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1. Instalment Credit in Perspective

Instalment credit for use in purchasing consumer durable goods, and more recently services as well, is firmly established in the American economy. From time to time, however, concern has been voiced about the possible overextension of consumer credit and its consequences. This concern arises not solely because variations in the volume of consumer credit are now a highly potent factor in the economy but also because deterioration in its quality might have widespread, untimely repercussions. This book attempts to measure and to analyze the variations that have occurred in consumer credit quality.

The effect of changes in the volume of credit on economic growth, stability, and prices has already received much attention. It is the problem that Rolf Nugent and Gottfried Haberler dealt with in their pioneering works, and it was examined again in the 1957 Federal Reserve study.[1] On the other hand, the impact of cyclically and secularly changing credit quality on economic stability, growth, and the level of prices has been relatively neglected. An initial exploration of this question was undertaken in a paper prepared for the Federal Reserve study just cited.[2] This book updates and expands that study through further analysis of additional data.

We begin with a consideration of some of the broad changes in the quantity and quality of consumer instalment credit. But first, what is meant by credit quality? Since the next chapter will consider this matter in some detail, here we merely note that quality concerns itself

[1] Rolf Nugent, *Consumer Credit and Economic Stability*, New York, Russell Sage Foundation, 1939; Gottfried Haberler, *Consumer Instalment Credit and Economic Fluctuations*, New York, National Bureau of Economic Research, 1942; Board of Governors of the Federal Reserve System, *Consumer Instalment Credit*, Washington, 1957.

[2] Geoffrey H. Moore, Thomas R. Atkinson, and Philip A. Klein, "Changes in the Quality of Consumer Instalment Credit," in *Consumer Instalment Credit*, Part II, Volume 1, pp. 70–157.

ultimately with the degree of risk that attaches to credit transactions. Such risk may be viewed prospectively at the time the credit is extended, or retrospectively in terms of collection experience. Viewed prospectively, credit quality can be measured by credit terms (down payment or loan-to-value ratios, or maturities) and by borrower characteristics such as income or occupation—in short, by such aspects of the credit transaction as are known to be associated with risk. Viewed retrospectively, credit quality can be measured by delinquency, repossession, and loss experience. Hence an examination of credit quality must deal with the conditions that determine risk. We need to consider the changing volume of instalment credit, on what terms credit has been extended and how they have changed, what kind of people use consumer credit and how the borrowing population has changed, and how collection experience on instalment loans has varied over the years.

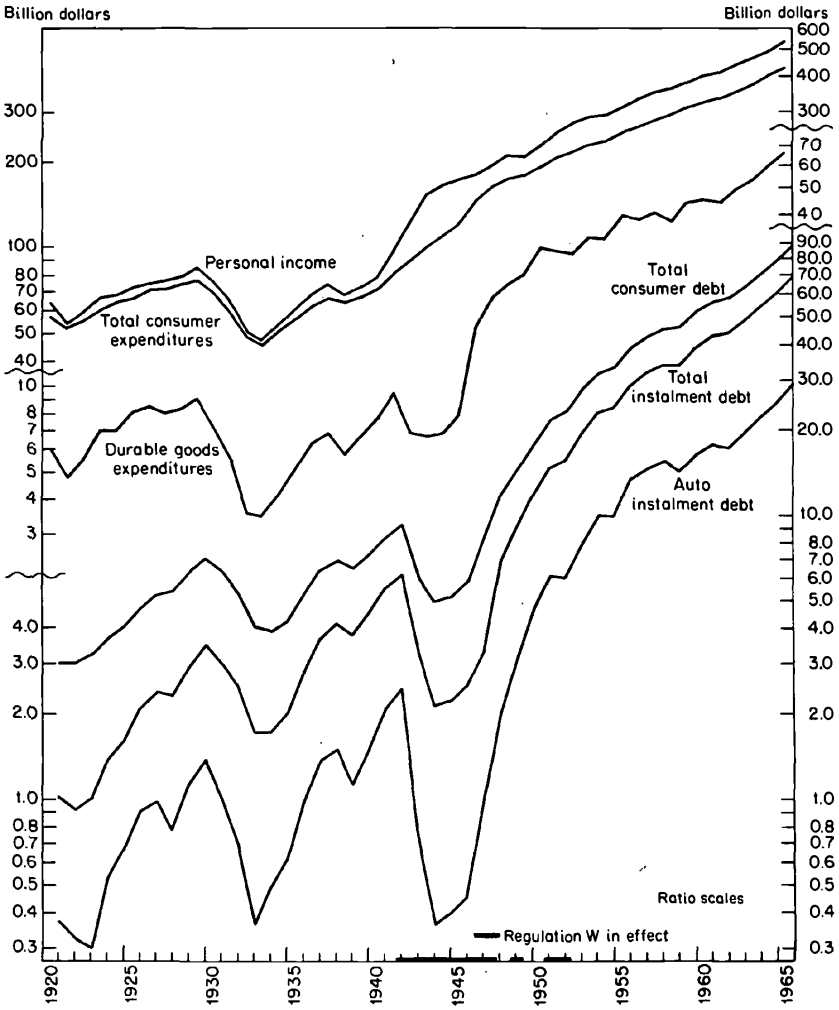
Historically, instalment credit has been most closely associated with the purchase of consumer durables, especially automobiles, although in recent years it has spread to various consumer services, such as travel and education. Both total consumer credit and its chief component, instalment credit, have grown in three waves—in the late 1920's, the 1930's, and most rapidly in the decade following the Second World War. This pattern of growth in outstanding debt is shown in Chart 1, which shows as well the growth of the economy as measured by total personal income and consumer expenditures.[3]

The growth of the 1920's was reversed by the Great Depression, at which time the decline in personal income was accompanied by even larger declines in expenditures on consumer durables as well as in instalment debt. Economic recovery, reversed briefly but sharply during the 1937–38 recession, produced new highs in personal income, durable goods expenditures, consumer debt, and instalment debt by the beginning of the Second World War. The imposition of Regulation W (see note 6), governing the use of instalment credit, together with

[3] There are many excellent discussions of the growth in instalment credit. Among the classics in the field are E. R. A. Seligman, *The Economics of Instalment Selling* (1927), and the volumes cited in note 1. More recently the growth of consumer instalment credit has been traced in Volume 1, Parts I and II, of the Federal Reserve study, *Consumer Instalment Credit*. See also the report by F. Thomas Juster, *Household Capital Formation and Financing, 1897–1962*, NBER, New York, 1966.

CHART 1

Personal Income, Consumer Expenditures, and Consumer Debt Outstanding, 1920–65



SOURCE: Table 1 and its sources.

reductions in the availability of new automobiles and other consumer durables, caused a drop in the use of credit during 1942–45. Since 1945, consumer credit has expanded spectacularly. Total consumer debt, instalment debt, and its largest component, automobile paper, have all grown at a faster rate than either personal income or total sales of durables. By the end of 1965, total consumer debt outstanding was 16 per cent of annual personal income, whereas it was 7 per cent in 1948 and 8 per cent in 1929 (Table 1). Instalment debt was 13 per cent of income in 1965, 4 per cent in 1948 and in 1929.

It is illuminating to consider not only the growth in the accumulated debt but also the rate at which it is extended and repaid. The extensions, of course, constitute a supplement to income and the repayments a drain upon it.[4] Instalment credit extensions, as Table 1 shows, reached a level 14 per cent as large as total personal income in 1965, compared with 7 per cent thirty-four years before. The repayments were somewhat smaller in each year: 6 per cent of income in 1929 and 13 per cent in 1965. The net increase in instalment debt during each year was, therefore, a rather small fraction of income: about half of 1 per cent in 1929, 1.5 per cent in 1965.[5] These figures show that the primary function of consumer credit is to facilitate transactions rather than to provide additional funds—in recent years, for every hundred dollars of income the net increment in instalment debt during the year was only about a dollar. Nevertheless, these net increments have persisted year after year, and this accounts for the rise in the accumulated debt relative to income. Moreover, it is probable that many purchases made with the use of credit might not be made at all in the absence of available credit.

In part, the growth of consumer credit has merely facilitated transactions at higher prices. But Table 1 shows that the price rise by no means accounts for the increase. Prices of consumer goods and services in 1965 were nearly twice their 1929 level, but instalment credit extensions were thirteen times their 1929 level. Neither total expenditures nor those on durable goods alone have risen as fast as the rate of credit extension.

[4] The estimates of repayments in Table 1 include not only periodic and final repayments but also repayments of obligations that are immediately refinanced. These refinancings are, of course, also included in the extensions.

[5] Extensions, repayments, and net change are larger fractions of *borrowers'* income, of course, than of total income. Repayments apparently have not risen relative to borrowers' income. See Table 9.

