

This PDF is a selection from an out-of-print volume from the National Bureau of Economic Research

Volume Title: Agricultural Equipment Financing

Volume Author/Editor: Howard G. Diesslin

Volume Publisher: UMI

Volume ISBN: 0-87014-364-6

Volume URL: <http://www.nber.org/books/dies55-1>

Publication Date: 1955

Chapter Title: Development of Credit Practices

Chapter Author: Howard G. Diesslin

Chapter URL: <http://www.nber.org/chapters/c0754>

Chapter pages in book: (p. 61 - 73)

Development of Credit Practices

WHOLESALE EQUIPMENT FINANCING

Since the establishment of the long-line companies early in the twentieth century, it has been the policy of farm equipment manufacturers to finance their dealers' inventories on liberal terms, at the same time offering substantial inducements for payment in cash. To what extent commercial banks have also been a source of such inventory credit is not known. Their activity in this field may have increased after World War II as they became more active in farm equipment financing at the retail level; but manufacturers are still the main source of dealers' inventory credit.

A 5 percent discount for cash payment by a specified date, determined primarily by the season in which the particular equipment is usually sold, has been standard in dealer terms for many years. Over and above this cash discount, it has been a common practice for manufacturers to allow an additional discount of one-half of 1 percent per month for payment prior to the cash discount date. For example, assume that an item of equipment delivered to a dealer on February 1 has a cash discount date of May 1 and a factory price of \$1,000. If the dealer remits cash on February 1 he obtains a \$50 cash discount plus a prepayment discount of \$14.25.

Upon receipt of the equipment, the dealer generally signs a note on which interest does not accrue until the date, usually four to twelve months after shipment for large items of equipment, at which cash payment is required. Manufacturers may allow dealers to carry over to the following season, on a non-interest-bearing-note basis, as much as 50 percent of the larger items of equipment.

A survey of terms extended by the larger manufacturers to their dealers in 1948 indicated some variation among companies. Cash

discount dates varied from ten days after delivery for one company to the end of the fiscal year for another. Charges on dealer notes and accounts were nominal. Some companies carried dealers' equipment for as long as two years with no interest or finance charge; but no company interviewed allowed a cash discount to dealers on time payment sales.

RETAIL EQUIPMENT FINANCING

In financing retail purchases of farm equipment, three main elements concern the supplier of credit: the equipment being sold, the seller, and the purchaser. The lender takes title to, or a lien on, the equipment sold; and for further security he may require the dealer's endorsement of the customer's note. The dealer is responsible for assembling and adjusting the equipment, and may, besides, accept the contingent liability just referred to. Finally, the financial standing and creditworthiness of the borrower are of paramount importance. Through the years when manufacturers were the chief source of credit, another element—the desire to increase sales—at times had an important effect on credit practices.

Manufacturers' Terms

Complete information regarding the terms on which manufacturers extended credit in the early 1900's is not available, but a brief description of them may be given on the basis of information obtained through officials of equipment manufacturing companies and from a few published materials. Among the latter is found the following passage on the McCormick Company's methods of doing business in 1902.¹

The system of giving long credits to the farmer for purchasing reaping machines was established by Cyrus H. McCormick at the beginning of his business early in the fifties, or about 1855. It has been continued up to the present time, and it is a fact that the harvesting machine business gives longer credit to the farmers than they receive from the manufacturers of any other goods they buy. Plows and spring tools are sold on short time or for cash. Twine is sold principally for cash in the fall of the year it is sold. The usual terms for harvesting machines are one-third in the fall of the year the

¹ *The International Harvester Co.* (Department of Commerce and Labor, Bureau of Corporations, 1913), pp. 340 f.

machine is purchased (this is called cash), one-third the fall of the following season and one-third the fall of the second season. . . . Excessive competition has extended this time until it frequently happens that a farmer has three years in which to pay for the machine after the season in which he purchased it. Competition has also brought about the undesirable feature of giving a farmer a year's time without interest when the crop conditions are unfavorable and he is not able to get full use out of his machine. It is also a custom to sell machines at the close of the harvest on what [is] called "next year's time" without interest. That is to say, that if a farmer purchased a harvester or reaper in September of 1902, he gives his note without interest until the fall of 1903, and at that time he pays one-third cash and one-third each in the fall of 1904, 1905. The policy of extending this long credit has worked to the advantage of the McCormick Company in some ways by increasing sales, but if the collection departments of all the various companies were managed together, many improvements upon this system could be effected by shortening the length of credit and by making the examination of the paper taken in payment more rigid.

