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## *Loan Experience Over Time*

### *Production Credit Associations*

THE Production Credit Association system has expanded its operation throughout the 1945-65 period. In 1945, the number of loans outstanding was only slightly more than 150,000; by 1965, the figure had risen to more than 239,000 or by nearly 60 per cent. Concurrently, the number of AB loans increased from 141,000 to 200,000; the number of C loans increased from 10,000 to 38,000; and the number of D loans, at 1,046 in 1965, had increased about one-third since 1945. The total dollar amount of loans outstanding was about eleven times as great in 1965 as in 1945. AB, C, and D loan amounts were about nine, twenty-seven, and eleven and a half times as great in 1965 as in 1945, respectively.

With the increase in lending activities has come a change in the composition of the Production Credit Association portfolio. Specifically, from Table 23 it is evident that between 1945 and 1965 loans graded AB declined from 93 per cent to 84 per cent of all loans outstanding. The proportion of C loans rose from 7 per cent to 16 per cent. This shift is equally evident for C loan amounts as a proportion of total amounts outstanding.

The proportion of D loans in the portfolio, however, has not varied notably from the .51 per cent of loans outstanding registered in 1945. The peak of .97 per cent was reached relatively early in the period—in 1950. More variation in D loans is evident when proportions of loan amounts are examined, but again no definite trend is exhibited. Loans graded D represented .59 per cent of loan amounts outstanding

TABLE 23

Composition of Total Loans Outstanding on Examination Date,  
Percentage of Total, All PCA Districts, 1945-65

<i>Year</i>	<i>Number</i>			<i>Amount</i>		
	<i>AB</i>	<i>C</i>	<i>D</i>	<i>AB</i>	<i>C</i>	<i>D</i>
1945	92.8	6.7	.51	88.0	11.4	.59
1946	91.9	7.3	.84	87.0	12.3	.66
1947	91.7	7.6	.82	87.1	12.4	.55
1948	91.9	7.7	.57	86.9	12.7	.42
1949	89.7	9.3	.95	84.8	14.1	1.05
1950	89.5	9.5	.97	86.2	12.9	.86
1951	91.7	7.7	.61	88.7	10.7	.55
1952	91.6	7.9	.43	86.6	12.9	.52
1953	89.3	10.0	.72	79.8	18.3	1.82
1954	88.4	10.8	.75	68.0	17.0	1.56
1955	88.1	11.2	.74	78.9	19.6	1.52
1956	87.8	11.4	.73	78.2	20.3	1.53
1957	87.8	11.6	.68	78.2	20.4	1.40
1958	87.4	12.0	.57	78.7	20.4	.93
1959	86.7	12.9	.52	77.4	21.8	.87
1960	85.1	14.3	.59	74.3	24.7	1.02
1961	84.7	14.7	.56	73.0	26.1	.90
1962	84.1	15.3	.60	72.9	26.2	.84
1963	83.9	15.6	.54	73.3	26.0	.66
1964	83.3	16.2	.52	71.7	27.6	.70
1965	83.5	16.1	.44	71.4	28.0	.61

Source: Computed from data provided by the Farm Credit Administration.

in 1945. This percentage was .61 in 1965, down considerably from the peak of 1.82 reached in 1953.<sup>1</sup>

Although a relative increase in C loans would indicate higher charge-off or loss rates over time (since C loans generate more D

<sup>1</sup> For AB loans the percentages are consistently smaller by amount than by number, while for C and D loans the relationship is generally the reverse. Evidently the average size of AB loans outstanding is smaller than the average C or D loan.

loans), there is no clear-cut trend in losses as a percentage of total amounts loaned (Table 24). Grade D loan amounts as a percentage of total loan amounts outstanding were highest in 1953 (Table 23), and concurrently loss rates peaked at 0.32 in that year (Table 24). After 1953, these loss rates decreased to a low of about 0.03 per cent in 1958, but increased slightly to 0.12 in 1962, the last year of the Production Credit Association data used in this study.