TABLE 1

Consumer Credit, Consumer Expenditures, and Personal Income, Selected Dates, 1920–65
(dollars in billions)

	Consumer Debt Outstanding, End of Year			Consumer Instalment Credit			Consumer Expenditures			Price Index for Consumer Expenditures (1958:100)	
	Total Debt	Instalment Debt		Extensions	Repayments	Net Change	Total	Durable Goods	Personal Income	Total	Durable Goods
		Total	Auto								
1920	3.0	1.0	0.4	—	—	+0.2	58.7	6.1	65.4	66	70
1929	7.1	3.5	1.4	5.8	5.4	+0.4	77.2	9.2	85.9	55	56
1937	6.9	4.1	1.5	6.3	5.9	+0.4	66.5	6.9	74.1	46	46
1941	9.2	6.1	2.5	9.4	8.9	+0.6	80.6	9.6	96.0	49	50
1948	14.4	9.0	3.0	15.6	13.3	+2.3	173.6	22.7	210.2	82	86
1953	31.4	23.0	9.8	31.6	28.0	+3.6	230.0	33.2	288.2	92	94
1957	45.0	33.9	15.3	42.0	39.9	+2.1	281.4	40.8	351.1	98	98
1960	56.0	42.8	17.7	49.6	46.0	+3.6	325.2	45.3	401.0	103	101
1963	70.5	54.2	22.4	61.3	55.2	+6.1	375.0	53.9	465.5	106	100
1964	78.4	60.5	25.2	67.5	61.1	+6.4	401.4	59.4	496.0	107	100
1965	87.9	68.6	28.8	75.5	67.5	+8.0	431.5	66.1	535.1	109	100
Ratio, 1965 to 1929	12.4	19.6	20.6	13.0	12.5	20.0	5.6	7.2	6.2	1.9	1.8

(continued)

TABLE 1 (concluded)

	Total Debt to Income	Instalment Debt to Income		Instalment Credit Extensions to Income	Instalment Credit Repayments to Income	Net Change in Instalment Debt to Income	Durable Goods Expenditures to Total Expenditures	Instalment Credit Extensions to Total Expenditures	Net Change in Instalment Debt to Total Expenditures
		Total	Auto						
					Percentage Ratios				
1920	5	2	1	--	--	+0.3	10	--	+0.3
1929	8	4	2	7	6	+0.5	12	8	+0.5
1937	9	6	2	9	8	+0.5	10	9	+0.6
1941	10	6	3	10	9	+0.6	12	12	+0.7
1948	7	4	1	7	6	+1.1	13	9	+1.3
1953	11	8	3	11	10	+1.2	14	14	+1.6
1957	13	10	4	12	11	+0.6	14	14	+0.7
1960	14	11	4	12	11	+0.9	15	15	+1.1
1963	15	12	5	13	12	+1.3	14	16	+1.6
1964	16	12	5	14	12	+1.3	15	17	+1.6
1965	16	13	5	14	13	+1.5	15	17	+1.9

Notes to Table 1

Source: Consumer credit: 1920–62, "Section 16 (new) Consumer Credit Statistics," p. 33, prepared by Board of Governors of the Federal Reserve System from *Supplement to Banking and Monetary Statistics;* 1963–65, *Federal Reserve Bulletin,* June 1966, pp. 874, 876.

Consumer expenditures, total: 1920–28, estimated as the same percentage of personal income as shown by the ratio of consumers' outlay to aggregate payments to individuals including entrepreneurial savings, Kuznets, *National Income and Its Composition, 1919–1938,* p. 137; 1929–61, *Survey of Current Business,* August 1965; p. 24, 30, 52; 1962–65, *Survey,* July 1966, pp. 11, 13, 38.

Consumer expenditures, durable goods: 1920–28, estimated as the same percentage of consumer expenditures as shown by the ratio of consumer expenditures on durable goods to total flow of goods to consumers, Variant III, Kuznets, *Capital in the American Economy: Its Formation and Financing,* pp. 486, 502; 1929–65, from the sources indicated for consumer expenditures.

Personal income: 1920, extrapolated from 1921 by aggregate payments to individuals including entrepreneurial savings, Kuznets, *National Income and Its Composition,* p. 137; 1921–28, Barger, unpublished worksheets; 1929–65, from the sources indicates for consumer expenditures.

Price indexes: 1920–28, extrapolated from 1929 by the series implicit in Kuznets series for Variant III, *Capital,* pp. 486, 487, 502, 504; 1929–65, from the sources indicated for consumer expenditures.

TRENDS IN CREDIT TERMS

In the 1920's instalment credit was associated primarily with the purchase of such consumer durables as pianos, sewing machines, and automobiles, and the chief source of credit then was the sales finance company. In recent years commercial banks have become prominent in this field, providing a large volume of personal instalment loans, automobile loans, and other types of instalment credit. At the end of 1965, total instalment credit stood at $68.6 billion, of which commercial banks held $29.2, sales finance companies $16.1, credit unions $7.5, consumer finance companies $5.6, department stores $4.5, and other institutions $5.6 billion. Automobile paper amounted to $28.8 billion, other consumer goods paper $17.7, personal loans $18.4, and home repair and modernization loans $3.7 billion.

A survey of the changes in instalment credit terms should, therefore, encompass the several types of financial institutions that provide

such credit and the wide variety of types of credit extended. In view of the limitations of available data, however, we shall concentrate upon the trend in terms on automobile paper as reported by banks and sales finance companies. Although even these data are not fully comparable, they do provide a conspectus of the changing character of credit terms in a major sector of the market.

As Table 2 indicates, there has been a marked trend, at least since the twenties, toward a lengthening of contract maturities on automobile paper. In 1929, for example, the group of sales finance companies included in the sample reported that 85 per cent of their automobile paper (by dollar volume for both new and used cars) had a maturity of twelve months or less. Very little went beyond eighteen months. Maturities changed relatively little during the Great Depression. By 1937, however, when the volume of credit had more than regained the 1929 level, only 32 per cent had a maturity as short as twelve months. Considering new-car contracts alone, 22 per cent were for twelve months or less and 35 per cent were for more than eighteen months. If the war and the Regulation W periods are omitted, by 1953, with new-car volume reaching new highs, the volume of contracts being written for over eighteen months had jumped to 83 per cent. By 1957, 80 per cent of new-automobile contracts were for over twenty-four months, and 44 per cent had maturities in excess of thirty months. By 1965, 86 per cent were in this category. The trend toward longer contracts has applied to both new and used cars, but used-car contracts have remained substantially shorter in maturity than new-car contracts.

Chart 2 shows in somewhat greater detail that the long-run trend toward lengthening terms has continued in recent years, though at a moderate pace since 1959. This trend was broken sharply only when Regulation W was reimposed in 1950–51 during the Korean War.[6]

Table 3 and Chart 3 reveal that much the same trend toward easier terms is evidenced by down payment percentages. A lower down payment relative to the retail price of the car is, of course, indicative of a more liberal advance of credit. Substantial shifts toward smaller down payment ratios occurred between 1934 and 1937 and between 1953 and 1955. Since 1957, however, there has been little further easing,

[6] This Federal Reserve regulation was in effect during the following periods: September 1, 1941, to November 1, 1947; September 20, 1948, to June 30, 1949; and September 18, 1950, to May 7, 1952. It imposed maximum maturities and minimum down payments for instalment credit.

TABLE 2

Percentage Distribution of Dollar Volume of Automobile Contracts by Length of Contract, Sales Finance Companies, Selected Years, 1925–65

Length of Contract	Statement Date, End of Year									
	1925	1929	1934	1937	1953	1955	1957	1960	1963	1965
New and Used Cars										
1. 12 mos. or less	81[a]	85[a]	70[a]	32[a]	--	--	--	--	--	--
2. 13 mos. and over	19	15	30	68	--	--	--	--	--	--
New Cars										
3. 12 mos. or less	--	--	62[a]	22[a]	--	--	--	--	--	--
4. 13 mos. and over	--	--	38	78	--	--	--	--	--	--
5. 18 mos. or less	--	--	--	65[b]	17[b]	9[b]	6[b]	--	--	--
6. 19 mos. and over	--	--	--	35	83	91	94	--	--	--
7. 24 mos. or less	--	--	--	95[a]	81[c]	32[b]	20[b]	--	--	--
8. 25 mos. and over	--	--	--	5	19	68	80	--	--	--
9. 30 mos. or less	--	--	--	--	--	--	56[b]	19[b]	15[b]	14[b]
10. 31 mos. and over	--	--	--	--	--	--	44	81	85	86
Used Cars										
11. 12 mos. or less	--	--	85[a]	51[b]	14[b]	17[b]	11[b]	--	--	--
12. 13 mos. and over	--	--	15	49	86	83	89	--	--	--
13. 24 mos. or less	--	--	--	99[a]	99[c]	95[c]	65[b]	33[b]	21[b]	21[b]
14. 25 mos. and over	--	--	--	1	1	5	35	67	79	79

(continued)

Notes to Table 2

[a]National Association of Sales Finance Companies, "Composite Experience of Sales Finance Companies and Automobile Dealers, 1939."

