

# *Monetary Restraint and Instalment Credit*

RICHARD T. SELDEN

For as long as one can remember, monetary policy has been tossing about on a sea of controversy. The issues change from year to year, of course. Yet, curiously enough, it is difficult to detect anything like a convergence toward a consensus on such basic questions as: (1) What is monetary policy? (2) How does it work? (3) How well does it work? (4) How could its effectiveness be enhanced, its possible adverse side effects minimized?

Let me say at once that this paper does not pretend to settle these matters. However, it is based on the premise that progress can be made by taking an intensive look at one relatively small sector of the economy. The sector explored here is the market for consumer instalment credit. Section I discusses alternative views on the first two questions raised above; Section II briefly outlines some salient features of the institutional setting of instalment credit markets in the United States; Section III examines general evidence relating to the responsiveness of instalment credit to changes in monetary policy during 1952-70; and Section IV presents detailed information on the behavior of one important nonbank source of instalment credit, sales finance companies, during periods of monetary restraint. The major conclusions are summarized in Section V.

## *I. How Monetary Policy Works*

Obviously one will have a hard time tracing the effects of monetary policy unless one has a correct understanding of what monetary policy is, how it works, and when it is tightening or easing.

Mr. Selden is Professor of Economics, University of Virginia.

Taken literally, monetary policy is public policy with respect to the volume of money. For various reasons, however, many economists are dissatisfied with such a simple definition. Some prefer to *think* in terms of "credit policy," while continuing to *speak*, unfortunately, of monetary policy. This may seem to be an innocuous semantic distinction, since bank credit is merely the asset counterpart of bank deposits, the major component of the money supply. However, the total volume of credit in a modern economy is far greater than bank credit and its movements need not parallel those of bank credit. A given volume of bank credit, moreover, is consistent with a wide range of money supplies--especially in this day of negotiable CDs, bank-related commercial paper, and head office borrowings of Euro-dollars. A further point to note is that "credit policy" embraces a wide variety of selective controls over credit terms and the structure of lenders' portfolios--usually with only negligible effects on the money supply.

Clearly, those who favor a credit policy orientation have in mind a macro-model in which variations in the demand for money are apt to assume major significance in producing changes in aggregate demand for goods and services, while exponents of the literal definition view

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the demand for money as being stable even in the face of substantial variations in the volume of credit or in credit terms. Which of these two approaches is best is an empirical matter about which it is still possible for honest men to differ. Nevertheless, it would greatly clarify policy discussions if those who believe that credit is the crucial variable would cast their arguments explicitly in terms of credit policy rather than monetary policy.

Some economists, perhaps recognizing that the "credit vs. money" issue remains unresolved, have taken the "cop-out" of identifying monetary policy with "central bank policy": monetary policy is any action that is customarily carried out by central banks. In addition to simplicity this has the advantage that it brings us closer to what the authorities actually are doing, as against what outsiders believe they are trying to do, with respect to money and credit. Central banks generally do not operate directly on either money or credit; rather, they vary such policy instruments as their lending rates, their government securities portfolios, and commercial bank reserve requirements. If one is interested in the authorities' intentions, one may do better to examine the behavior of instruments rather than the presumed targets. On the other hand, it must be pointed out that by focusing on central bank actions one runs a risk of overlooking important dimensions of monetary and credit policies since ordinarily central banks are not the only public entities that influence money and credit. Moreover, is there really any virtue in concentrating on intentions? My view is that for most problems one ought to look at the net result of instrument manipulations on whatever one regards as the strategic monetary or credit variables, rather than at what these manipulations may tell us about intent.

#### *Channels of Monetary Impact*

There is still another theoretical issue of great practical import for this paper: Through what channels does a "monetary" impulse proceed to impinge on the economy? The standard theory holds that monetary restraint affects the economy according to the following sequence: (1) a tightening in the reserve position of the banking system leads to (2) increased cost and reduced availability of bank credit, which leads to (3) increased cost and reduced availability of credit generally, which leads to (4) a reduction in the level of debt-financed spending on goods and services, which implies (5) a reduction in aggregate demand for goods and services. According to this theory, instalment credit, insofar as it responds to monetary

restraint, becomes more costly or is rationed more stringently, by both banks and nonbank lenders, when bank reserve positions are tightened. As a result, some prospective purchasers of autos (for example) either are unable to obtain credit or are deterred from doing so by its high cost; in either event, outlays on autos are less than they otherwise would be.

