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Volume Title: The Cyclical Timing of Consumer Credit, 1920-67

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Volume Publisher: UMI

Volume ISBN: 0-87014-225-9

Volume URL: <http://www.nber.org/books/klei71-1>

Publication Date: 1971

Chapter Title: Total Consumer Credit

Chapter Author: Philip A. Klein

Chapter URL: <http://www.nber.org/chapters/c3419>

Chapter pages in book: (p. 4 - 13)

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Total Consumer Credit

CLASSIFICATION AND DEFINITION OF COMPONENTS

AT THIS POINT we will indicate briefly what is included in the major components of consumer credit.¹ The term "consumer credit" as currently used by the Federal Reserve ". . . includes short- and intermediate-term credit that is extended through regular business channels to finance the purchase of commodities and services for personal consumption, or to refinance debts incurred for such purposes."² As noted earlier, consumer credit may be broadly divided into instalment and noninstalment credit. The latter measures the ". . . obligations of consumers scheduled to be repaid in a single payment."³ It includes single payment loans held principally by commercial banks; charge accounts held by department stores, mail-order houses, and other retail outlets (e.g., furniture stores), and general credit-card business; and service credit, which includes credit for medical care, public utilities, education and recreation, funeral and legal expenses, etc. Many kinds of noninstalment credit have become important relatively recently.

Instalment credit includes all consumer credit scheduled to be repaid in two or more separate payments. There are four types: automobile paper, by far the largest single sector; loans for other consumer goods; home repair and modernization loans; and personal loans.

¹ For a full description of consumer credit and its components as usually defined, see *Supplement to Banking and Monetary Statistics*, Section 16, (New) Consumer Credit, Federal Reserve System, September 1965.

² *Ibid.*, p. 2.

³ *Ibid.*, p. 24.

GROWTH OF CONSUMER CREDIT

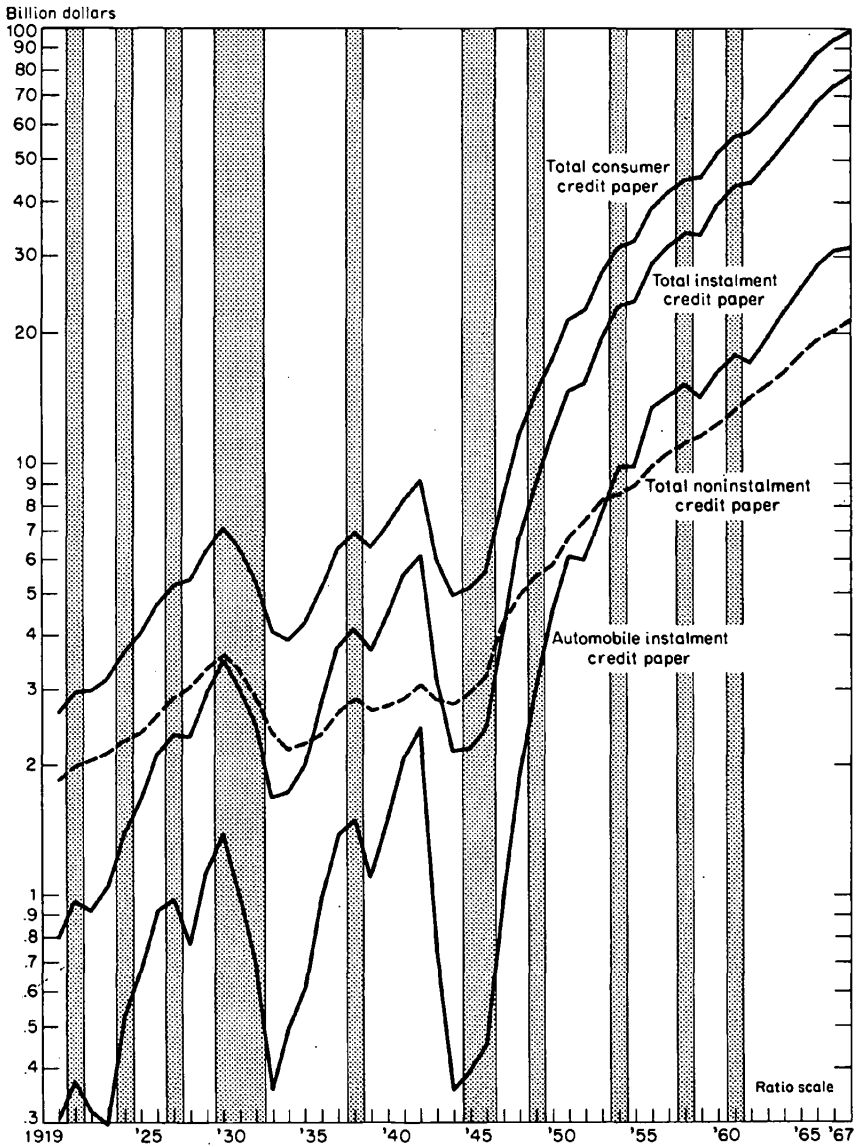
We shall begin by observing the over-all growth and cyclical sensitivity of consumer credit and its component parts. As is apparent in Chart 1, consumer credit growth has been concentrated largely in three periods. The use of credit for consumer durables was first introduced on a large scale in the twenties, with a peak in 1929. The second period corresponded to the period of recovery from the Great Depression and reached a peak in 1941, at the onset of U.S. participation in World War II. Both of these periods of growth were small, however, compared with the third, which began at the end of World War II and has continued ever since. Consumer credit outstanding has more than quadrupled since 1950, increasing from about \$20 billion to almost \$100 billion. The absolute growth during this third period as well as the growth relative to the earlier ones has been very substantial. Instalment credit (including automobile credit) and noninstalment credit have both shared in this growth, generally conforming to the pattern just discussed. Noninstalment credit differed to the extent that it showed only modest expansion during the second period.

