 1, 1979—up 14.1 percent for the year and the largest annual percentage increase since 1973 (table 1). This year's increase results from a combination of higher land prices, a slight increase in land transfer rates, the securement of short-term debt with long-term mortgages, and an increase in the rate of refinancing short- into long-term debt. However, contrary to previous opinion, the rate of this type of refinancing has experienced an insignificant increase compared to general levels throughout the rest of the 1970's (tables 2 and 3).

Lender shares of the real estate market show little change from last year, but life insurance companies are continuing their competitive expansion. This year they are expected to increase their debt outstanding by 17.9 percent—the largest annual percentage increase

since 1921.

(126)

TABLE 1 .- FARM DEBT OUTSTANDING 1

	J	anuary 1	(billions)		Chai	nge 2 (perc	ent)	Market of de (perce	bt
Lenders	1974	1977	1978	1979 ³	1974-79	1973-78	1978-79	1978	1979
Real estate debt: Federal land banks. Life insurance companies. All operating banks. Farmers Home Administration 4-	\$10.9 6.0 5.5 3.0	\$18. 5 7. 3 6. 8 3. 7	\$21. 4 8. 5 7. 8 4. 0	\$24. 5 10. 0 8. 6 4. 4	125 57 68 46	16 15 15 9	14 18 10 10	34 13 12 6	34 14 12 6
Total institutional lenders Individuals and others 5	25. 4 15. 9	36. 3 20. 3	41. 6 21. 7	47. 5 24. 8	87 75	15 7	14 14	66 34	66 34
Total	41. 3	56. 4	63. 3	72.2	75	12	14	100	100
Nonreal estate debt: All operating banks Production credit associations_ Federal intermediate credit	17. 2 7. 8	23. 3 12. 2	25. 7 13. 5	27. 6 14. 7	61 88	10 10	7 9	46 24	43 23
banks 6 Farmers Home Administration_	.3	1. 9	. 4 3. 1	. 4 5. 4	12 516	2 67	-1 72	1 6	1 8
Total institutional lenders Individuals and others 7	26. 2 5. 9	37. 8 7. 0	42. 7 8. 2	48. 1 10. 1	83 71	13 15	12 20	77 15	75 16
Total (excluding CCC)	32.1	44. 7	51.1	58. 2	81	13	14	92	91
Commodity Credit Corporation loans	.8	1.0	4. 5	5. 5	633	344	23	8	9
Total	32. 9	46. 1	55. 5	63. 7	94	21	14	100	100
Total farm debt	74.1	102. 2	120.0	135. 9	83	16	14		

¹ Totals may not add due to rounding. 2 Calculated from unrounded data.

TABLE 2.—FEDERAL LAND BANKS: PERCENTAGE DISTRIBUTION OF THE PURPOSES FOR LOANS CLOSED FOR THE YEARS ENDING DEC, 31, 1970-77 1

	1970	1971	1972	1973	1974	1975	1976	1977	1st half 1978
Farm real estate purchases	21. 7	23. 1	31. 2	32. 1	35. 8	31. 4	34. 5	31.6	32. 6
Refinancing: Mortgages held by— Own company Others	18. 9 21. 1	18. 3 22. 6	19. 7 17. 3	15. 7 17. 2	14. 7 17. 6	16. 9 19. 2	18. 8 15. 2	20. 8 15. 0	20. 2 16. 1
Total Short-term loans held by others	40. 0 14. 0	40. 9 12. 9	37. 0 11. 5	32. 9 10. 9	32. 3 9. 9	36. 1 12. 3	34. 0 10. 5	35. 8 12. 8	36. 3 12. 9
Total refinancing	54.0	53. 8	48. 5	43. 8	42.2	48. 4	44.5	48. 6	49. 2
Repairs and improvements to land and buildingsOther purposes	10. 6 13. 7	9. 9 13. 2	9. 6 10. 7	14. 0 10. 1	11.9 10.1	9. 7 10. 5	11. 0 10. 0	10. 0 9. 8	8. 5 9. 7
All purposes 2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

² Calculated from unformed once.
3 Estimated from Statimated from Statimated from the Statimated from the

¹ From Farm Credit Administration.
2 Summation may not equal exactly 100 percent due to rounding.