### *The Portfolio Balance Theory*

In contrast to this standard theory, I would like to suggest a radically different version of how monetary restraint impinges on instalment credit, or on any other sector of the economy, for that matter.<sup>1</sup> According to this theory (call it the portfolio balance theory), (1) a reduced rate of monetary growth leads to distorted wealth portfolios throughout the economy, which leads to (2) reduced rates of acquisition of nonmonetary wealth, which implies (3) reductions in aggregate demand for goods and services, which leads to (4) reductions in demand for credit. The portfolio balance theory suggests that monetary restraint affects instalment credit only indirectly. Reductions in monetary growth cause some households to hold less money per dollar of nonmonetary wealth than they wish to hold. Consequently, they slow down their rates of acquisition of autos and other types of nonmonetary wealth. Since the demand for instalment credit appears to be largely derived from the demand for durable goods, this implies a fall in the demand for instalment credit. Thus, on this theory instalment credit may respond to monetary restraint even though some lenders do not experience any particular trouble in obtaining funds to finance new credit extensions--i.e., even though there is no reduction in the availability or increase in the cost of instalment credit.

Note that the standard theory and the portfolio balance theory are in no sense mutually exclusive explanations of how monetary policy works. Indeed, both have a certain plausibility, and it would not be surprising to find evidence that both processes have affected instalment credit in the United States.

<sup>1</sup>The theory has been set forth more fully in Milton Friedman and David Meiselman, "The Relative Stability of Monetary Velocity and the Investment Multiplier in the United States, 1897-1958," in *Stabilization Policies* (A series of Research Studies prepared for the Commission on Money and Credit) (Englewood Cliffs, N. J.: Prentice-Hall, 1963). See also Milton Friedman and Anna J. Schwartz, "Money and Business Cycles," *Review of Economics and Statistics*, February 1963 (Supplement), pp. 59-63.

*Identification of Periods of Restraint*

Let us turn to the practical problem of identifying periods of monetary restraint. Chart I shows a number of time series that might conceivably be used for this purpose. At the top are two highly correlated series that probably indicate quite faithfully the policymaker's intentions: free reserves and an index compiled by Brunner and Meltzer from Federal Open Market Committee directives.<sup>2</sup> Both series suggest that the Federal Reserve has consistently tightened policy at the beginning of business expansions and relaxed policy late in expansions, well before the onset of recessions. However, one gets a far less complimentary view of Federal Reserve performance from the next four lines, which show growth rates in narrowly-defined money ( $M_1$ ), broadly-defined money ( $M_2$ ), bank credit, and the monetary base.<sup>3</sup> These growth rates in monetary aggregates may be interpreted in at least two rather different ways. Milton Friedman, among others, has suggested that the key aspects of the growth rate series are their turning points: periods of monetary restraint extend from peaks to troughs.<sup>4</sup>

A less common interpretation--at least equally defensible in my judgment--is to focus on the *levels* of the growth rates. These levels are not entirely arbitrary. If we ignore for the moment the problem of trends in monetary velocity, then a rate of growth in the aggregates equal to the growth rate in full employment real GNP