The trends in D loans charged off and paid in full can be observed directly in Tables 6 and 7, above. These trends are downward for

TABLE 24

PCA Net Losses During Year Ending December 31, All PCA Districts,  
1945-62  
(amounts in dollars)

<i>Year</i>	<i>Amount</i>	<i>As Percentage of Loans Outstanding on January 1</i>
1945	91,116	.048
1946	138,704	.070
1947	229,427	.098
1948	295,313	.101
1949	294,086	.079
1950	543,980	.139
1951	499,258	.110
1952	727,815	.128
1953	1,935,298	.319
1954	1,542,561	.280
1955	1,611,708	.274
1956	1,519,964	.233
1957	1,019,118	.145
1958	232,359	.026
1959	1,512,620	.134
1960	1,740,964	.127
1961	2,236,891	.150
1962	2,013,356	.122

Source: Computed from data provided by the Farm Credit Administration.

both loan numbers and loan amounts. The decline is evident for proportions of D loans charged off as well as for proportions of D loans paid in full. A larger proportion of D loans have remained D loans in recent years than in the early postwar period.

From the data it is evident that there has been a significant deterioration in the quality of Production Credit Association loans as reflected in the loan inspection grades, but that loss rates have not risen proportionately.

#### *Federal Land Bank*

The Federal Land Bank of Springfield, Massachusetts, expanded the volume of its operations in New York State from its beginnings in 1917 of 92 loans and \$308,000 outstanding to 11,285 loans and \$57,810,000 outstanding in 1958, the last year for the data in this study. In 1933, which was the first year when loan collateral grades were assigned, there were 8,780 loans outstanding for a total amount of \$28,804,000. The peak in loan numbers of 12,768 outstanding was reached in 1939. Since that time, the number of loans has declined as the number of farms declined. Loan volume declined from 1939 to 1945 and has increased since.

The 1917-57 period can be divided into two subperiods with 1933 as the dividing year. This division is appropriate partly because the lending, operating, and record-keeping practices and policies of the Bank changed at this time, and partly because the Great Depression, which reached bottom in 1932-33, greatly affected the pattern of loan experience.

#### *The 1917-32 Period*

Loan experience between 1917 and 1932 was bad by any reasonable standard. Loss rates are considered a useful standard during this period, since it was only after 1932 that profits were made on foreclosed loans. For this period, loss rates peaked in the early 1920's at about 30 per cent for loan numbers and 14 per cent for loan amounts, calculated by dividing net amounts of losses by gross amounts originally loaned (Table 25, cols. 1 and 2). When loans still outstanding on April 30, 1958 are omitted from the denominator (cols. 3 and 4), the loss rates are slightly higher but follow much

TABLE 25

Loss Rates, by Number and Amount, as Percentage of Loans Closed in Each Year, Loans Closed Minus Outstandings, and Loans Foreclosed, Land Bank Loans in New York State, 1917-58<sup>a</sup>