TABLE 3,—LIFE INSURANCE COMPANIES: PERCENTAGE DISTRIBUTION OF THE PURPOSES OF FARM MORTGAGE LOAN COMMITMENTS FOR YEARS ENDING DEC. 31, 1956-771 [Percent]

1973 1974 1975 1976 1977 1978	35.0 33.1 28.2 32.5 33.8 35.8	16.4 20.5 21.8 21.6 21.6 22.2 18.7 22.6 18.3 21.9 28.0 23.8 17.7 13.3 14.9 18.7 19.8 19.3 18.2 14.1 13.2 12.7 11.0 9.6 8.4 7.7 8.6 10.7 7.0 6.3 7.1 11.9 9.7 11.8 14.2 13.0 10.5 9.7	23.0 26.7 32.9 32.9 29.8 27.9	13.3 15.7 15.9 19.5 19.1 16.8 16.1 16.7 15.8 15.5 15.5 18.9 18.3 21.2 20.0 17.6 17.7 19.3 21.1 13.9 15.4 15.6	44.1 43.7 44.5 50.0 52.8 51.3 48.7 47.9 46.4 41.9 46.7 47.9 47.2 55.5 50.8 47.2 40.7 46.0 54.0 46.8 45.2 43.6	10.9 11.5 13.7 15.8 14.7 8.7 12.7 9.9 10.4 17.0 16.4 7.5 8.5 6.2 9.1 8.0 11.2 10.2	100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 1	² Summation may not equal exactly 100 percent due to rounding.
1972	39,1 37.0 35.5 31.0 31.6 33.6 35.2 36.8 37.2 40.9 35.7 35.5 29.4 16.6 21.3 31.6 35.0	17.7	29.6	17.6	47.2	13.7	100.0	rcent du
1971	21.3	23.8	30.8	20.0	50.8	11.5	100.0	y 100 pe
1970	16.6	28.0	34.3	21.2	55.5	10.9	100.0	l exactly
1969	29. 4	21.9	28.9	18.3	47.2	8.4 10.8 8.2 12.6	100.0	not equa
1968	35. 5	18.3	29.0	18.9	47.9	8.8.	100.0	n may r
1967	35.7	22.6 8.6	31.2	15.5	46.7	9.1 8.5	100.0	ımmatic
1966	40.9	18.7	26.4	15.5	41.9	10.1	100.0	2 St
1965	37.2	22.2	31.2 30.6	15.8	46.4	7.8	100.0	
1964	36.8	21.6 9.6		16.7	47.9	7.7	100.0	
1963	35.2	21.6 11.0	32.6	16.1	48.7	7.4	100.0	
1962	33.6	21. 8 12. 7	34.5	16.8	51.3	7.6	100.0	
1961	31.6	20.5	33.7	19.1	52.8	6.9	100.0	
1960	31.0	16. 4 14. 1	30.5	19.5	50.0	6.9	100.0	
1959	35.5	16. 2 12. 4	28.6	15.9	44.5	7.5	100.0	
1958	37.0		30.8 28.0	15.7	43.7	7.5	100.0	oort
1957	39.1		30.8	13.3	44.1	6.9		gage rep
1956	35.1		32.2	14.0	46.2	8.7 10.0	100.0	m Mort
	Farm real estate pur- chases	Refinancing: Mortgages held by— Own company	Totals	Short-term loans held by others_ 14.0 1	Total refinancing.	ments to land and 8.7 buildings 10.0	All purposes 2 100.0	¹ From Quarterly Farm Mortgage report

1 From Quarterly Farm Mortgage report

Possibly the major concerns of potential borrowers currently are credit availability and rising interest rates. At present, the effects of the increasing short-term money rates have not had an appreciable effect. Federal land banks (FLB's) do obtain much of their loan funds from the short-term money markets, but because of their variable interest rate program, new borrowers are charged on an average cost rather than marginal cost basis. Such spreading of costs lessens the effect of fluctuating rates in the money markets in both an upward and downward direction.