[b]First National Bank of Chicago, "Ratios of the Instalment Sales Finance and Small Loan Companies," and Supplements. Percentages shown are simple averages of the percentages reported by each company. Used-car figures from 1957 include only models up to two years old.

[c]*Consumer Instalment Credit,* Part II, Vol. 1, pp. 123–124. New-car figures are based on percentage distribution of number of contracts for five companies, which in 1955 had 57.1 per cent of the automobile paper extensions by all sales finance companies. Used-car figures are for four companies, which in 1955 had 55.8 per cent of the automobile paper. Percentage distribution by dollar volume not available.

Note: For additional detail see Appendix Tables A-1 – A-3.

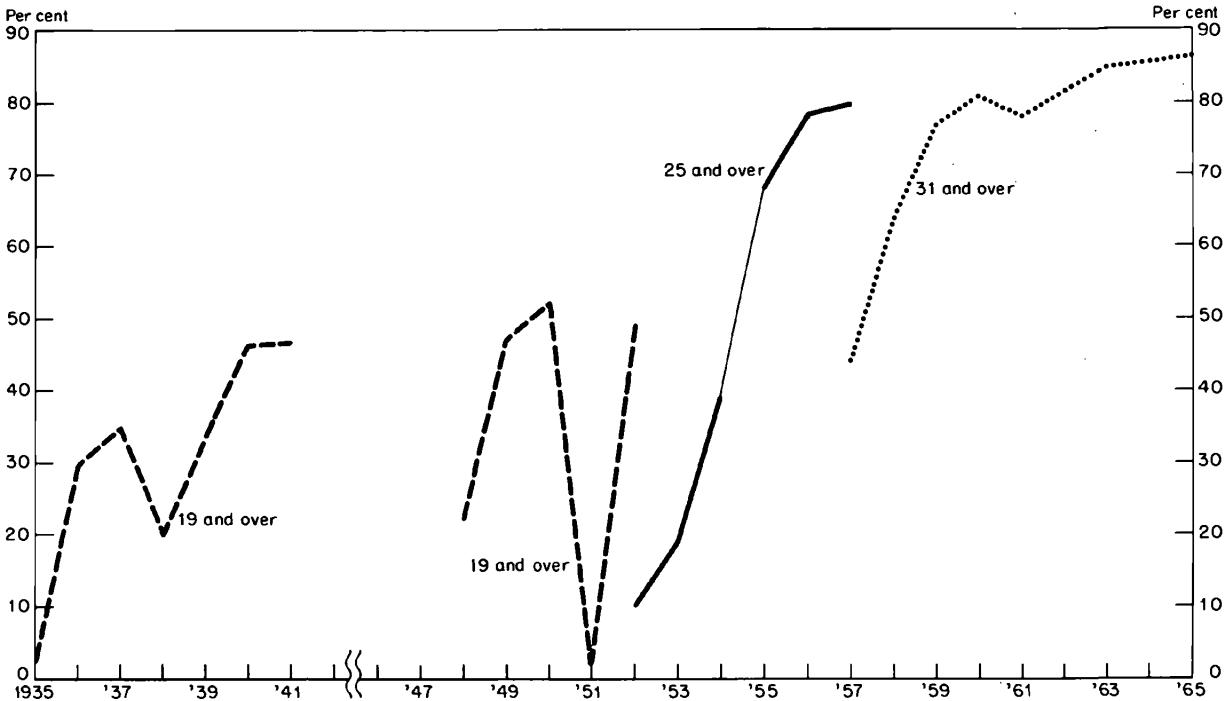
judging from the percentage of sales finance contracts in which the amount of credit advanced exceeded the cost of the automobile to the dealer (or, in the case of used cars, its wholesale value). This ratio, termed the "dealer cost ratio," is an improvement upon the down payment percentage in that it avoids the inflation inherent in the latter when trade-in allowances (included in the down payment) are raised relative to the actual cash value of the trade-in. It is similar to the loan-to-value ratio used in mortgage credit analysis.[7]

Statistics on trends in the characteristics of automobile credit extended by commercial banks are assembled in Tables 4, 5, and 6. Table 4 indicates that since 1956 there has been a steady lengthening in maturities on both new- and used-car contracts and on contracts which the banks issue themselves as well as those purchased from dealers and other lenders. However, for direct loans the proportion with long maturities is much lower, a point worth bearing in mind because we shall find a corresponding difference in collection experience. Note also that the maturities are shorter for used-car than for new-car loans, just as in the sales finance company figures. Data for the same period but covering a different sample of commercial banks yield similar results (see Table A-4).

[7] For further discussion and comparison of the down payment percentage and dealer cost ratio, see Chapters 2, 7, and Appendix H.

CHART 2

Percentage of New-Car Sales Contracts in Excess of 18, 24, and 30 Months' Maturity, Sales Finance Companies, 1935–65



SOURCE: 1935–41, 1955–65, Table A-2 (percentages based on dollar volumes); 1948–54, Table A-3 (percentages based on number of contracts).

NOTE: The figures for 1951 are significantly affected by Regulation W. Cf. note 6.

TABLE 3

Percentage Distribution of Dollar Volume of Automobile Contracts by Down Payment Percentage and by Dealer Cost Ratio, Sales Finance Companies, Selected Years, 1925–65

	Statement Date, End of Year									
	1925	1929	1934	1937	1953	1955	1957	1960	1963	1965
New and Used Cars										
1. Down Payment under 33-1/3%	19[a]	8[a]	18[a]	23[a]	--	--	--	--	--	--
2. Down Payment 33-1/3% and over	81	92	82	77	--	--	--	--	--	--
New Cars										
3. Down Payment under 33-1/3%	--	--	17[a]	22[b]	30[b]	52[b]	60[b]	--	--	--
4. Down Payment 33-1/3% and over	--	--	83	78	70	48	40	--	--	--
5. Dealer cost ratio 1.01 and over	--	--	--	--	--	--	32[b]	32[b]	38[b]	40[b]
6. Dealer cost ratio 1.00 or less	--	--	--	--	--	--	68	68	62	60
Used Cars										
7. Down Payment under 40%	--	--	21[a]	--	--	--	--	--	--	--
8. Down Payment 40% and over	--	--	79	--	--	--	--	--	--	--
9. Down Payment under 33-1/3%	--	--	--	28[b]	31[b]	38[b]	54[b]	--	--	--
10. Down Payment 33-1/3% and over	--	--	--	72	69	62	46	--	--	--
11. Dealer-cost ratio 1.01 and over	--	--	--	--	--	--	59[c]	39[b]	53[b]	52[b]
12. Dealer-cost ratio 1.00 or less	--	--	--	--	--	--	41	61	47	48

Notes to Table 3

[a]National Association of Sales Finance Companies, "Composite Experience of Sales Finance Companies and Automobile Dealers, 1939."

[b]First National Bank of Chicago, "Ratios of the Instalment Sales Finance and Small Loan Companies," and Supplements, Percentages shown are simple averages of the percentages reported by each company. The dealer-cost ratio is the ratio of the amount of credit advanced to the cost of the car to the dealer (for new cars) or to its wholesale value (for used cars). Hence an increase in the percentage of contracts with dealer-cost ratios in excess of 1.00 indicates an easing of credit similar to that implied by an increase in contracts with down payments less than 33 per cent of the retail price of the car.

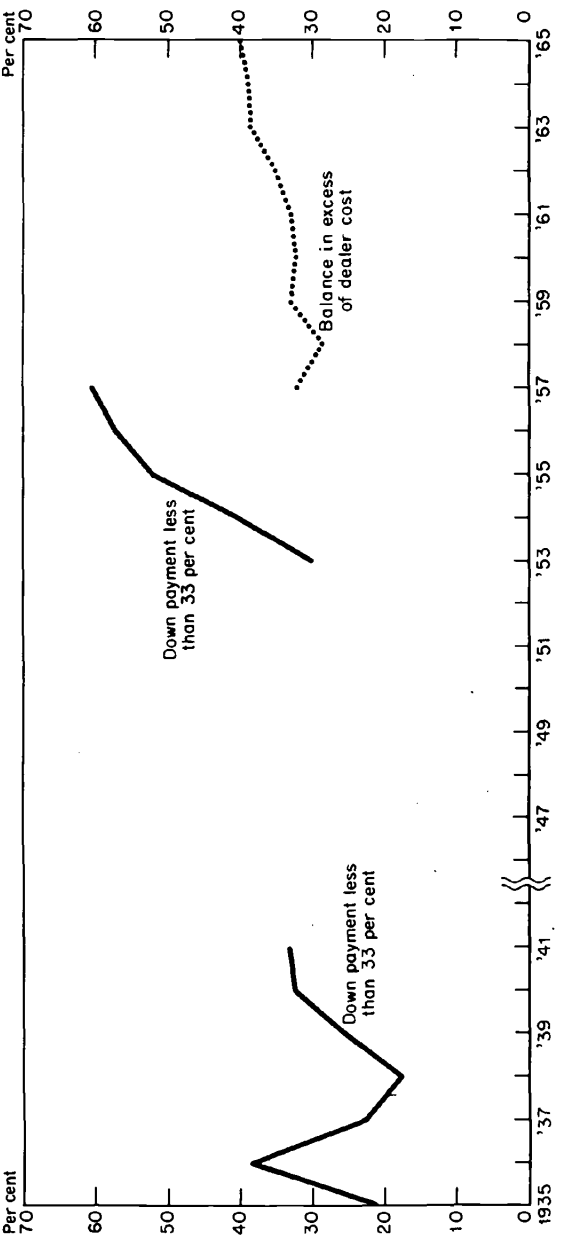
[c]Related to low book value. (The First National Bank of Chicago, "Supplementary Ratios," June 1960 release.)