Year	Loss Rates as Percentage of Loans Closed		Loss Rates as Percentage of Loans Closed and Disposed of Minus Outstandings		Loss Rates as Percentage of Loans Foreclosed	
	Number (1)	Amount (2)	Number (3)	Amount (4)	Number (5)	Amount (6)
1917	25.0	-7.2	25.3	-7.5	100.0	-26.5
1918	23.5	-9.1	24.4	-9.5	99.4	-29.6
1919	21.2	-10.9	21.8	-11.2	96.6	-39.1
1920	21.8	-9.7	23.1	-10.5	94.2	-33.9
1921	30.9	-14.0	31.7	-14.4	97.5	-36.3
1922	26.0	-12.8	27.3	-13.6	93.9	-38.7
1923	27.8	-13.7	30.1	-14.8	95.0	-38.6
1924	27.2	-13.0	29.1	-14.0	94.9	-36.9
1925	25.7	-11.9	27.3	-12.8	95.7	-36.8
1926	24.1	-11.9	25.4	-12.8	94.7	-41.4
1927	17.9	-6.9	19.5	-7.7	94.0	-33.0
1928	15.1	-4.5	16.1	-4.9	93.0	-26.4
1929	11.3	-3.2	12.6	-3.6	95.1	-25.1
1930	10.8	-2.2	11.8	-2.4	92.0	-15.6
1931	7.8	-1.7	8.5	-1.8	90.9	-16.8
1932	5.1	-1.5	5.7	-1.7	85.2	-26.1
1933	5.8	.4	6.3	.4	97.9	6.5
1934	8.7	.1	9.4	.1	98.0	1.2
1935	4.0	.3	4.3	.3	90.5	5.4
1936	2.0	.7	2.1	.7	100.0	27.8
1937	1.7	.0	1.8	.0	90.9	-2.2
1938	.6	-.1	.7	-.1	100.0	-16.9
1939	.4	.0	.4	.0	100.0	-1.2

(continued)

*Some Measures of Agricultural Credit Quality*

TABLE 25 (concluded)

<i>Year</i>	<i>Loss Rates as Percentage of Loans Closed</i>		<i>Loss Rates as Percentage of Loans Closed and Disposed of Minus Outstandings</i>		<i>Loss Rates as Percentage of Loans Foreclosed</i>	
	<i>Number</i> (1)	<i>Amount</i> (2)	<i>Number</i> (3)	<i>Amount</i> (4)	<i>Number</i> (5)	<i>Amount</i> (6)
1940	—	—	—	—	—	—
1941	.2	.2	.3	.2	100.0	53.6
1942	.4	.0	.5	.0	40.0	— .3
1943	—	—	—	—	—	—
1944	.1	.0	.2	.0	33.3	5.8
1945	—	—	—	—	—	—
1946	.0	.0	.1	.0	33.3	2.0
1947	.1	.1	.1	.1	20.0	10.1
1948	—	—	—	—	—	—
1949	.1	.0	.2	.1	20.0	7.1
1950	.2	.0	.5	.1	33.3	8.7
1951	.1	.0	.3	.1	33.3	11.4
1952	.4	.1	1.2	.5	57.1	27.9
1953	.1	.0	.4	.1	50.0	23.1
1954	—	—	—	—	—	—
1955	.1	.0	1.1	.1	100.0	23.6
1956	—	—	—	—	—	—
1957	—	—	—	—	—	—
1958	.5	.0	12.5	1.8	100.0	8.1

Note: Loss indicated by minus sign.

Source: Computed from data provided by the Federal Land Bank of Springfield, Massachusetts.

<sup>a</sup> Losses are those realized by April 30, 1958.

the same pattern. As might be expected, losses were experienced on a high (85 to 100 per cent) proportion of the number of loans foreclosed during this period (column 5). The peak in the proportion of losses of loan amounts for foreclosed loans was 41 per cent in 1926 (column 6).

TABLE 26

Percentage of All Loans Closed Minus Outstandings in Each of Three Dispositions, Land Bank Loans in New York State, 1917-58