Life insurance companies have not realized any significant effects either. The long-term bond market has not reflected the large increases in short-term rates. The fact that business is not looking into the long-term money markets indicates the expectation that rates will be dropping during 1979. Increases in life insurance company interest charges thus far during 1978 have been based more on the higher amounts that borrowers are willing to pay in obtaining the loan funds than on a shortage of fund availability. Also, it must be noted the current rates charged by life insurance companies and FLB's on their

new loans are still lower than those charged in 1976.

The higher money market rates may have most impact on commercial banks. Between May and August, the average effective interest rate on farm loans made by banks increased from 9.3 to 9.6 percent. These rates may continue upward, approaching 10 percent by early 1979. Even if the short-term money market rates began decreasing now, the average rate charged to bank borrowers could not be expected to drop below 9 percent by 1979. Combining the present rising interest rate situation with the discount rate being raised from $8\frac{1}{2}$ to $9\frac{1}{2}$ percent and the already high loan-to-deposit ratios, some bank customers may seek service from other lenders.

NONREAL ESTATE FINANCE MARKETS

Although loan-to-deposit ratios in commercial banks are high and collateral requirements have increased, there has been some easing in loan repayment problems and less need for extensions and renewals. Factors involved in alleviating the loan problems include improved farm income, Government lending, borrower counseling, and debt restructuring. Loan demand is strong presently, especially increasing during the last half of 1978. However, credit availability is tight in the commercial banking sector.

Farm nonreal estate debt outstanding is expected to reach \$63.7 billion by January 1979—up 14.5 percent for the year. Government lending is the major factor responsible for this year's amount of increase. Commercial banks' debt outstanding will have risen 7.3 percent—the lowest rate of increase since 1974; and Production Credit Association (PCA) debt outstanding will have increased 9 percent—

the lowest rate of increase since 1972.

Machinery manufacturer and dealer financing has also slacked off. Their outstandings are expected to increase only 3 percent during 1978 compared with 40 percent in 1977. This coincides with the increased demand for farm machinery since May. Until then, unit sales had been steadily declining since 1973.

The American Bankers Association's annual farm credit survey showed commercial bankers reporting a noticeable improvement in credit conditions by mid-1978 over a year ago, especially in the Plains and Western States. They also anticipated further improvement in overall farm credit conditions for the coming year. When asked how they rated the quality of their farm loan portfolios versus their business loan portfolios, 51 percent ranked them the same and 41 percent said that their farm loan quality was better. However, this may be partly indicative of the dependence of the local businesses on the prosperity of the surrounding farmers.

PCA's collection rates for the first 9 months of 1978 were higher than during any of the past 3 years. Both PCA and bank collections have been enhanced by the large influx of lending from the Commodity Credit Corporation (CCC), Farmers Home Administration (FmHA), and Small Business Administration (SBA). For example, CCC loans outstanding are expected to increase approximately \$1 billion during 1978. FmHA and SBA short-term debt expansion continued to be mostly in their emergency/disaster loan programs. In total, these emergency/disaster loan programs accounted for \$3.5 billion, or 40 percent of the total nonreal estate debt expansion for 1978.

The topic of interest rates was largely covered in the previous section, but the subject of credit availability deserves additional comment. Although PCA's will have no problems obtaining loan funds, the high loan-to-deposit ratios of commercial banks already appear to be causing problems in some areas. However, many of these problems should be alleviated by the new FmHA economic emergency loan program; \$2½ billion have been allocated to this program for fiscal year 1979.