Table 4 suggests that the trend toward more liberal maturities which sales finance company data have revealed since the 1920's has also characterized commercial bank loans in the recent past. The only bank data available for a longer period are the estimated average loan durations shown in Table 5. While the method of estimation introduces certain biases, they are not so serious as to cast doubt upon the broad trends. It is clear that the average maturity on automobile contracts from all sources lengthened over time both in the prewar era and again in the years since 1946. Banks, however, have adhered to somewhat more conservative terms, especially on their direct loans, than sales finance companies. In 1965, for example, banks reported 80 per cent of their purchased paper and 64 per cent of their direct loans had maturities of more than thirty months, whereas the corresponding figure for sales finance companies was 86 per cent (see Chart 4).

The limited information available on down payment percentages or dealer cost ratios suggests that banks also have participated in the trend toward more liberal credit advances. Table 6 shows that since 1957 the proportion of bank loans on which the contract balance exceeded dealer cost or wholesale value has increased quite steadily, for purchased and direct loans on new cars as well as on used cars. Comparison of the dealer cost ratios for banks with those for sales finance companies (Table 3)—a hazardous comparison because the sources and method of averaging are different—suggests that bank terms have eased

CHART 3

Percentage of New-Car Sales Contracts (Dollar Volume) with Down Payment Less Than 33 Per Cent or Balance in Excess of Dealer Cost, Sales Finance Companies, 1935–65



SOURCE: Table A-2.

TABLE 4

Percentage of Automobile Loans With Long Maturities, Commercial Banks, 1956–65

	New Cars (per cent with maturities 31 months and over)			Used Cars (per cent with maturities over 25 months)		
	All Loans	Purchased Paper	Direct Loans	All Loans	Purchased Paper	Direct Loans
1956	38.4	45.2	18.2	13.2	17.0	5.2
1957	40.7	50.5	19.9	14.2	17.6	5.2
1958	49.7	59.6	29.1	17.7	23.1	7.4
1959	58.6	67.7	38.1	24.8	30.9	10.2
1960	62.6	71.2	43.9	25.8	31.0	12.8
1961	63.4	71.9	44.7	24.8	30.4	13.1
1962	67.9	75.4	52.1	28.9	35.4	15.6
1963	70.9	77.4	56.8	33.9	40.4	21.3
1964	73.8	79.6	60.8	38.1	44.4	25.0
1965	75.2	80.2	63.9	43.1	49.6	29.7

Source: NBER estimates based on unpublished data for a sample of commercial banks from the Board of Governors of the Federal Reserve System. All percentages are averages of twelve monthly figures.

more widely and steadily since 1957, but still remain more conservative, on the whole, than the terms on sales finance company credit. In any case, it seems clear that the long-run trend toward more liberal credit terms has been a general one.

The trend toward longer maturities and larger relative credit advances in the prewar period and the similar shift in the postwar period has been such that average monthly instalment payments on automobile contracts remained relatively constant in each period, though they shifted to a higher absolute level postwar than had been customary before the war. That is to say, repayment periods have increased roughly in proportion to the larger debt obligations, leaving payments per month about the same. Typical monthly payments on new cars in the postwar period have been $70–$80, and on used cars

TABLE 5

Average Duration Of Loan, Automobile Paper (New And Used Cars), 1928–65

(months)

	Average Term on Contracts Written, Automobile Dealers (1)	*Computed Average Duration of Loan*[a]					
		All Holders (2)	Auto Dealers[b] (3)	Commercial Banks			Sales Finance Companies (7)
				Direct (4)	Purchased (5)	Total (6)	
1928	12.4	--	--	--	--	--	--
1929	12.5	12.2	--	--	--	--	--
1930	12.6	11.5	--	--	--	--	--
1931	13.0	11.7	--	--	--	--	--
1932	13.1	11.9	--	--	--	--	--
1933	13.3	14.0	--	--	--	--	--
1934	13.8	13.5	--	--	--	--	--
1935	14.3	14.4	--	--	--	--	--
1936	16.2	14.4	--	--	--	--	--
1937	17.4	14.1	--	--	--	--	--
1938	16.8	14.6	--	--	--	--	--
1939	--	15.1	--	--	--	--	--
1940	--	16.2	--	--	--	--	--
1941	--	16.4	--	--	--	--	--
1942	--	12.3	--	12.5	13.1	12.8	--
1943	--	6.6	--	9.1	8.9	9.0	--
1944	--	9.2	--	9.6	10.1	9.8	--
1945	--	9.2	--	10.5	9.8	10.2	--
1946	--	10.2	11.0	11.3	10.3	10.9	9.4
1947	--	11.8	12.4	12.4	11.1	11.8	11.9
1948	--	13.8	14.0	14.0	13.7	13.9	13.8
1949	--	15.4	15.0	14.8	15.4	15.1	15.9
1950	--	17.6	16.8	17.0	18.3	17.6	18.0
1951	--	15.1	15.0	14.9	15.5	15.2	15.0
1952	--	14.8	14.5	14.2	15.2	14.7	15.1
1953	--	18.9	17.6	17.5	19.6	18.6	19.7
1954	--	18.6	17.1	17.2	18.7	18.0	19.5
1955	--	20.5	18.4	18.6	19.8	19.2	22.0
1956	--	22.2	20.0	20.0	22.1	21.3	23.6
1957	--	22.1	20.0	20.0	22.4	21.5	23.1
1958	--	21.7	20.1	20.1	22.2	21.4	22.5
1959	--	22.6	20.7	20.9	22.7	22.1	23.9
1960	--	24.4	21.8	22.4	24.6	23.8	25.6
1961	--	24.2	22.5	22.4	24.4	23.7	25.2
1962	--	24.1	19.3	22.8	24.8	24.0	25.1
1963	--	25.0	14.6	24.2	26.1	25.4	26.4
1964	--	25.5	n.a.	24.2	26.2	25.4	27.3
1965	--	25.8	n.a.	24.8	26.7	26.0	27.8

Notes to Table 5

Source: Column 1 -- Duncan McC. Holthausen, *The Volume of Consumer Instalment Credit, 1929–38,* NBER, 1940, p. 46; Columns 2–7 -- Federal Reserve *Supplement to Banking and Monetary Statistics,* "Section 16 (new), Consumer Credit"; *Federal Reserve Bulletin,* May 1966; Federal Reserve Releases G.18 and G.20; computed as follows:

$$1929\text{–}39: \frac{\text{Average outstandings at end of preceding and current year X 2}}{\text{Repayments during year} \div 12} - 1.$$

$$1940\text{–}65: \text{Four-quarter average of } \frac{\text{Average outstandings at end of preceding and current quarter X 2}}{\text{Repayments during quarter} \div 3} - 1.$$

[a]These estimates are subject to a downward bias when new loan extensions decline sharply, reducing outstandings relative to repayments, and to an upward bias when extensions rise sharply. Also, since the repayment figures include refinancing, the calculated durations are necessarily shorter than the average maturities of the original obligations. The figures for certain years in the period 1946–52 are importantly affected by Regulation W. Cf. note 6.

[b]Information on repayments of auto loans held by dealers is not published separately. The Federal Reserve estimate is based on the assumption that the monthly collection ratio is the same as that for direct auto loans held by commercial banks. While this assumption was valid several years ago there is no recent information on this point; hence the computed durations for the most recent period are of uncertain validity and are necessarily nearly identical with those for direct bank loans.