While the over-all trends are thus similar, some changes in relative importance are worth noting. In the prewar period the importance of instalment relative to noninstalment paper in total consumer credit tended to shift back and forth. Since World War II instalment credit has been consistently larger, and has grown consistently faster, than noninstalment credit; automobile paper alone, since the early 1950's, has exceeded total noninstalment credit in absolute size. In the past few years the gap between instalment and noninstalment credit has appeared to be narrowing somewhat, probably as a result of the rapid growth in credit forms like revolving charge accounts, etc.

Chart 1 makes it clear that the credit industry is quite sensitive cyclically. Noninstalment credit has been the least unstable in this regard.⁴ Indeed, its only cyclical manifestation in the postwar period has been decelerated growth in a few recessions. Automobile credit, on the other hand, seems to be the most volatile, having reacted to every business cycle during the period covered except the postwar readjustment cycle and the 1948-49 recession. Even in these two cycles none of the series declined. These relationships will be explored in detail subsequently.

⁴ The growth of service credit as well as the increased importance of credit cards may render this sector more sensitive to the cycle in the future. The evidence is still incomplete.

CHART 1
Consumer Credit and Its Major Components, 1919-67



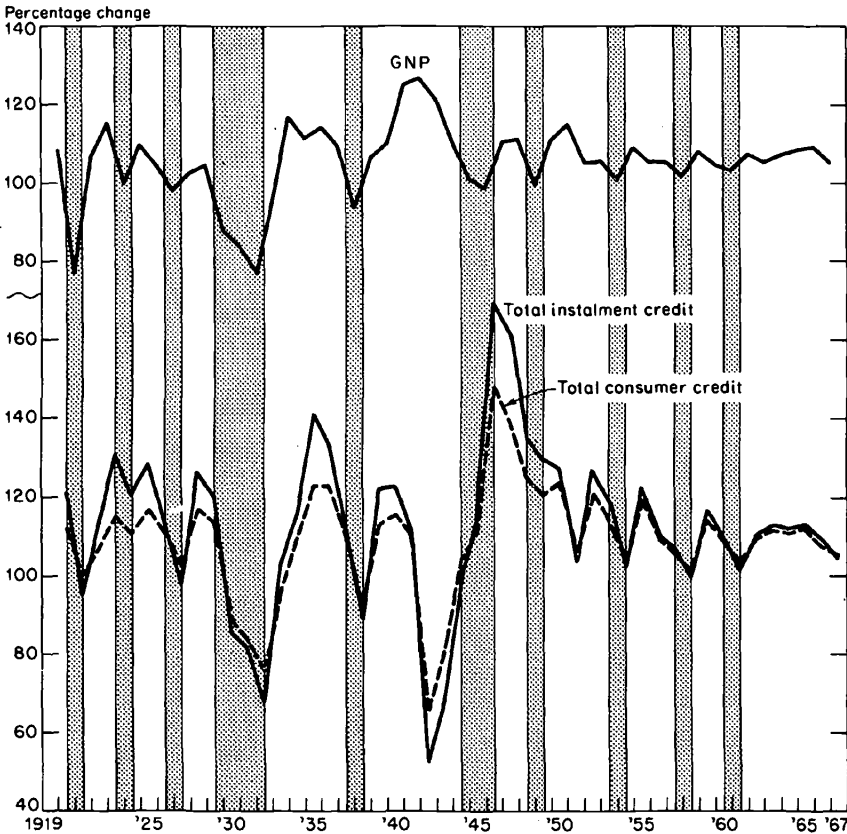
NOTE: Shaded areas represent business cycle contractions; white areas, expansions.