<i>Year</i>	<i>Number</i>			<i>Amount</i>		
	<i>Paid in Full or Refunded</i> (1)	<i>Foreclosed</i> (2)	<i>Paid at Foreclosure</i> (3)	<i>Paid in Full or Refunded</i> (4)	<i>Foreclosed</i> (5)	<i>Paid at Foreclosure</i> (6)
1917	72.5	25.3	2.2	66.6	28.2	5.2
1918	72.2	24.6	3.2	64.9	32.1	3.0
1919	72.3	22.6	5.1	66.4	28.7	4.9
1920	70.3	24.5	5.2	63.7	31.0	5.2
1921	64.2	32.5	3.2	57.6	39.5	2.9
1922	65.1	29.1	5.8	59.0	35.1	5.9
1923	63.6	31.6	4.8	56.1	38.4	5.4
1924	65.9	30.7	3.4	58.8	37.9	3.3
1925	67.9	28.5	3.6	62.0	34.6	3.3
1926	69.3	26.9	3.9	65.4	31.0	3.6
1927	76.1	20.7	3.2	73.4	23.3	3.3
1928	78.9	17.3	3.8	77.8	18.7	3.5
1929	83.9	13.3	2.8	82.3	14.5	3.2
1930	82.9	12.8	4.3	80.1	15.4	4.5
1931	88.1	9.3	2.5	86.8	11.0	2.2
1932	91.1	6.7	2.2	91.8	6.4	1.8
1933	91.0	6.5	2.6	90.8	6.6	2.6
1934	87.6	9.6	2.8	87.5	9.9	2.6
1935	92.4	4.7	2.8	92.1	5.0	2.9
1936	95.2	2.1	2.7	94.5	2.7	2.8
1937	95.0	2.0	3.1	96.1	1.6	2.3
1938	95.8	.7	3.6	96.8	.5	2.7
1939	96.8	.4	2.8	96.0	.4	3.6
1940	97.9	—	2.1	98.1	—	1.9
1941	97.1	.3	2.6	96.3	.4	3.4
1942	94.5	1.1	4.3	93.2	2.2	4.6
1943	96.6	.6	2.8	96.0	.5	3.4
1944	95.9	.5	3.6	96.0	.5	3.5

(continued)



TABLE 26 (concluded)

Year	Number			Amount		
	<i>Paid in Full or Refunded</i> (1)	<i>Foreclosed</i> (2)	<i>Paid at Foreclosure</i> (3)	<i>Paid in Full or Refunded</i> (4)	<i>Foreclosed</i> (5)	<i>Paid at Foreclosure</i> (6)
1945	96.8	.2	3.0	97.4	.2	2.4
1946	97.5	.2	2.4	97.7	.1	2.1
1947	98.3	.6	1.1	97.7	1.0	1.3
1948	97.9	.5	1.6	97.0	1.0	2.0
1949	98.1	1.0	.8	98.4	1.0	.6
1950	98.1	1.6	.3	98.6	1.2	.1
1951	98.3	.8	.8	98.8	.9	.2
1952	97.4	2.0	.6	97.7	1.7	.6
1953	99.3	.7	—	99.6	.4	—
1954	99.4	—	.6	99.3	—	.7
1955	96.6	1.1	2.3	97.2	.5	2.2
1956	100.0	—	—	100.0	—	—
1957	100.0	—	—	100.0	—	—
1958	62.5	12.5	25.0	79.9	22.1	—

Note: Distribution is as of April 30, 1958.

Source: Computed from data provided by the Federal Land Bank of Springfield, Massachusetts.

Examination of the disposition of loans between the categories of paid in full, foreclosed, and paid at foreclosure discloses a pattern of loan experience similar to the loss data, but with one additional insight (Table 26). Loans paid at foreclosure seem to have much less variation over time than the other two types of loan dispositions.

#### *The 1933-57 Period*

The operations of the Bank were changed greatly starting in 1933. Funds provided by the Federal Farm Mortgage Corporation were used to refinance long-term agricultural debt, and in the process much of the debt of agriculture was written off.

Loss rates remained high for a number of years on loans previously

TABLE 27

Composition by Collateral Grade of Total Loans Outstanding on  
December 31, Percentage of Total, Land Bank Loans in  
New York State, 1933 to April 30, 1958