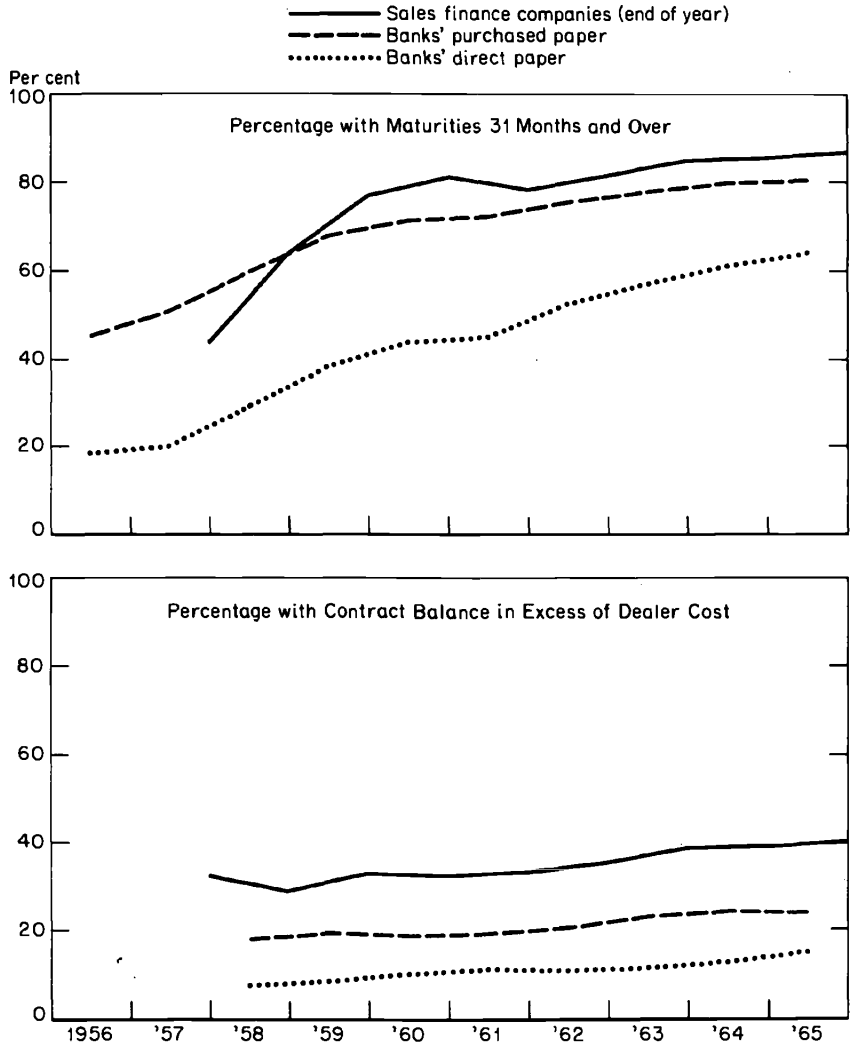
n.a. = not available.

$45–$50. In the prewar period the amounts were roughly half these levels.

Finally, it is important to bear in mind that the trend toward easier terms since the 1920's which has just been outlined does not necessarily mean that credit quality has declined proportionately. Other factors that affect credit quality or risk must be taken into consideration. The higher level and greater stability of incomes, the broader distribution of liquid assets, the longer life of the average car, the greater necessity of owning an automobile for transportation to work in our expanding suburban areas, and many other factors need to be considered before one reaches broad conclusions based on the simple association of loan

CHART 4

Terms on New-Car Contracts: Sales Finance Companies and Commercial Banks, 1956–65



SOURCE: Tables 2, 3, 4, 6.

TABLE 6

Percentage of Automobile Loans With Contract Balance in Excess of Dealer Cost, Commercial Banks, 1956–65

	New Cars			Used Cars[a]		
	All Loans	Purchased Paper	Direct Loans	All Loans	Purchased Paper	Direct Loans
1956	12.9	--	--	24.1	--	--
1957	12.4	--	--	24.0	--	--
1958	14.5	17.5	7.1	26.4	33.5	12.7
1959	16.2	19.2	8.0	30.0	36.9	14.2
1960	16.3	18.6	9.9	32.4	38.0	19.0
1961	16.8	18.7	10.9	35.9	40.0	26.0
1962	17.7	20.3	10.5	37.9	45.9	20.2
1963	19.9	22.6	11.0	40.3	47.3	23.5
1964	12.2	23.8	12.2	39.5	45.2	24.9
1965	21.6	23.6	14.5	38.3	43.6	24.2

Source: NBER estimates based on unpublished data for a sample of commercial banks from the Board of Governors of the Federal Reserve System. Percentages are averages of twelve monthly figures (except 1956, which is an average of the last 3 months of the year).

[a]Percentage with contract balance in excess of wholesale value.

terms with credit quality. Among these factors, consideration of borrower characteristics, to which attention is directed in the next section, is of critical importance.

BORROWER CHARACTERISTICS

As just noted, loan quality viewed prospectively at the time loans are made requires consideration not alone of the terms on which loans are extended but also of those characteristics of the borrowers which pertain to their ability and willingness to repay. The degree of risk which attaches to loans with identical down payment and maturity requirements can, of course, vary radically depending on the borrowers to whom the loans are extended. Improvements in the level and stability of borrowers' incomes, for example, can lead to better collection ex-

perience. Such changes in the characteristics of borrowers may occur because of shifts in the willingness of lenders to grant credit to different segments of the population, because of changes in the desire of different groups to borrow, and, lastly, because of changes that occur in the characteristics of the population itself.

It is much more difficult to summarize changes in borrower characteristics than in loan terms. First, the relevant characteristics are by no means as clearly defined or as commonly agreed upon as are loan terms. In the second place, few financial institutions keep systematic statistical records even of the more obvious characteristics of their borrowers, such as income and occupational status, despite the value such records would have not only in analyzing risk but also in defining the market. It is, furthermore, difficult to trace changes in borrower characteristics over a long period of time, because most of the available information is to be found in the Survey of Consumer Finances, which began in the postwar period. Moreover, the questions asked by the survey have varied somewhat from year to year, the method of presenting the results has also varied, and the definition of indebtedness, crucial for our purposes, has varied considerably as well. Nonetheless, it is possible through the survey data, and with a few other sources of information, to arrive at certain broad conclusions concerning changes in borrower characteristics.

In her study of the pattern of consumer debt for 1935–36, Blanche Bernstein found that 26 per cent of the families with instalment debt had incomes under $1,000 a year. Forty-eight per cent of the instalment debt holders had incomes between $1,000 and $2,000, and only 27 per cent had incomes over $2,000. Table 7 compares Bernstein's results with the distribution of instalment debt holders by income in 1941, 1956, and 1962. A rough adjustment for the change in the cost of living has been incorporated by making use of the fact that prices paid by consumers rose only moderately between 1935–36 and 1941 but approximately doubled by 1956 and 1962. Thus Table 7 suggests that, even bearing in mind the great changes in price levels since the mid-1930's, the distribution of debt has shifted to a marked degree toward higher real-income groups, largely in accordance with the rising real incomes of the entire population. The use of instalment debt has increased sharply in all income groups since the mid-thirties, but more so in the middle and upper income range than in the lower groups. In all

TABLE 7

Instalment Debt Holders by Income Group, 1935–36, 1941, 1956, and 1962

Income in 1935–36 or 1941 Dollars	Income in 1956 or 1962 Dollars	1935–36	1941	1956	1962	Change 1935–36 to 1956	Change 1956 to 1962
		All Households, Percentage Distribution					
Under 1,000	Under 2,000	35	23	21	15	-14	-6
1,000-1,999	2,000-3,999	40	31	24	21	-16	-3
2,000-4,999	4,000-9,999	21	41	47	49	+26	+2
5,000 and over	10,000 and over	3	5	8	15	+5	+7
Total		100	100	100	100		
		All Households, Percentage with Instalment Debt					
Under 1,000	Under 2,000	17	15	24	22	+7	-2
1,000-1,999	2,000-3,999	28	32	45	56	+17	+1
2,000-4,999	4,000-9,999	28	37	60		+32	
5,000 and over	10,000 and over	15	24	35	46	+20	+11
Average		24	30	47	50	+23	+3
		Instalment Debt Holders, Percentage Distribution					
Under 1,000	Under 2,000	26	12	11	7	-15	-4
1,000-1,999	2,000-3,999	48	34	23	80	-25	-3
2,000-4,999	4,000-9,999	25	51	60		+35	
5,000 and over	10,000 and over	2	4	6	14	+4	+8
Total		100	100	100	100		

Notes to Table 7

Source: 1935–36, Blanche Bernstein, *The Pattern of Consumer Debt, 1935–36: A Statistical Analysis*, NBER, 1940, Table A-1, p. 124. Data refer to families having a net change in instalment debt during the year.

1941, Reavis Cox, "Instalment Buying by City Consumers in 1941," BLS *Bulletin 773*, p. 3. Data refer to consumer units having a net increase in their outstanding instalment-purchase obligations during the year.

1956, "Survey of Consumer Finances," *Federal Reserve Bulletin*, August 1957, pp. 892, 896, 900. Data refer to spending units; income data pertain to 1956, instalment indebtedness to date of interview, early 1957.

1962, *1963 Survey of Consumer Finances*, Monograph No. 34, Survey Research Center, Institute for Social Research, The University of Michigan, pp. 20, 65, and 66. Data refer to spending units; income data pertain to 1962, instalment indebtedness to date of interview, early 1963.

Since the consumer price index was 48 in 1935–36, 51 in 1941, and 95 in 1956 and 105 in 1962 (1957–59:100), doubling the 1935–36 and the 1941 incomes makes them roughly comparable in real terms with 1956 and 1962.

Note: Detail may not add to total because of rounding.

years, however, the majority of instalment debt holders have been in the middle income groups.