SOURCE: 1919-62—Supplement to *Banking and Monetary Statistics*, Section 16, p. 33; 1963-67—*Federal Reserve Bulletin*, February 1968, p. A. 48.

Consumer Credit and GNP

It is well known that in series with rising trends, yearly variations are likely to become larger in absolute terms. Consumer credit, its instalment credit component, and gross national product have all grown greatly in the United States during the period under review. In investi-

CHART 2
Total Consumer Credit, Total Instalment Credit, and GNP, as a Percentage of the Previous Year, 1919-67



NOTE: Shaded areas represent business cycle contractions; white areas, expansions.

SOURCE: GNP—1919-67—Survey of Current Business; Consumer Credit—1919-62—Supplement to Banking and Monetary Statistics; 1963-67—Federal Reserve Bulletin, February 1968.

gating the cyclical impact of the credit series, it is therefore helpful to consider their variability *relative* to the variability in gross national product. Can one say that the per cent variation over the cycle has changed for either of the two credit series compared with the per cent variation that has occurred in GNP?

It seems clear from Chart 2 that apart from the Great Depression and the early forties, the relative variability over the cycle in the credit series has not changed greatly (it is, for example, approximately the same in the prewar and postwar periods). But it is important to note, too, that in general most of the rises in both measures of credit represented larger percentage increases than did the rises in GNP at roughly corresponding periods. (The two credit series usually reach peaks at the same time; the peaks in GNP are not always coincident, but are usually close.) Moreover, these greater percentage increases in the credit series than in GNP during expansions are not matched by larger decreases in credit relative to GNP during contractions, when all three series usually have decreased by comparable percentages.

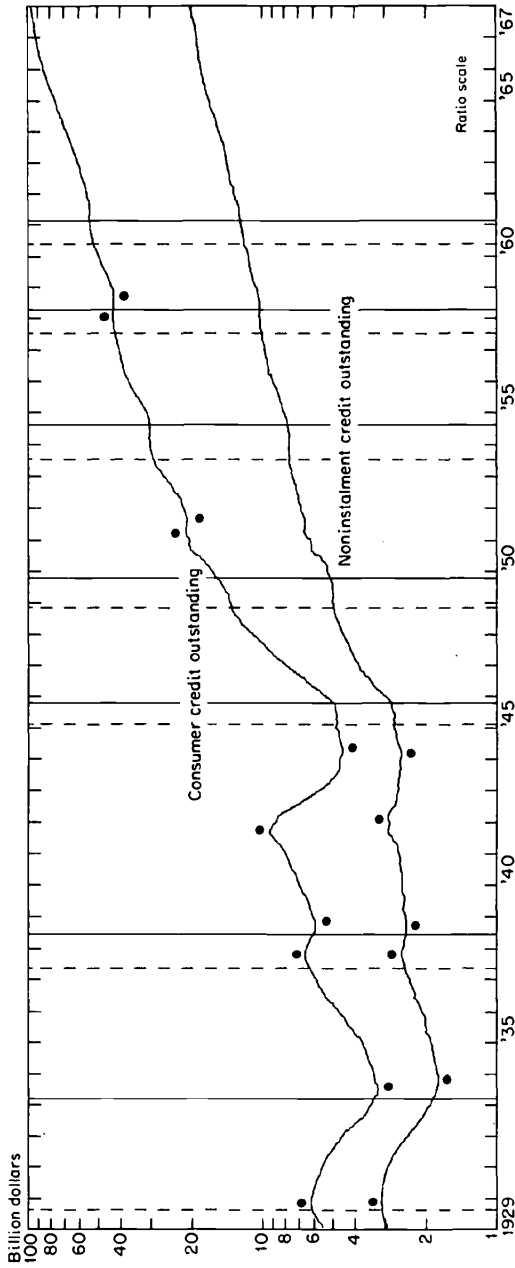
TIMING OF CONSUMER CREDIT DURING BUSINESS CYCLES

An analysis of the timing patterns of consumer credit outstanding suggests why the bulk of our attention must be focused on the instalment credit component. Chart 3 and Table 1 indicate the relevant information. Chart 4 summarizes the results. Clearly it would be preferable to have more data so that our analysis could include more than one postwar and two prewar cycles. While generalizations or "averages" based on such a small sample must be viewed with caution, it is well to remember that we are able to examine the record of the recent past during a period of almost 40 years. This is quite long by the standards of much current analysis, and covers the bulk of the period during which consumer credit was reasonably well established in the U.S. economy.