REVENUE ACT OF 1978

The Revenue Act of 1978, signed by President Carter on November 6, will have an important impact on our land markets and the form of business organizations operating within our farm sector. I will briefly discuss two of its provisions.

First, its provision reducing the tax rate on long-term capital gains will have the side effect of further encouraging high income individuals to convert ordinary income into long-term capital gains, thereby reducing tax liabilities. The changes within this provision may result in an additional upward pressure on land prices.

Second, its provision changing corporate tax rates will give greater tax advantages to incorporation. These changes are summarized in the following table:

[In percent]

Net income	Tax rate under old law	Tax rate under Revision Act of 1978
1st \$25,000	20	17
2d \$25,000	22	20
3d \$25,000	48	30
4th \$25,000	48	40
Over \$100,000	48	46

Note: Since these rates are lower than what a private individual is subject to, the legislation will encourage incorporation and stimulate expansion.

EFFECT OF INFLATION ON FOREIGN DEMAND FOR U.S. FARMLAND

The devaluation of the American dollar is an important consideration in the analysis of foreign investor interest in U.S. farmland. During the year ending September 1, 1978, the value of the dollar, compared with currencies of the six free industrial nations shown in table 4, depreciated, ranging from a decline of 10.5 percent in Britain to a 32.8-percent decrease in Switzerland. The effect this has on foreign investor interests is shown in table 5. For example, the Swiss, who with the same number of francs that would have allowed him to pay \$1,000/acre last year, could offer \$1,488/acre a year later. Even the British citizen, who experienced the least appreciation of his currency versus the dollar, of the countries shown, received a \$117/acre bidding advantage due to the devaluation. In conclusion, the devaluation of the dollar has provided many of the potential foreign buyers a significant bidding advantage.

RELATIONSHIP BETWEEN NET FARM INCOME AND LAND VALUES

This relationship has often been referred to as a paradox during the last 30 years. However, I am going to take an opposite view on the premise that the aggregate data used in prior analyses were, at the

best, used improperly.

First, a strong argument can be made that figures 1, 2, and 3 take the analyst through successively more appropriate comparisons between changes in land values and net income before inventory adjustment. To more rigorously substantiate my hypothesis that the relationship between changes in land values and farm income over time has not been a paradox, I turned to the USDA's series on annual cash rent for whole farms and selected data for Iowa to make a preliminary test. This series was obtained from annual surveys of farmers who were asked the current cash rent for typical whole farm units in their respective vicinities and the price of the land so rented.

A major portion of my analysis entailed ascertaining the relative profitability of investing in the farmland, based upon the rate of return derived from only the net cash rent stream, compared with alternative investment opportunities. To compare the profitability of owning the land versus the alternative investments, I calculated the discounted current value of the rate of return from the annual net income streams derived from owning the land and from alternative investments. The alternative investments were assumed to offer fixed, annual rates of return ranging from 3 percent up through 9 percent. The discount rate used was always set equal to the rate of return on the alternative investment. For example, when the rate of return on land was compared with that of an alternative offering a 6-percent annual rate, then a 6-percent discount rate was used, also.

The results are shown in table 6. For example, part (a) shows that an investor buying Iowa farmland in 1965 had to hold his land 7 years until the net discounted current value of the rate of return derived from his annual net rent stream surpassed that of an alternative investment providing an annual 6-percent rate of return, based on a 6-percent discount rate. For a better perspective, table 7 summarizes rates of return from some alternative investments available at that time. Of the alternatives shown for 1965, it appears that land was

the most profitable. It did take 7 years, but even 10- to 20-year maturities on alternative long-term investments are not uncommon. Further comparisons of tables 6, 7, and 8 indicate that, at least for the years shown, land seems to have been the prudent investment over the long term. Granted, these results are from only a preliminary analysis of one State, but I have already begun a complete analysis of Iowa along with 13 other States, and the raw data indicate similar results.