It is apparent from the above statement that the terms on purchaser notes extended by the McCormick Company at the turn of the century were longer than those commonly used today. Records of the International Harvester Company show that notes and accounts accepted from dealers and purchasers between 1904 and 1911 ranged from 25.6 percent to 35.8 percent of total sales.² These notes ranged in maturity from one to four years, about one-quarter maturing the first year, nearly two-thirds the second year, and approximately 10 percent the third and fourth years (Table 24). During this eight-year period there was a noticeable trend away from one-, three-, and four-year notes toward a higher percentage of two-year notes.

Before World War I it was a common practice, particularly with harvesting equipment, not to require a first payment until after the first harvest. Attempts were made to collect the remaining notes on harvesting machines in the succeeding two falls; but occasionally notes had to be extended an additional year or two, when crop failures or low prices reduced farmers' income. Notes with terms extending as long as four years were usually on sales of large equipment.

With the advent of mechanized tractor power after World War I, two important developments took place with respect to

² *Ibid.*, p. 283.

farm equipment credit terms. First, a new basis replaced the earlier "two or three falls" standard for tractors and for many of the larger units of equipment. The new terms, which soon became well established, were 20 percent cash (or equivalent) at time of purchase, 40 percent by October 1 of the year of purchase, and 40 percent by October 1 of the succeeding year. The second development was the increasing use of monthly instalments, notably on cream separators and milking machines.

TABLE 24
 CONTRACT TERM OF DEALER AND PURCHASER NOTES
 TAKEN BY INTERNATIONAL HARVESTER COMPANY, 1904-11
 (percentage distribution of dollar volume)

YEAR	PROPORTION MATURING IN:			
	<i>First Year</i>	<i>Second Year</i>	<i>Third Year</i>	<i>Fourth Year</i>
1904	34.7%	48.0%	14.4%	2.9%
1905	36.0	50.4	12.2	1.4
1906	30.5	58.3	10.2	0.9
1907	29.6	63.0	7.0	0.4
1908	26.9	66.3	6.4	0.4
1909	26.5	66.7	6.2	0.6
1910	25.9	67.7	6.0	0.4
1911	28.9	64.2	6.5	0.4

From *The International Harvester Co.* (Department of Commerce and Labor, Bureau of Corporations, 1913), p. 284.

Manufacturers had hitherto generally required their dealers to endorse all the purchaser notes which they originated for company financing. In this way the manufacturer obtained full recourse against the dealer on the obligations of equipment purchasers. During the twenties, however, the equipment companies began the practice, which in the thirties became widespread, of taking purchaser notes from their dealers without recourse, provided the dealer furnished full credit information and agreed to replace any purchaser note that proved unsatisfactory within sixty days after it had been received by the company.

Information required by the manufacturers on credit purchases included (1) the amount and type of equipment purchased; (2) the

down payment received, whether in the form of cash or trade-in allowance; (3) the amount to be financed, and the proposed schedule of repayments; (4) an estimate of farm income, by months, for the period of the proposed loan; (5) a financial statement; (6) a description of the real property owned; and (7) credit references. In addition, public records would be examined to determine the kind and amount of liens outstanding against the property of the prospective buyer.

During the depression of the early thirties, a "no down payment" basis of equipment financing was revived by some of the larger manufacturers in an attempt to stimulate sales. The program of one company, announced in the spring of 1931, was as follows: No cash down payment for tractors and tractor-drawn or tractor-driven equipment sold and delivered with a tractor, but settlement to be made by the payment of notes of equal amount maturing on the first of October 1931, 1932, and 1933; and similar terms for tractor-drawn or tractor-driven equipment sold in amounts of \$200 or more. If the farmer paid more than 50 percent cash on either of the above purchases, a cash discount of 5 percent was allowed; sales of less than \$200 required the usual down payment, but no dealer guarantee was required on such notes accepted by the manufacturer.

Despite more liberal terms on the part of most manufacturers, sales continued to shrink. Fresh devices were tried, for example a plan similar to the one just described except that payments in the first fall depended on the size of the corn, wheat, or potato crop. The farmer was to estimate the yield on whichever of these crops was his major enterprise. His first fall payment would be at the rate of 10 cents per bushel for the corn or wheat raised by him and 7 cents a bushel for potatoes—the payment not to exceed one-third of the purchase price of the equipment.