In Chart 3, total consumer credit outstanding clearly has been sensitive to changes in aggregate economic activity at least as far back as 1929. But the sensitivity has been less pronounced since World War II. In the case of noninstalment credit, some cyclical sensitivity evident in the prewar period has entirely disappeared since the war, except for a slight decrease in the rate of increase during recessions. Chart 3 also suggests that, where comparisons can be made, total consumer

Total Consumer Credit

CHART 3
Total Consumer Credit and Noninstalment Credit Outstanding, 1929-67



NOTE: Vertical broken lines represent business cycle peaks; vertical solid lines, troughs. Dots identify peaks and troughs of specific cycles.

SOURCE: Board of Governors, Federal Reserve System.

credit outstanding and its noninstalment credit component lag behind the business cycle generally. Table 1 indicates the nature of these lags in greater detail.

Table 1 shows that total consumer credit outstanding has lagged behind every business cycle for which comparison is possible, perhaps reflecting the increasing cyclical insensitivity of its noninstalment credit component. Although consumer credit outstanding has reacted to general cyclical movements mainly by tending to flatten out rather than decline during the postwar period, the timing relationships appear to be about the same as before World War II. Compared to business cycles, the lags appear to be consistently longer at cyclical peaks than at troughs.

Table 1 suggests that instalment credit has exhibited average timing at peaks and troughs similar to that for total consumer credit outstanding. Noninstalment credit shows the same lag pattern as total consumer credit outstanding, but cyclical sensitivity has disappeared in the postwar period. Instalment credit has continued to be cyclically sensitive in this period. The table thus indicates that the instalment credit component has been responsible for any cyclical sensitivity in total consumer credit in the years after World War II. The relative cyclical stability of noninstalment credit should not go unnoticed, however, because this sector has, as indicated above, been growing at a relatively rapid rate during recent years.

The timing comparisons themselves are enumerated in Table 2 together with analytical information on the measures of average timing that were just considered. The patterns of instability revealed by the major components of consumer credit are summarized in Chart 4, which indicates in schematic fashion the turning points in total consumer credit outstanding, instalment credit outstanding, automobile credit outstanding, and noninstalment credit outstanding. It is clearly seen that all measures of outstanding credit exhibited greater conformity to the business cycle during the prewar period. They diverged from the business cycle pattern during the war, but moved together presenting an extra cycle in 1938-44. This reflected production restrictions, accompanied by the imposition of Regulation W, and the resulting virtual elimination of new instalment credit during this period.

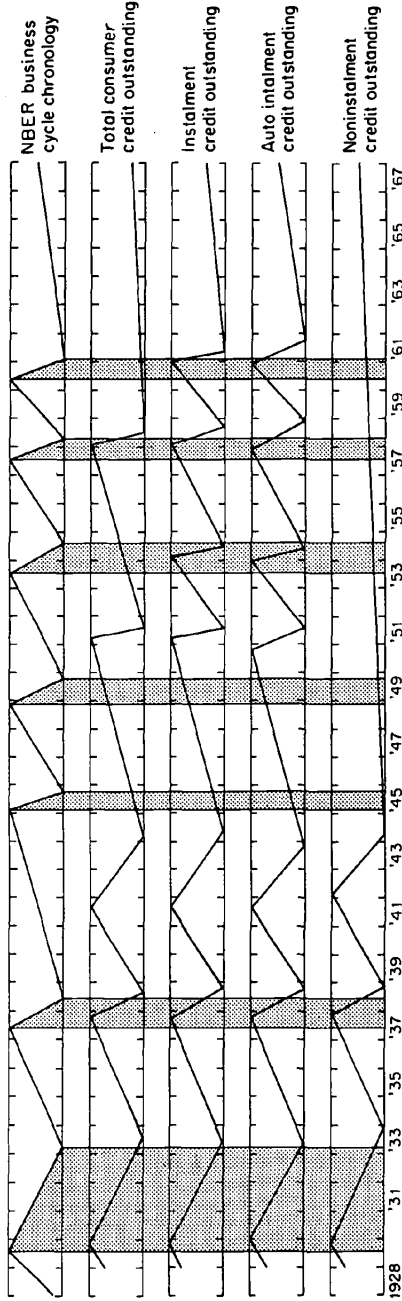
The chart underscores the postwar divergence of instalment credit, which continues to show cyclical sensitivity, from noninstalment credit. The pattern of conformity of instalment credit to the business cycle established during the prewar period is less complete in the postwar