In conclusion, with this data I am not trying to predict the future, nor am I saying that current land prices are justified. What I am saying is that the data provide an extremely convincing case that, for over the past 30 years, those who said the relationship between farm incomes and land values did not make sense were apparently wrong.

TABLE 4.—DEVALUATION OF THE AMERICAN DOLLAR

[Between Sept. 11, 1977 and Sept. 11, 1978: Prices for foreign banknotes, as quoted on the last business day (in dollars)] i

Selected foreign country	Buying, Sept. 11, 1977	Buying, Sept. 11, 1978	Devaluation of American dollar (percent)
Britain (pound)	1.71	1. 91	10. 5
	.19	. 22	13. 6
	.42	. 50	16. 0
Italy (Iira)	. 0009	. 0011	18. 2
Japan (yen)	. 0035	. 0051	31. 4
Switzerland (franc)	. 41	. 61	32. 8

¹ Source: Wall Street Journal.

TABLE 5.—EFFECT OF THE DEVALUATION OF THE AMERICAN DOLLAR

[Between Sept. 11, 1977 and Sept. 11, 1978, assuming an initial parity position between U.S. dollar and selected foreign currencies on Sept. 11, 1977; Price that selected foreign investors could pay per acre of U.S. farmland on Sept. 11, 1978, given the same money stock of their respective currencies that would have enabled them to pay \$1,000 1 yr earlier]

II S. former	Foreign investor							
U.S. farmer, United States	British	French	West German	Italian	Japanese	Swiss		
\$1, 268	\$1, 117	\$1, 157	\$1, 190	\$1, 222	\$1, 458	\$1, 488		

FIGURE 1. --NATIONAL FARMLAND VALUE INDEX VS INDEX OF NET FARM INCOME BEFORE INVENTORY ADJUSTMENT FOR ALL FARMS.

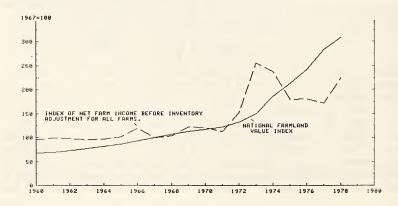
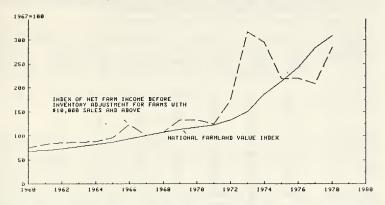
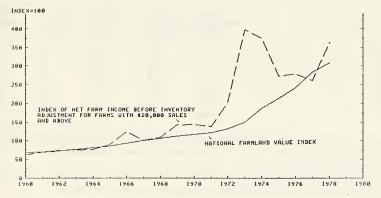


FIGURE 2. --NATIONAL FARMLAND VALUE INDEX VS INDEX OF NET FARM INCOME BEFORE INVENTORY ADJUSTMENT FOR FARMS WITH \$10,000 SALES AND ABOVE. 1/



- 1/ ESTIMATE FOR 1978'S NET FARM INCOME BEFORE INVENTORY ADJUSTMENT FOR FARMS WITH \$18,000 SALES AND ABOVE 15 My Oun. I Derived it by regressing this income grouping against the following 2 variables:
 - a) HET FARM INCOME BEFORE INVENTORY ADJUSTMENT FOR ALL FARMS.
 - b) TIME.

FIGURE 3. --NATIONAL FARMLAND VALUE INDEX VS INDEX OF NET FARM INCOME BEFORE INVENTORY ADJUSTMENT FOR FARMS WITH \$20,000 SALES AND ABOVE. ${\it y}$



- ESTINATE FOR 1978'S HET FARM INCOME BEFORE INVENTORY ADJUSTMENT FOR FARMS WITH \$28,000 SALES AND ABOVE IS BY OUN. I DERIVED IT BY REGRESSING THIS INCOME GROUPING AGAINST THE FOLLOWING 2 VARIABLES:
 - a) HET FARM INCOME BEFORE INVENTORY ADJUSTMENT FOR ALL FARMS.
 - b) T1HE.