Year	Number				Percent- age of All Loans: Unknown Grade	Amount				Percent- age of All Loans: Unknown Grade
	Percentage of Loans of Known Collateral Grade					Percentage of Loans of Known Collateral Grade				
	12AB	12CD	34AB	34CD		12AB	12CD	34AB	34CD	
1933	59.0	10.2	15.5	15.3	93.2	68.1	8.1	13.7	10.1	94.2
1934	60.2	10.2	11.7	17.9	90.4	69.4	8.4	10.3	11.9	91.7
1935	57.5	10.7	12.6	19.3	84.9	66.9	9.1	11.1	13.0	87.0
1936	55.6	11.5	13.3	19.6	80.1	65.8	9.5	11.7	13.0	82.5
1937	54.8	11.8	13.2	20.3	77.1	65.3	9.8	11.5	13.4	79.6
1938	54.3	11.9	13.2	20.5	74.7	64.7	10.3	11.3	13.7	77.1
1939	53.8	12.1	13.2	20.9	72.0	64.8	10.3	11.1	13.7	74.5
1940	52.9	12.4	12.9	21.8	69.8	63.8	10.5	11.2	14.5	72.4
1941	52.1	12.5	12.8	22.5	67.7	63.2	10.7	11.1	15.0	70.3
1942	51.1	12.7	12.8	23.4	65.4	62.1	10.9	11.2	15.8	68.3
1943	52.7	12.7	11.4	23.2	63.0	64.2	10.7	9.7	15.4	65.8
1944	53.7	12.9	10.3	23.1	58.8	65.3	10.6	9.0	15.0	61.4
1945	54.6	13.2	9.3	23.0	54.3	66.0	10.5	8.5	15.0	56.0
1946	51.2	13.0	9.3	26.4	45.1	63.6	10.1	8.4	17.8	44.2
1947	47.6	12.4	8.5	31.4	39.5	60.4	9.6	7.7	22.3	37.7
1948	43.8	11.9	7.8	36.6	35.3	55.5	9.4	7.3	27.9	32.7
1949	38.7	11.0	7.2	43.1	32.0	49.7	8.7	7.4	34.3	29.2
1950	37.8	11.7	9.3	45.2	28.4	46.6	9.3	9.0	35.1	25.6
1951	33.5	10.2	8.4	47.9	25.2	42.1	8.7	9.1	40.1	22.5
1952	30.5	9.1	7.7	52.7	22.1	37.5	7.8	9.2	45.5	19.3
1953	28.0	8.4	7.1	56.5	19.3	34.3	7.3	9.1	49.3	16.3
1954	25.2	7.6	6.6	60.5	16.9	31.0	6.7	8.8	53.6	13.8
1955	23.4	7.1	6.2	63.3	14.7	29.0	6.3	8.9	55.8	11.5
1956	22.0	6.7	6.3	65.1	12.6	27.3	5.9	10.1	56.7	9.1
1957	20.7	6.5	6.1	66.6	10.9	27.4	5.9	10.2	56.5	7.4
1958	20.4	6.4	6.1	67.1	10.5	27.6	5.9	10.0	56.5	7.0

Source: Computed from data provided by the Federal Land Bank of Springfield, Massachusetts.

TABLE 28

Composition by Collateral Grade of Total Loans Closed During Year,  
Percentage of Total, Land Bank Loans in New York State,  
1933 to April 30, 1958