One can, of course, ignore the position of borrowers at either end of the income scale and consider the median incomes of spending units with debt and without it. Such figures for a number of years are shown in Table 8. It is seen that in every year surveyed the median income of debtors has been higher than the median income of the total spending population, and instalment debt holders have higher median incomes than all personal debt holders. Instalment debt is not typically associated with very low income. Moreover, movements in median incomes for debtors and nondebtors have not been sharply divergent. Between 1948 and 1963 median incomes of spending units with instalment debt and of all spending units both more than doubled.

We are interested in changes in income primarily because they are relevant to consideration of the burden that instalment debt represents for the borrower and his ability to repay it. According to Table 1, the ratio of instalment loan repayments to total personal income has risen sharply since the end of the Second World War. However, it is the

TABLE 8

Median Incomes: Spending Units with Debt and All Spending Units, 1935–36, 1941, and 1948–63

	Spending Units			Ratio	
	With Personal Debt[a] (1)	With Instalment Debt (2)	All (3)	Col. 1 to Col. 3 (4)	Col. 2 to Col. 3 (5)
1935–36	--	$1,461	$1,286	--	1.14
1941	--	2,126	1,863	--	1.13
1948	$3,305	3,216	2,840	1.16	1.13
1949	3,155	--	2,700	1.17	--
1950	3,402	--	3,000	1.13	--
1951	3,547	--	3,200	1.11	--
1952	3,666	--	3,420	1.07	--
1953	4,152	4,310	3,780	1.10	1.14
1954	4,059	4,125	3,700	1.10	1.11
1955	4,257	4,442	3,960	1.08	1.12
1956	4,712	4,936	4,250	1.11	1.16
1957	4,868	n.a.	4,350	1.12	n.a.
1958	4,891	5,082	4,400	1.11	1.16
1959	--	5,498	4,860	--	1.13
1960	--	6,008	5,170	--	1.16
1961	--	5,790	5,000	--	1.16
1962	--	5,996	5,300	--	1.13
1963	--	6,640[b]	5,900[b]	--	1.13

Source: Computed from data from Bernstein, *Pattern of Consumer Debt,* for 1935–36; Cox, "Instalment Buying," for 1941; "Survey of Consumer Finances," *Federal Reserve Bulletins* for 1948–58; and Monographs 24, 32, 34, 39 of *Survey of Consumer Finances,* Survey Research Center, University of Michigan, for 1959–63.

[a]Personal debt excludes mortgage debt in all years except 1948 and 1949; in 1950, figure may include some cases with only business debt or with only charge accounts. In other years those with business debt or charge accounts only are excluded. In 1951, all owners of unincorporated businesses and farm operators are excluded from calculations whether or not they had consumer debt; in later years they are included.

[b]In 1963 the Survey was conducted on a family-unit basis.

TABLE 9

Two Estimates of the Ratio of Instalment Debt Repayments to Income of Instalment Debtors, 1935–63

	Total Personal Income (bil. $) (1)	Per Cent of Spending Units with Instalment Debt (2)	Ratio of Median Incomes, Instalment Debtors to All Spending Units (3)	Estimated Personal Income of Instalment Debtors (bil. $) (4)	Repayments on Instalment Debt (bil. $) (5)	Repayments as Percentage of Personal Income of Instalment Debtors (6)	Median Percentage, Repayments to Preceding Year's Disposable Income of Debtors (7)
1935–36	64.5	24	1.14	17.6	4.0	23	n.a.
1941	96.0	30	1.13	32.6	8.9	27	n.a.
1952	272.5	38	1.14[e]	118.0	25.4	22	n.a.
1953	288.2	40[e]	1.14	131.4	28.0	21	n.a.
1954	290.1	43	1.11	138.5	30.5	22	14
1955	310.9	44	1.12	153.2	33.6	22	14
1956	333.0	45	1.16	173.8	37.1	21	14
1957	351.1	47	1.16[e]	191.4	39.9	21	15
1958	361.2	48	1.16	201.1	40.3	20	13
1959	383.5	48	1.13	208.0	42.6	20	14
1960	401.0	48	1.16	223.3	46.0	21	13
1961	416.8	47	1.16	227.2	47.7	21	12
1962	442.6	46	1.13	230.1	50.2	22	13
1963	465.5	50	1.13	263.0	55.2	21	13

Notes to Table 9

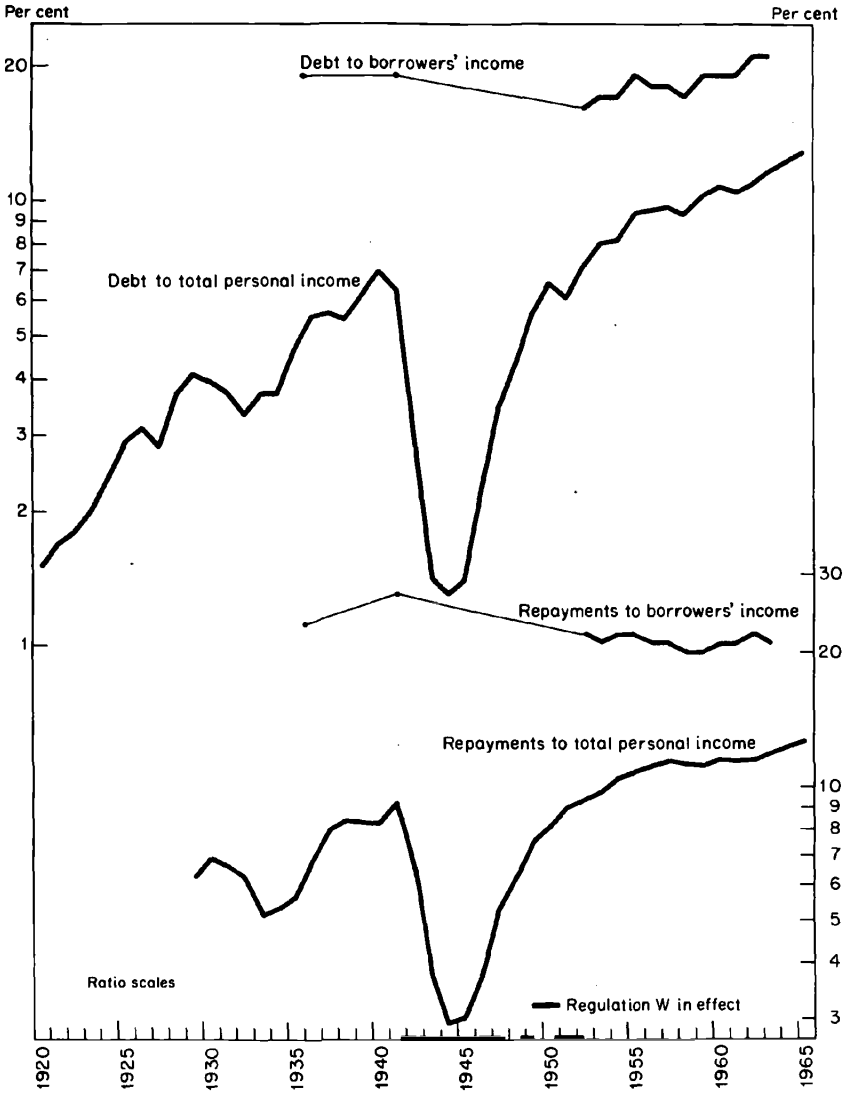
e = estimated by interpolation or extrapolation.
n.a. = not available.
Source: Columns 1 and 5 – Table 1, above.
Columns 2 and 7 – *1963 Survey of Consumer Finances*, pp. 65 and 68; and earlier Surveys. Figures in Column 7 for 1954, 1956, 1957, and 1959 computed by NBER from frequency distributions published in earlier surveys.
Column 3 – Table 8, above.
Column 4 – Column 1 x Column 2 x Column 3 ÷ 100.
Column 6 – Column 5 ÷ Column 1 x 100.

ratio of repayments to borrowers' income rather than to all income that is relevant for consideration of the ability of borrowers to repay their loans. In view of the facts demonstrated in Tables 7 and 8 that the average income of borrowers has increased at least as much as the average income of the whole population, and that the number of borrowers has increased relative to the population, it seems likely that the aggregate income of borrowers has risen faster than total personal income. Hence the ratio of debt repayments to *borrowers'* income, while much higher than the ratio to total income, has not risen as fast as that ratio has. Indeed, some rough calculations, together with direct survey evidence, suggest that the average ratio of instalment debt repayments to borrowers' income may not have risen at all (Table 9 and Chart 5). The calculations suggest that instalment debt repayments have absorbed about 21 per cent of the aggregate income of borrowers each year since 1952. Estimates for 1935–36 and 1941 are somewhat higher. The median ratio of instalment debt repayments to disposable income of borrowers as reported by the Survey of Consumer Finances is a much lower figure, around 13 per cent, but it too has remained roughly constant over the years for which it has been reported (since 1955).[8] One of the factors that has prevented an increase in the repayment-income ratio is, of course, the extension of

[8] One of the principal reasons for the higher level of our calculated ratio compared with the median ratio reported by the survey is that our figures on repayments include repayment of debt that is refinanced, whereas the survey ratios do not include such "repayments." Other factors seem to work in the opposite direction. Since the calculated ratio is, in effect, an average of repayment to income ratios weighted by income, and since repayment ratios are probably higher in the heavily populated low income groups, one might expect the median ratio to be higher than the weighted average. Furthermore, our calculation uses,

CHART 5

Ratios of Consumer Instalment Credit to Income, 1920–65



SOURCE: Worksheets for Tables 1 and 9.

maturities. The ratio of instalment debt to borrowers' income has undoubtedly increased, though only moderately. Between 1953 and 1963, the ratio of instalment debt at the end of the year to instalment debtors' income as estimated in Table 9 rose from 17.5 per cent to 20.6 per cent. In short, the obligation assumed by borrowers has increased relative to their income, although the immediate burden of that obligation has not.