TABLE 6.

[Number of years required to hold lowa farmland until—(a) the discounted present value of the net rate of return derived from the net cash rent stream exceeds the discounted present value of the rate of return derived from an alternative investment providing a constant, annual income stream; (b) the discounted present value of the net rate of return derived from the net cash rent stream exceeds the original purchase price].

Rate of re- turn on alterna- tive invest- ments	1935	1940	1945	1950	1955	1960	1965	1970	1975
Part (a) years:									
3	1	1	1	1	1	1	1	1	1
4	4	1	.1	.8	.4	2	. 1	1	1
5 6	13	12	11	17	14 20	10 15	3	2	1
7	13 22 32	20	19 27	24 27	23	18	11	7	3
8	42	12 20 29	33		25		13	, ģ	
9		38							
Part (b) years:									
3	22	19	21 23 25	23	21	18	14		
4	24	20	23 25	24 26	22 23	18 2 (20)	² (15) ² (16)		
6	22 24 27 32 37	19 20 22 25 29	28	29	² (25)	2 (21)	2 (10)		
7	37	29	28 32	31	(20)	(-1)			
8	44	34	2 (35)						
9		39							

¹ The discount rates used equal the designated rates of return on the alternative investments.

2 Using estimated rents.

TABLE 7.—COMPARATIVE RATES AND YIELDS ON SELECTED BONDS AND MONEY RATES IN THE UNITED STATES FOR SELECTED YEARS

[In percent]

Year	Long-term government bonds ¹	Municipal (high grade) bond yields ²	Industrial bond yields ³	Short-term Treasury obligations 4	Rates on price commercial paper (4 to 6 mo) ⁵
1935	2. 37 2. 32 2. 84 4. 02 4. 21 6. 59 6. 98	3. 41 2. 50 1. 67 1. 98 2. 53 3. 73 3. 27 6. 51 7. 05	4. 02 3. 10 2. 68 2. 67 3. 19 4. 59 4. 61 8. 26 9. 25	0. 14 . 01 . 38 1. 21 1. 75 2. 93 3. 95 6. 46 6. 08	0. 76 . 56 . 75 1. 45 2. 18 3. 85 4. 38 7. 72 6. 48

¹ Board of Governors of Federal Reserve System. Prior to Apr. 1, 1952, only bonds due or first callable after 15 years were included. From Apr. 1, 1952, through Sept. 30, 1955, consists of fully taxable, marketable 2½-percent bonds due or first callable after 12 years. Beginning Oct. 1, 1955, consists of those due or callable in 10 to 20 yr.

Standard & Poor's Corp.
 Moody's Investors Service.

TABLE 8.—AVERAGE INTEREST RATES ON LONG-TERM DEBT OUTSTANDING HELD BY FARM REAL ESTATE LENDERS IN 10WA

- Year	Farm real estate lender (interest rates)								
	Federal land banks	Life insurance companies	Banks	Individuals	Others	All lenders			
1935						5.			
1940	3.6	4.6	4.8	4. 4	4.5	4. 2			
1945	4.0	4.3	4. 2	4.2	4.2	4. 2			
1950	4.0	4. 1	4. 1	4. 0	4. 1	4.			
1955	4.0	4.2	4. 4	4. 1	4. 2	4. 2			
1960	4.3	4.6				4. !			
1965	5.0	5. 1	5. 5	4. 7	4. 9	5. (
1970	5, 8	5.6	6. 2	5.3	5.5	4. ! 5. (5. (
1975	7. 8	6. 9	8.0 .			6.9			

Average yield on new offerings of Treasury bills (1935–1975). Maturities of bills varied from 3 to 9 months for 1935, but have all been for 3 months since 1937.

5 Board of Governors of Federal Reserve System. Prevailing open market rates in New York City.