In the spring of 1932 the farm equipment industry was at a very low ebb. At that time, at least one major company announced a novel plan under which it guaranteed the Chicago price of No. 2 yellow corn at 50 cents per bushel, No. 2 hard wheat at 70 cents, and middling spot cotton at New Orleans at 8½ cents per pound, for amounts sufficient to pay 40 percent of the purchase price of tractors, harvester-threshers, and other items of equipment. Spe-

cial measures, however, failed to reverse the downward trend of sales, which decreased rapidly during the remainder of 1932, in some instances falling to 25 percent of 1929 sales. Past-due purchaser notes piled up, exceeding total sales for some companies in 1932, and bringing to light certain weaknesses in the extension of purchaser credit by manufacturers, such as a failure to require sufficiently large down payments to establish a real buyer's equity in the equipment, inappropriate spacing or scheduling of payments, and a tendency to rely too heavily on dealer guarantees of purchaser notes.

After 1932, and on through the forties, manufacturers required a cash down payment (or trade-in equivalent) of 20 to $33\frac{1}{3}$ percent of the selling price for most farm equipment. A 20 percent down payment was required on equal monthly instalment contracts and $33\frac{1}{3}$ percent on two-payment contracts. Approximately 50 percent of the balance of the purchase price after down payment was to be repaid within twelve months after delivery of the equipment and the remainder within eighteen months after delivery. In some instances a maximum of twenty-four months from delivery date was allowed for complete repayment. These terms were extended to all items of equipment with a selling price in excess of \$100. Where the selling price was less than that amount, the same range of down payments applied, but the maximum term of the loan generally did not exceed ten to twelve months.

The minimum down payments and maximum contract lengths given above were generally characteristic of the purchaser notes accepted by manufacturers from 1935 through 1948, but there were several exceptions. In high risk areas, such as the large wheat area west of the 100th meridian, scattered areas in the Northwest, and small areas in the Southeast, down payments as high as 40 or 50 percent were required. Milking machines and cream separators were typically sold with a 10 percent down payment, mainly because of the monthly instalment payments which their sales contracts required and the comparative stability of income in dairy farming.

Average down payments on credit sales of a number of leading manufacturers ranged from 35 to 50 percent for the years 1935-41. During the period 1942-48, when manufacturers were extending

only a negligible amount of retail credit, average down payments were somewhat larger, ranging from 40 to 50 percent.³ Maximum terms provided by manufacturers on purchaser notes were most commonly eighteen or twenty-four months. For all reporting companies, purchaser notes maturing in the same fiscal year in which they were originated made up approximately one-third of the dollar volume of such notes; those maturing in the second year made up about half, and those maturing in the third year about 15 percent (Table 25).

TABLE 25
 CONTRACT TERM OF PURCHASER NOTES ACQUIRED
 BY REPORTING FARM EQUIPMENT MANUFACTURERS, 1937-48
 (percentage distribution of dollar volume)

YEAR	PROPORTION MATURING IN:		
	<i>Current Year</i>	<i>Second Year</i>	<i>Third Year</i>
1937	37.5	50.5	12.0
1938	37.4	49.4	13.2
1939	35.6	50.0	14.4
1940	35.9	50.0	14.1
1941	36.6	50.1	13.3
1942	43.8	46.5	9.7
1943	38.1	47.5	14.4
1944	38.7	47.1	14.2
1945	38.5	47.7	13.8
1946	39.4	46.2	14.4
1947	33.6	49.8	16.6
1948	33.6	49.9	16.5

Based on the National Bureau of Economic Research survey of farm equipment manufacturers. The four companies reporting accounted for over half the sales volume of the industry in the period covered.

³ The BAE survey indicated that 44 percent of the retail credits extended by manufacturers in 1947 involved no down payment. This is surprising, in view of the standard down payment requirements of the larger manufacturers and the actual arrangements reported by them to the National Bureau. The 100 percent credits reported in the BAE survey (Table 17) may have been made by small manufacturers, or may have been a combination of dealer-manufacturer credit extensions reported by farmers as coming from manufacturer only.

Manufacturers' Charges

During the early 1900's, prices of agricultural equipment were usually quoted separately for cash and credit sales. It was not uncommon for sales involving equal payments in two successive falls to carry a 5 percent higher price than cash sales, and for sales involving three successive equal payments to carry a 10 percent higher price.⁴ Time purchasers also paid interest at close to the legal maximum rate. Sometime before World War I, however, it became a fairly typical practice for manufacturers to quote only time prices to their dealers, and to allow stipulated discounts for cash payment. This practice led to the single retail price which has remained to this time the standard practice of the industry.