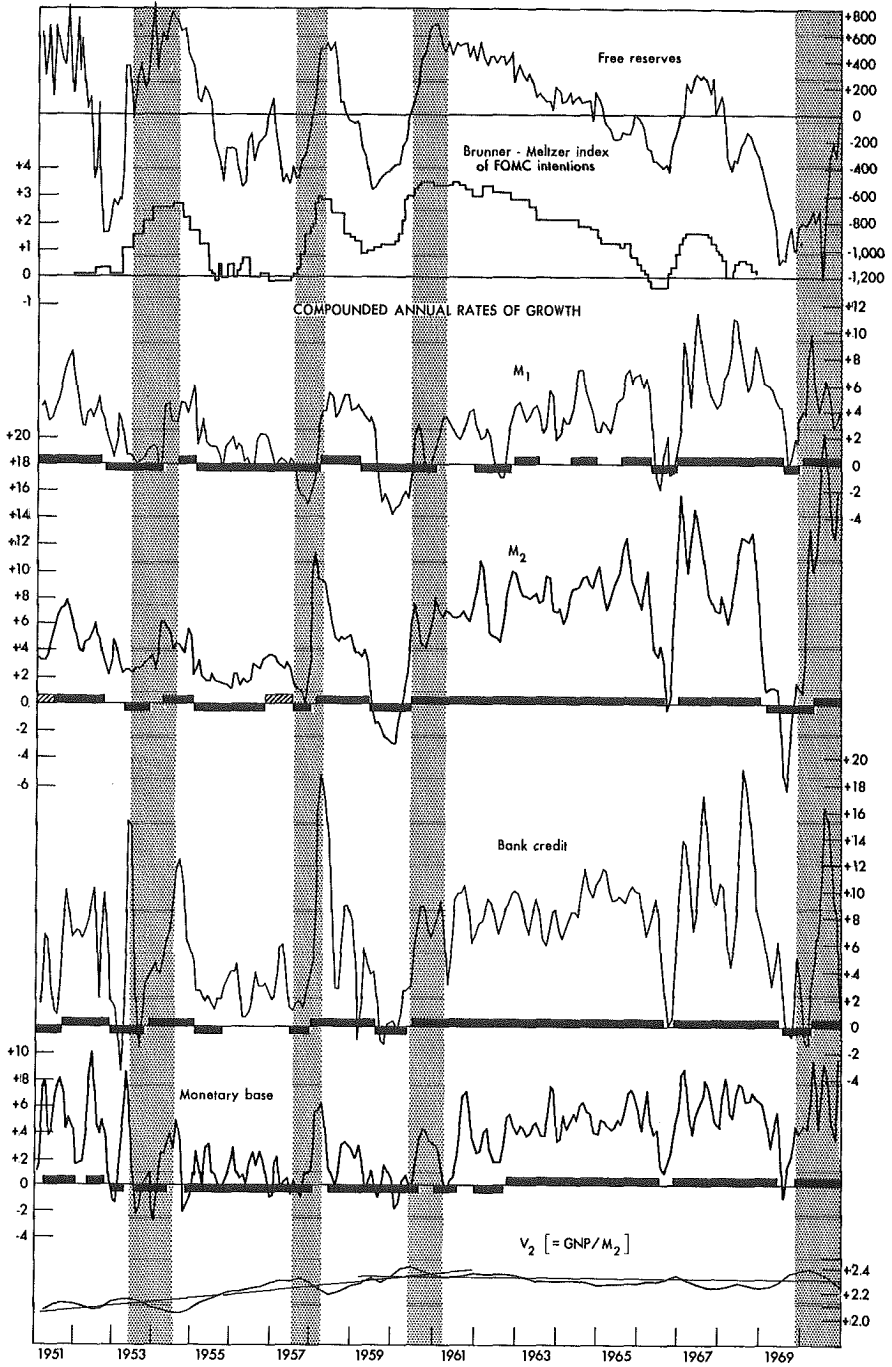
<sup>2</sup>See Appendix II of their "*An Alternative Approach to the Monetary Mechanism*," a report prepared for the Subcommittee on Domestic Finance of the House Committee on Banking and Currency, August 17, 1964. This publication covers the period through 1962. Allan Meltzer has provided a similar index for the period 1964-68 in "The Appropriate Indicators of Monetary Policy, Part I," in *Savings and Residential Financing, 1969 Conference Proceedings* (Chicago: United States Savings and Loan League, 1969). The missing piece, 1963, was supplied by the author.

Perhaps it should be indicated that the series plotted in Chart I is a cumulation of the Brunner-Meltzer series, taking early 1952 as zero.

<sup>3</sup>The series plotted in Chart I have been smoothed by use of a centered three-term moving average, with a 1-2-1 weighting pattern. Classification of periods also was based on the smoothed series.

<sup>4</sup>Among the many works of Friedman that could be cited in this regard, see his "The Monetary Studies of the National Bureau," in *The Optimum Quantity of Money and Other Essays* (Chicago: Aldine, 1969).

CHART I  
 SELECTED INDICATORS OF MONETARY POLICY, 1951 - 1970



would be consistent with long-run price stability. A higher rate of growth of the aggregates over a sufficiently long time interval could then be regarded as "easy money," while a lower rate of growth could be regarded as "monetary restraint." The black bars along the zero lines in Chart I depict monetary policy phases in accordance with this idea. Periods of monetary restraint are time intervals of at least five months in which the growth rate of a particular aggregate was less than 3 percent per year; such periods are marked by bars below the zero lines. To avoid a "razor's edge" situation, periods of monetary ease were defined as those with aggregates growth rates of more than 3.75 percent; they are marked by bars above the zero lines.<sup>5</sup>

The results, not surprisingly, depend on which aggregate one looks at. All of them indicate monetary restraint in 1953, lasting well into the recession. Similarly, 1955 (after the opening months), late 1957, and late 1959 and the first half of 1960 were periods of restraint according to all four aggregates. In 1956 money was tight if one looks at  $M_1$ ,  $M_2$ , and base money; however, bank credit behaved too erratically to permit classification. The year 1962 was one of slow growth in  $M_1$  and in the base but a year of rapid growth in both  $M_2$  and bank credit. A major surprise is that only one aggregate,  $M_1$ , classifies the famous 1966 "credit crunch" as a period of restraint on our rules; the episode was too brief to qualify in terms of the other aggregates. It should also be noted that the monetary base did not signal a restraint period in late 1969 and early 1970, in contrast to the other aggregates.