Data on the occupational characteristics of the borrowing population are available for even fewer years than are the income characteristics. Comparisons reflecting changes over a fairly long period are possible only by utilizing the Bernstein data for the mid-1930's and the Survey of Consumer Finances data for the 1950's. Bernstein classified nonfarm occupations into two groups, wage-earning and other. The latter includes not only the professional and managerial groups but also clerical and sales—occupations now usually included with wage earners. In Table 10 the distribution of instalment debt borrowers in the farm and two nonfarm classes is shown for 1935–36 and for 1956, together with more detail for 1956 alone.

The incidence of debt holding has increased substantially in all occupational groups during this twenty-year period, though relatively more for wage earners and least for farmers (cols. 3 and 4). This shift, plus the dramatic reduction in farm households (cols. 1 and 2), has meant that borrowers in the wage-earner group have increased relative to those in other occupations, while farm borrowers have decreased.[9] Since wage earners have generally had a poorer than average record in repaying consumer debt, and the farm group better than average (see Chapter 4), this shift in itself would contribute to a deterioration in credit quality. However, an offsetting factor, no doubt, has been the substantial relative increase in wage-earner income during this period.

not the ratio of mean incomes of debtors to those of the whole population, but the ratio of their median incomes. One might expect the ratio of mean incomes to be lower than the ratio of medians, but this would reduce the estimate of borrowers' income and hence raise the calculated ratio of repayments to borrowers' income. Finally, our calculated ratio is to total personal income, whereas the survey ratio is to disposable income; correction for this difference would make the discrepancy still larger. Estimates of the median ratio for borrowers on new-auto contracts, of 17 per cent for 1953 and 19 per cent for 1957, are given in Table 35, below.

[9] For some evidence that this trend has continued since 1956, cf. Table A-5.

TABLE 10

Instalment Debt Holders by Occupation Group, 1935–36 and 1956

Occupation Of Family Head	All Households				Instalment Debt Holders, Percentage Distribution	
	Percentage Distribution		Percentage with Instalment Debt			
	1935-36 (1)	1956 (2)	1935-36 (3)	1956 (4)	1935-36 (5)	1956 (6)
Wage earners	40	46	30	60	49	57
Skilled and semiskilled	--	34	--	62	--	43
Unskilled and service	--	13[a]	--	56[a]	--	14[a]
Other nonfarm occupations	35	47	26	42	39	40
Professional and semiprofessional	--	13	--	47	--	13
Managerial	--	8	--	47	--	7
Clerical and sales	--	15	--	44	--	14
Self-employed	--	11	--	30	--	7
Farmers						
Operators and laborers	25	--	12	--	12	--
Operators	--	6	--	18	--	2
Total employed	100	100	24	49	100	100

Source: Bernstein, *Pattern of Consumer Dept.*, pp. 28, 31, 130, 146, 147; "Survey of Consumer Finances," *Federal Reserve Bulletin*, July 1956, p. 705. The latter source also covers instalment debt holders among those not employed, with the following results (1956):

	All Households		Instalment debt holders, percentage distribution
	Percentage distribution	Percentage with instalment debt	
Employed	80	49	88
Retired	9	13	3
Unemployed, students, housewives, and protective service workers	11	40	10
Total	100	45	100

[a]Includes farm laborers.

Note: Detail may not add to total because of rounding.

One borrower characteristic which is of considerable importance in connection with ability to repay debt is the holding of liquid assets. There are good reasons to suppose, and some empirical evidence as well (presented in Chapter 4), that the existence of liquid assets reduces the degree of risk attached to consumer credit. Although we have not been able to put together a usable series showing changes in the debt-to-liquid-asset ratio among borrowers, it is possible to examine the change in liquid-asset holdings for the whole population, and to compare it with the change either in total consumer credit or in instalment credit outstanding (Table 11). It appears that, despite the great increase in liquid assets held by nonfarm households generally, their debt has risen faster still. The ratio of debt to assets in 1963 was higher than in any year on record, and was almost as high in 1964. However, since 1957, the increase in the ratio has been relatively small. It is, of course, necessary to bear in mind that the liquid assets shown in the table include all liquid assets held, not simply those held by the users of consumer credit.

A recent picture of borrowers' holdings of liquid assets in relation to their debt is provided by Table 12. For borrowers in the lower income groups, personal debt is typically greater than liquid assets. The percentage of borrowers with debt in excess of their liquid assets declines quite steadily as one moves up the income scale (cols. 7 and 10). The fact that debt is usually at a more conservative level in relation to liquid assets in the case of higher income groups may help to explain why credit experience is generally better in high than in low income groups.

Finally, one might inquire how indebtedness has spread among age groups, since the borrower's age has some bearing on his financial responsibility and economic prospects. Table 13 indicates that the holding of debt within all age groups became more common between 1951 and 1959, but that the frequency of indebtedness increased most in the younger groups. This doubtless reflects the recent trend toward marriage at younger ages and the consequent necessity for establishing households. An offsetting factor has been the shift in the age distribution of the population toward the older, with the net effect that the distribution of debt holders by age was substantially the same in 1959 as in 1951. Recently published data for 1962 show that the frequency of debt holding has remained high at the younger ages. In

TABLE 11

Consumer Credit and Liquid-Asset Holdings by Nonfarm Households, Selected Years, 1929–64

End of Year	Liquid Assets Held by		Consumer Credit Outstanding		Debt to Asset Ratios (per cent)			
					Nonfarm Households		Consumer and and Nonprofit Organizations	
	Nonfarm Households	Consumer and Nonprofit Organizations	Total	Instalment Credit	Total	Instalment Debt	Total	Instalment Debt
	(billion dollars)				(3)÷(1)	(4)÷(1)	(3)÷(2)	(4)÷(2)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1929	44.2	--	7.3	3.5	16.5	7.9	--	--
1933	43.9	--	3.9	1.7	8.9	3.9	--	--
1939	53.8	--	7.2	4.5	13.4	8.4	--	--
1945[a]	170.8	--	5.7	2.5	3.3	1.5	--	--
1945[b]	162.4	--			3.5	1.5	--	--
1949	178.6	--	17.4	11.6	9.7	6.5	--	--
1953	206.5	--	31.4	23.0	15.2	11.1	--	--
1955	225.4	--	38.8	28.9	17.2	12.8	--	--
1957	245.9	--	45.0	33.9	18.3	13.8	--	--
1958	260.5	272.1	45.1	33.6	17.3	12.9	16.6	12.3
1959	--	293.0	51.5	39.2	--	--	17.6	13.4
1960	--	302.0	56.0	42.8	--	--	18.5	14.2
1961	--	320.5	57.7	43.5	--	--	18.0	13.6
1962	--	351.0	63.2	48.0	--	--	18.0	13.7
1963	--	369.1	70.5	54.2	--	--	19.1	14.7
1964	--	412.5	78.4	60.5	--	--	19.0	14.7

(continued)

Notes to Table 11

Source: Column 1 — *Studies in the National Balance Sheet of the United States,* Volume II, Raymond W. Goldsmith, Robert E. Lipsey, and Morris Mendelson, Princeton Press for NBER, 1963, Table Ia, pp. 78–85 and Table III-1, pp. 118–119. Liquid assets include currency and demand deposits, other bank deposits and shares, and U.S. government securities.

Column 2 — *Flow of Funds Accounts, 1945–62, 1963 Supplement,* Board of Governors of the Federal Reserve System, Table 8, p. 4, and *Federal Reserve Bulletin,* November 1965, p. 1622. Liquid assets include demand deposits and currency, savings accounts, and U.S. government securities. The differences between column (1) and column (2) represent principally bank deposits and shares and savings bonds held by farm households and revisions in the Federal Reserve data.

Columns 3 and 4 — Table 1.

[a]Comparable with preceding years.

[b]Comparable with following years.

that year 80 per cent in the group under 35 and 20 per cent in the group 65 and over had personal debt.[10]

Data on other borrower characteristics are too fragmentary, or too remotely related to credit quality, to justify detailed consideration. What evidence there is concerning these characteristics, as well as more detailed materials on the characteristics presently considered, are presented in Table A-5.