From about 1936 and on through 1948, manufacturers have used two general types of time purchase charges. One type, used by a few companies, is a simple interest charge, usually 6 percent, on the outstanding balance until maturity, and a somewhat higher penalty rate thereafter. The other type, used by many of the larger manufacturers, and putting a distinct premium on short maturities, is usually a 6 percent interest charge on the outstanding balance of the note plus a finance charge that increases with the length of the contract. The latter varies from 0.2 percent per annum on the balance outstanding for a note maturing in three months to 3.1 percent for a note maturing in twenty-four months. A single-payment purchaser note would have a gross charge of 6.2 percent per annum if repaid in three months, 7.5 percent if repaid in fifteen months, and 9.1 percent if repaid in twenty-four months. In the spring of 1949 one of the larger companies put into effect a schedule of time payment charges with an effective interest rate of 9.23 percent per annum, regardless of the note's maturity or the schedule of repayments. This is extreme, but serves to point up a general development during the forties. If the manufacturers' gross credit charges under the more common arrangement are compared with the average interest rates charged by banks on equipment-secured loans as observed in 1947 (Table 23), it appears that manufacturers, by and large, whether intentionally or not, were pricing themselves out of the retail credit market, and in that

⁴ *The International Harvester Co.* (Department of Commerce and Labor, Bureau of Corporations, 1913), p. 279.

way, as well as by other means, were promoting a shift to new sources of farm equipment credit.

Security Provisions

While some farm equipment purchases are financed on an unsecured basis, usually the creditor requires security, taking title to or a lien on the equipment by means of a conditional sales contract or chattel mortgage. These instruments, common in manufacturers' credit arrangements ever since the long-line companies were formed, characterize those of lending institutions too. Where a lending agency is financing the general production operations of the equipment purchaser and requires security, this is usually obtained through a combination of a chattel mortgage on the equipment purchased and liens on such other assets as are sufficient to safeguard the entire loan.

PCA loans are usually of that type. In fact only 4 percent of the total amount loaned by PCAs to finance farm equipment purchases in 1947 was secured exclusively by an equipment lien; 9 percent was either unsecured or endorsed, 78 percent was secured by the equipment purchased plus other assets, and 9 percent by other and unknown security combined (Table 26). When a lien was taken on equipment or other assets, it was generally in the form of a chattel mortgage. Except for the New England and Middle Atlantic states, the regional divisions showed little variation in the type of security taken by PCAs. In those two regions the percentages of unsecured and endorsed loans, and of loans secured exclusively by a lien on the equipment purchased, were considerably higher than for the country as a whole.

We have no comparable information for commercial banks, since in the mid-1947 survey their loans for financing equipment and livestock purchases were reported in a single category. As Table 14 showed, about a fifth of such loans (by number) were secured solely by lien on equipment: this is the group we have treated as equipment loans, and it is not known what proportion of the loans secured only by endorsement, or by a combination of means, would relate to equipment purchases also.

Manufacturers, as was pointed out earlier, used to rely greatly on the added security of dealers' endorsements of farmers' equipment notes, but by the 1930's had largely abandoned that practice.

Among the agencies at present chiefly supplying farm equipment credit, several types of recourse agreement are in use, though in many cases no such provision is required.

TABLE 26
SECURITY PROVISIONS IN FARM EQUIPMENT FINANCING
BY PRODUCTION CREDIT ASSOCIATIONS, 1947
(percentage distribution of amount loaned)

<i>Census Region</i> ^a	<i>Unse- cured or Endorsed</i>	<i>Lien on Equipment Purchased Only</i>	<i>Lien on Equipment Purchased plus Other Assets</i>	<i>Other Security</i>	<i>Unclas- sified</i>
New England	43	12	44	b	...
Middle Atlantic	24	14	54	8	...
East North Central	12	1	81	6	b
West North Central	2	3	77	8	9
South Atlantic	3	8	87	1	1
East South Central	6	1	85	3	4
West South Central	b	...	93	5	2
Mountain	8	b	80	6	6
Pacific	6	2	83	9	b
United States	9	4	78	6	3

Based on the National Bureau of Economic Research survey of PCAs.

^a For a listing of states included in each census region, see Table 1, footnote a.

^b Less than 0.5 percent.

When a lending agency enters into a standing agreement with a dealer to finance his customers' purchases on a nonrecourse basis, the lender naturally retains the option to reject specific loan applications. A performance warranty is generally provided on all new equipment by the manufacturer, and the dealer undertakes to assemble and adjust the equipment and to teach the purchaser its proper operation and care. Where the lender is also financing used-equipment sales for the dealer in question, he may require the dealer's guarantee of performance. Further, under nonrecourse agreements the dealer generally does any necessary repossessing, reconditioning, and reselling, being reimbursed by the lender, however, for costs incurred in performing these services.