Table 1
 Timing Analysis, Total Consumer, Noninstalment, and Instalment Credit
 Outstanding at Business Cycle Peaks and Troughs,
 1929-67

Bus. Cycle Peak	Peaks				Troughs							
	Total Consumer Credit Outstanding or Lag (+) (-) (1)	Total Noninstal. Credit Outstanding or Lag (+) (-) (2)	Total Instal. Credit Outstanding or Lag (+) (-) (3)	Lead (-) or Lag (+) (4)	Bus. Cycle Trough Outstanding or Lag (+) (-) (5)	Total Consumer Credit Outstanding or Lag (+) (-) (6)	Total Noninstal. Credit Outstanding or Lag (+) (-) (7)	Total Instal. Credit Outstanding or Lag (+) (-) (8)	Lead (-) or Lag (+) (9)	Total Consumer Credit Outstanding or Lag (+) (-) (10)	Total Instal. Credit Outstanding or Lag (+) (-) (11)	Lead (-) or Lag (+) (12)
8/29	10/29	10/29	10/29	+2½	10/29	+2½	3/33	7/33	+4½	+8½	5/33	+2½
5/37	10/37	11/37	9/37	+5½	8/41	+4½	6/38	8/38	+2½	+4½	10/38	+4½
2/45	NT	1/42	8/41	-	NT	-	10/45	2/44	-	-	4/44	-
11/48	NT	NT	NT	-	NT	-	10/49	NT	-	-	NT	-
7/53	3/51	3/51	3/51	-	7/51	-	8/54	7/51	-	-	7/51	-
7/57	1/58	1/58	1/58	+6½	1/58	+6½	4/58	6/58	+2½	-1½	6/54	+5½
5/60	NT	12/60	12/60	-	2/61	+7½	2/61	NT	-	+2½	4/61	+2½
Average				+4.0		Prewar Period (1929-38)			+3.5			+3.5
Average deviation				+1.5					+1.0			+1.0
Average						Postwar Period (1945-67)						+2.2
Average deviation									+7.2			+2.4
Average						Whole Period (1929-67)			+0.4			+2.7
Average deviation				+4.5					+5.7			+2.0
Average deviation				+1.6					+1.8			+1.8

NT = No turn.
 NOTE: Figured at end of month. Leads and lags in months.
 SOURCE: Federal Reserve Bulletin.

CHART 4
 Specific Cycles in Consumer Credit Outstanding at Business Cycle Peaks
 and Troughs, 1929-67



NOTE: Shaded areas represent business cycle contractions; white areas, expansions.
 SOURCE: *Federal Reserve Bulletin*, selected issues.

Table 2
*Summary of Timing: Consumer, Instalment, and Noninstalment
 Credit at Business Cycles, 1929-67*

Line	Consumer Credit Outstanding	Nonin- stalment Credit	Instalment Credit Outstanding
1. Number of business cycle turns covered	14	14	14
2. Number of leads	0	0	1
3. Number of rough coincidences ^a	3 (0)	1 (0)	4 (0)
4. Number of lags	6	4	9
5. Number of timing comparisons	6	4	10
6. Number of business cycle turns skipped	8	10	4
7. Number of extra specific cycle turns	4	2	4
8. Median lead (-) or lag (+) at peak	+5½	+4½	+6½
9. Median lead (-) or lag (+) at trough	+2½	+6½	+2½
10. Mean lead (-) or lag (+) at peak	+4.8	+4.5	+5.7
11. Mean lead (-) or lag (+) at trough	+3.2	+6.5	+2.7
12. Average deviation at peak ^b	1.6	2.0	1.8
13. Average deviation at trough ^b	0.9	2.0	1.8

^aRough coincidences include exact coincidences (shown in parentheses) and leads or lags of three months or less. The total number of timing comparisons (line 5) is equal to the total number of leads, exact coincidences, and lags.

^bAverage deviations have been computed about the mean leads and lags reported in lines 10 and 11.

NOTE: Computed at the end of the month.

SOURCE: Federal Reserve Board.

period; instalment credit and its automobile component presented an extra cycle in connection with the Korean War; moreover, instalment credit skipped the mild recession immediately after World War II.

We may conclude, therefore, that the instalment credit component of consumer credit has exhibited the greatest cyclical volatility since 1945.