It is apparent from this brief review of the admittedly scanty evidence on the changing characteristics of borrowers that there has been a substantial increase in recent decades in the incidence of both instalment and noninstalment debt among all income, occupation, and age groups. The over-all increase is indeed more striking than the redistribution among income, age, or occupation groups. Whether the incidence has shifted in such a way as to reduce repayment difficulties substantially is difficult to say. As between the prewar period and the late 1950's, the shift toward higher income groups, the continued increase in the use of credit in the better paid and more stable occupations, and the greater stability in aggregate income and employment have no doubt tended to reduce risk, thereby compensating at least in part for the easing of terms. During the postwar period alone, how-

[10] Dorothy S. Projector and Gertrude S. Weiss, *Survey of Financial Characteristics of Consumers,* Board of Governors of the Federal Reserve System, August 1966, p. 126.

TABLE 12

Distribution of Spending Units by Income And by Relation of Personal Debt to Liquid-Asset Holdings, 1959 and 1962

Income Before Taxes[a] (dollars)	1959, All Spending Units: Percentage with				1959, Spending Units with Debt: Percentage with			1962, Consumer Units with Debt: Percentage with		
	No Personal Debt (1)	Personal Debt Less than Liquid Assets (2)	Personal Debt Equal to or Greater than Liquid Assets (3)	Total (4)	Personal Debt Less than Liquid Assets (5)	Personal Debt Equal to or Greater than Liquid Assets (6)	Total (7)	Personal Debt Less than Liquid Assets (8)	Personal Debt Equal to or Greater than Liquid Assets (9)	Total (10)
Under 1,000	58	5	37	100	12	88	100			
1,000–1,999	57	5	38	100	12	88	100	9	91	100
2,000–2,999	44	15	41	100	27	73	100			
3,000–3,999	36	17	47	100	27	73	100			
4,000–4,999	32	21	47	100	31	69	100	21	79	100
5,000–5,999	30	25	45	100	36	64	100			
6,000–7,499	29	27	44	100	38	62	100	24	76	100
7,500–9,999	31	31	38	100	45	55	100	29	71	100
10,000 and over	49	26	25	100	51	49	100	40	60	100
All	40	20	40	100	33	67	100	24	76	100

Source: "Survey of Consumer Finances," *Federal Reserve Bulletin*, July 1959, p. 721, Supplementary Table 19; *Survey of Financial Characteristics of Consumers* by Dorothy S. Projector and Gertrude S. Weiss, Board of Governors of the Federal Reserve System, August 1966, p. 17.

[a]1958 income, for distribution by debt–liquid assets in early 1959; 1962 income, for distribution by debt–liquid assets on December 31, 1962.

TABLE 13

Consumer Indebtedness by Age of Borrower, 1951 and 1959

Age of Head of Spending Unit (years)	All Households								
	Percentage Distribution			Percentage with Personal Debt			Personal Debt Holders, Percentage Distribution		
	1951	1959	Change, 1951–59	1951	1959	Change, 1951–59	1951	1959	Change, 1951–59
18–24	8	8	0	46	70	+24	8	10	+2
25–34	21	20	-1	62	80	+18	27	26	-1
35–44	23	23	0	62	71	+9	30	27	-3
45–54	19	18	-1	47	64	+17	19	20	+1
55–64	16	16	0	36	41	+5	12	11	-1
65 and over	13	15	+2	19	26	+7	5	7	+2
Total or average	100	100		48	60	+12	100	100	

Source: "Survey of Consumer Finances," *Federal Reserve Bulletin*, December 1951, p. 1522; July 1959, pp. 712, 721. In 1951 personal debt includes charge accounts, instalment debt, and all other debt not secured by real estate. In 1959 it includes all short- and intermediate-term consumer debt other than charge accounts and excludes mortgage and business debt.

Note: Detail may not add to total because of rounding.

ever, the appreciable rise in the debt-to-income and debt-to-liquid-asset ratios suggests that the net effect of the changes in borrower characteristics has been to heighten rather than to lessen the risk attendant upon easier loan terms.

COLLECTION EXPERIENCE

It is clear that there has been considerable easing of loan terms during the past thirty years, especially on automobile credit. It is also clear that there has been a great increase in the use of instalment credit by all classes of consumers, though whether this use has been concentrated among particular groups of borrowers in such a way as to increase lending risks is less easy to say. This matter will require further consideration of the relation among loan terms, borrower characteristics, and prospective risk. To begin with, however, some direct evidence on lending risks may be obtained by examining briefly the level and trend in collection experience on instalment loans.

The major indicators of collection experience are delinquency rates, repossession rates, and loss rates.[11] The initial indication of collection difficulties is shown by the delinquency rate. The American Bankers Association has collected such information on automobile loans monthly since the 1940's and bimonthly since 1964; annual averages of these rates both for direct bank loans and for loans which banks acquire from automobile dealers are shown in Table 14. The trend of these rates has been downward since 1947, though the decline seems to have halted in 1957 or 1959. Indirect bank loans throughout show poorer delinquency experience than direct loans. In each business recession, i.e., in 1949, 1954, 1958, and 1961, delinquencies have risen, then declined when prosperity returned. During the period as a whole, there has been no dramatic rise in delinquency rates comparable with the easing in loan terms.

The ultimate measure of collection experience is the loss rate. The available information here pertains to sales finance companies, and it extends considerably farther back than the bank delinquency data (Table 15). The data from the study by Winchester summarized in the first column suggest a long-run diminution in loss rates for the period

[11] For further discussion of these and other measures of collection difficulty, cf. Chapter 3 and Appendix C. Data on repossession rates covering a long period are not available; some figures for 1948–56 are given in Table 47, below.

TABLE 14

Delinquency Experience on Automobile Loans, Commercial Banks, 1948–65

	Loans Delinquent 30 Days and Over as Percentage of Loans Outstanding at End of Month (Annual Average)	
	Direct	Indirect
1948	1.64	2.05
1949	1.75	2.24
1950	1.42	1.96
1951	1.23	1.73
1952	.93	1.47
1953	.98	1.65
1954	1.05	1.71
1955	.82	1.41
1956	.76	1.36
1957	.75	1.35
1958	.84	1.53
1959	.78	1.31
1960	.94	1.46
1961	1.05	1.49
1962	.95	1.33
1963	.94	1.42
1964	.94	1.50
1965	1.14	1.57

Source: "Delinquency Rates on Bank Instalment Loans," bi-monthly reports compiled by Instalment Credit Committee, American Bankers Association.

Data represent unweighted averages of delinquency rates reported separately in nine regions from 1948-54, and in ten regions from 1955-64. 1965 is extrapolated from 1964-65 change in weighted average (the present form of the published data).

TABLE 15

Net Losses on Retail Paper, Sales Finance Companies, 1929–65

Year	Ratio of Net Loss to: Outstanding Automobile Paper (5 companies) (1)	Ratio of Net Loss to: All Retail Paper Liquidated (19 companies) (2)
1929	1.15	--
1930	2.08	--
1931	1.69	--
1932	1.63	--
1933	.60	--
1934	.68	--
1935	.57	.75
1936	.44	.92
1937	.60	.89
1938	.97	1.70
1939	.48	.82
1940	.50	.92
1941	.50	.68
1942	1.07	--
1943	(1.51)[a]	--
1944	(.07)[a]	--
1945	.33	--
1946	.20	--
1947	.28	.48
1948	.30	.66
1949	.50	1.57
1950	.21	.58
1951	.31	.44
1952	--	.76
1953	--	1.40
1954	--	1.18
1955	--	.64
1956	--	.72
1957	--	.74
1958	--	1.35
1959	--	1.07
1960	--	1.71
1961	--	1.73
1962	--	1.28
1963	--	1.08
1964	--	1.21
1965	--	1.22

Notes to Table 15

Source: Column 1 – James P. Winchester, *Consumer Installment Loan Losses and Valuation Reserves* (Bankers Publishing Company, Cambridge, Mass., 1955), Table 10, p. 33.

Column 2 – First National Bank of Chicago, *Ratios of the Instalment Sales Finance and Consumer Finance Companies,* February 1961, pp. 20–25, and current releases.

[a]Recoveries from loans previously charged off exceeded the gross write-offs.

1929–50, although the rates for 1930–32 were obviously raised during the Great Depression. The estimates compiled by the First National Bank of Chicago, which begin somewhat later and continue to the present, rise in each business recession since 1938. Unlike the bank delinquency rates, the sales finance company loss rates do not show a downward trend. Indeed, loss rates have risen somewhat during the postwar period.

Thus it emerges that a revolution in the terms on which instalment credit is extended and in the type of borrower to whom it is extended, as well as a vast increase in the sheer volume of lending, have occurred without any striking increase in delinquency or loss rates. Of course, some dangers may lie ahead, either on a national scale or in particular areas or markets. For this reason, an examination of the relationship between evidence of potential risk and actual experience, and how it is affected by economic conditions generally, is warranted.