Under limited-recourse agreements the dealer as well as the

lender has a degree of responsibility for the quality of the credits granted. At least three kinds of such agreements are used, including (1) a reserve, or holdback, arrangement, (2) an arrangement whereby the liability of the dealer is limited as to time or amount, either on an individual contract basis or for an aggregate of contracts, and (3) a repurchase plan.

One form of the reserve, or holdback, arrangement involves deducting a certain percentage of the face amount of the notes accepted—normally, 3 to 5 percent—and crediting it to a reserve account in the name of the dealer. The reserve is accumulated until it amounts to 5 to 7 percent of the outstanding balance on all contracts. For example, if a dealer with a 5 percent reserve arrangement sends the bank a purchaser's note for \$1,000, the bank remits \$950 to the dealer and places \$50 in the dealer's reserve account. Whenever the reserve account exceeds the agreed percentage on the outstanding balance on all contracts—usually 5 to 7 percent—the bank disburses the excess to the dealer. The reserve account sets the limit of the dealer's liability on outstanding contracts. Should losses exceed the amount in the reserve, they are borne to that extent by the financing agency.

Several types of agreement may serve to limit the dealer's liability as to time or amount. He may have full liability until a specified percentage of the amount of the note or an agreed-upon number of payments has been made, after which all dealer liability ends. For example, on seasonal contracts, common in farm equipment sales, the dealer may be relieved of liability after the first payment has been made.

Third, a dealer may guarantee to repurchase repossessed farm equipment for the unpaid balance of the contract. This arrangement closely resembles the full-recourse agreement except that the lender generally agrees to assume the responsibility and cost of any necessary legal action.

As the term implies, full-recourse arrangements make the dealer fully liable for all defaulted obligations of the purchaser. The dealer may endorse each contract with full recourse, or there may be a master agreement between lender and dealer which clearly states the responsibility of the latter. A disadvantage of the full-recourse agreement is that in many states a dealer's endorsement on a purchaser note makes him a borrower, and this limits the

power of the lender to lend more than a specified sum to the dealer—usually an amount not greater than 10 percent of the capital and surplus of the lending institution. The strength of a full-recourse agreement, from the standpoint of the principal lender, is that by making the dealer a creditor as well as a salesman, it compels him to take responsibility for determining and enforcing sound credit policies. Its weakness is that the retail concerns are often under-capitalized. The experience of manufacturers has indicated that dealers' endorsements on defaulted purchaser notes have been of limited value, at least during periods of great financial strain.

We have information on the extent to which recent equipment loans have involved recourse on the dealer, but nothing to show whether there are significant differences among lending agencies in the type or frequency of recourse provisions. Seven out of ten farm equipment dealers in the United States in 1947 had standing agreements with a bank or finance company providing for purchaser credit, according to reports gathered in the NBER dealer survey. More than half of these agreements, Table 27 shows, involved no recourse on the dealer; but a substantial proportion—that is, more than a third of the agreements—did involve either

TABLE 27
 RECOURSE PROVISIONS IN STANDING AGREEMENTS OF LENDING AGENCIES
 WITH REPORTING DEALERS TO FINANCE FARM EQUIPMENT SALES, 1947
 (percentage distribution of dealers)

TYPE OF PROVISION	VOLUME OF SALES			Total
	<i>Under \$50,000</i>	<i>\$50,000–\$99,999</i>	<i>\$100,000 and Over</i>	
Agreements in force	60%	79%	78%	71%
Nonrecourse	33	40	43	38
Full-recourse	18	20	14	17
Limited-recourse	4	13	15	10
Combination ^a	5	6	6	6
No agreement	40%	21%	22%	29%
Dealers reporting	125	111	95	331

Based on the National Bureau of Economic Research survey of dealers.

^a Includes retailers with two or more of the above-listed types of agreement.

full or limited recourse. The proportion of nonrecourse agreements was highest in the case of dealers with large sales volume, and for them, limited recourse was as frequent as full recourse. For the group of dealers with smallest sales volume, the reverse was true. They were less likely to enjoy a standing agreement for customer financing; and in the agreements they did obtain, recourse provisions, and especially those requiring full liability, were more frequent than in the case of other dealers (Table 27).

The material of this and the preceding chapter, necessarily incomplete, is at any rate suggestive of developments in farm equipment credit practices. Contract lengths since the turn of the century have pretty steadily been shortened, and the recent shift to new credit sources, with commercial banks the chief supplier, seems to work in the same direction. Down payment requirements, often very lenient in the period of manufacturer-supplied credit, are still generally low when compared, for instance, with those for consumer durables. Provision for time payments, and especially for irregularly timed instalments conforming to income flow in particular types of farming, is less frequent than when manufacturers were the chief credit source. Effective interest rates, apparently, are lower.