Year	Number					Amount				
	Percentage of Loans of Known Collateral Grade				Percent- age of All Loans: Unknown Grade	Percentage of Loans of Known Collateral Grade				Percent- age of All Loans: Unknown Grade
	12AB	12CD	34AB	34CD		12AB	12CD	34AB	34CD	
1933	59.0	10.2	15.5	15.3	25.7	68.1	8.1	13.8	10.1	24.5
1934	61.6	10.1	7.4	20.9	82.6	70.7	8.7	6.2	14.3	83.0
1935	53.1	11.6	13.7	21.6	22.5	62.7	10.2	12.2	14.9	24.2
1936	50.7	13.7	15.0	20.7	3.0	63.4	10.6	13.2	12.8	2.0
1937	49.3	13.4	13.0	24.4	19.1	61.8	11.3	10.7	16.2	17.4
1938	50.5	12.8	13.3	23.5	19.2	60.9	13.3	9.5	16.3	15.4
1939	48.1	13.7	14.2	24.0	17.6	63.6	11.1	10.6	14.6	14.6
1940	44.2	14.7	9.2	31.8	19.8	54.3	11.8	11.3	22.6	17.0
1941	42.9	15.7	11.2	30.3	18.5	55.4	13.5	9.4	21.6	15.8
1942	38.7	14.0	13.3	34.1	15.3	51.6	12.6	11.5	24.4	13.2
1943	56.7	12.0	8.4	22.9	11.6	68.1	10.1	6.9	15.0	9.8
1944	52.5	14.9	5.7	27.0	6.6	64.6	12.1	6.1	17.2	5.0
1945	55.0	13.4	6.9	24.7	6.0	65.5	9.6	8.6	16.3	5.0
1946	46.1	13.1	10.0	30.8	20.5	61.4	9.7	8.2	20.7	17.4
1947	34.9	9.5	6.6	49.9	11.9	49.2	7.9	6.3	36.6	8.7
1948	20.5	7.9	4.6	67.0	3.6	35.3	7.8	6.2	50.7	2.1
1949	11.2	4.5	4.8	79.4	1.0	20.2	4.1	8.0	67.7	0.8
1950	22.0	13.5	21.6	42.9	0.2	26.5	14.4	19.8	39.3	0.1
1951	13.1	3.7	5.6	77.5	1.7	15.3	4.3	10.3	70.1	0.4
1952	10.6	3.2	4.8	81.4	1.6	10.8	4.3	10.1	74.8	0.5
1953	9.9	3.4	3.8	82.8	0.8	14.3	4.4	9.4	71.8	0.2
1954	5.7	3.3	4.1	86.8	0.2	12.7	3.8	8.4	75.1	0.2
1955	8.5	4.8	5.4	81.2	0.2	18.0	5.9	11.2	64.9	0.0
1956	10.0	6.1	8.9	75.0	0.0	19.5	5.8	15.7	59.0	0.0
1957	12.5	6.5	6.7	74.3	0.0	28.3	6.6	11.4	53.7	0.0
1958	18.3	6.4	6.4	68.9	0.1	37.5	6.2	8.2	48.1	0.0

Source: Computed from data provided by the Federal Land Bank of Springfield, Massachusetts.

closed, but profits rather than losses were realized for each year separately, as well as for all years taken together, on new loans closed during and after 1933. The rising and already high income of agriculture, along with inflation, enabled farmers to meet their new debt obligations to the Land Bank almost without exception.

The composition of the loan portfolio appears to have changed over this period, as indicated by the data in Table 27. For the early years of the period, the proportion of loans of unknown collateral grade is very high, as loan collateral was not graded on loans closed prior to 1933. Many of these, of course, were still in the portfolio in the early years of the 1933-58 period. Table 28 gives the composition of loans closed in each of the years from 1933 to 1958.<sup>2</sup> The data given in Table 28 correspond closely to those given in Table 27. There has been a marked downward trend in the percentage of loans in the best areas on the best farms and a marked upward trend in the percentage of loans in the worst areas on the worst farms. The percentage of loans in the two intermediate collateral grades has also declined, especially for loan numbers. These trends for all of the collateral grades are not as great for amounts as for numbers, but are in the same general direction.

As mentioned above, the loan experience for the period 1933-58, while similar in many respects for the different loan collateral grades, was slightly worse for loans on the worst farms in the worst areas. In addition, the foreclosure rate was higher for loans with a higher ratio of amount loaned to normal agricultural value, and this ratio was highest for the worst farms in the worst areas.

Although gains rather than losses were realized on foreclosed loans, it seems evident that there has also been some deterioration in the quality of the loans of the Federal Land Bank in its New York State operations over the period 1933-58.

<sup>2</sup> The large percentage of loans closed of unknown grade in 1946 and 1947 reflects the purchase by the Federal Land Bank of the Land Bank Commissioner loans held by the Federal Farm Mortgage Corporation. Many of these loans were of unknown collateral grade.