My preference among these aggregates is for  $M_2$ , followed closely by  $M_1$ . Using  $M_2$  as the basis of classification, periods of monetary restraint since 1951 were:

June 1953 to December 1953  
 March 1955 to November 1956  
 August 1957 to December 1957  
 July 1959 to June 1960  
 February 1969 to February 1970

<sup>5</sup>In the case of  $M_2$  two periods, marked with crosshatching (early 1951 and early 1957), are regarded as "neutral" policy periods since the growth rate stayed within the bounds set (i.e. between 3.0 and 3.75) for at least five months. It is rather striking that only these two brief periods, for only one of the four growth rate series, were able to qualify as neutral periods. Unmarked periods, such as 1961 in the  $M_1$  series, were characterized by too much monetary instability to permit classification in terms of the rules proposed.

In applying the rules I permitted certain exceptions where, for example, a period of slow growth in bank credit, as in 1953, is interrupted momentarily by a month or two of very rapid growth.

Strictly speaking, one ought to allow for velocity trends in applying a definition of monetary restraint based on growth rates of the aggregates. The bottom line in Chart I shows the income velocity of broad money,  $V_2$ . It rose fairly steadily up to 1960 at an annual rate of 1.38 percent, except for brief cyclical interruptions. Since then the trend has been downward at a rate of 0.19 percent per year; only in 1966 and 1969-70 was  $V_2$  above its trend line.<sup>6</sup> In view of these trends a case can be made that monetary growth rates on the order of 1.6 percent or less per year corresponded to periods of monetary restraint during the 1950s rather than the 3 percent threshold we have used. Similarly, a case could be made for a 3.2 percent threshold in the 1960s. The result would be to reduce the frequency of restraint during the 1950s and to increase the frequency slightly during the 1960s.

It would delay us unduly to pursue such refinements further. As a final thought along these lines, however, attention is called to still another approach to the definition of monetary restraint: it may be regarded as a period in which money is working unusually hard, as indicated by the relationship of velocity to its trend. In Chart I,  $V_2$  was above trend in pretty much the same periods we have already identified by reference to growth rates in  $M_2$ --a fact that lends support to the reasonableness of the growth rate approach.

## *II. Institutional Setting of Instalment Credit Markets*

Consumer instalment credit in the United States consists of auto paper, other consumer goods paper, repair and modernization loans, and personal loans. The suppliers of such credit are commercial banks, finance companies, credit unions, various other financial institutions, and retailers. Until recently a distinction was made between sales finance and consumer finance companies, the former consisting of firms that purchase instalment paper from retailers, the latter of firms that grant direct cash loans to households. Increasingly, during the 1960s, this distinction became less meaningful, both as a result of sales finance entry into cash lending and because of consumer finance company entry into retailing through acquisitions of retail chains. Consequently, the Federal Reserve no longer publishes separate statistics by type of finance company. Much of the empirical analysis that follows will nevertheless make use of this now-outmoded distinction.

<sup>6</sup>The trend lines shown in Chart I were calculated by overlapping the periods. The rising line was based on 1951-1 to 1961-4, while the falling line was based on 1959-1 to 1970-4.



Sales finance companies are of two basic types: those that are owned by manufacturers or retailers and those that are not. The former are often called "captive finance companies"--I shall use the less deprecatory term "finance subsidiaries"--while the latter are known as "independents." There is a real question whether a wholly-owned subsidiary of a retailer (a leading example is Sears Roebuck Acceptance Corporation) should be classified as a finance company or as part of a retail establishment, since the instalment paper it holds comes solely from its parent. In its most recent revision of instalment credit statistics,<sup>7</sup> the Federal Reserve has reached the sensible conclusion that such finance subsidiaries are not finance companies, and Federal Reserve data back to 1956 now reflect this decision. The case of manufacturer-owned subsidiaries is somewhat different. The largest of these, for example--General Motors Acceptance Corporation--holds a significant amount of retail paper from the sale of non-GM products since General Motors does not exercise complete control over the product lines of its dealers.

*Breakdown of the Instalment Credit Market*

Table I gives instalment credit breakdowns for the end of 1956 and 1968, both years of high prosperity. A number of points should be noted. First, commercial banks were the leading instalment lenders in 1968, as in 1956. However, banks gradually had expanded their share of instalment credit markets to an impressive 41 percent of the total by 1968. Banks are now the leading holders of auto paper, repair and modernization loans, and personal loans, and they are second only to retailers as holders of other consumer goods paper. Second, sales finance companies have greatly diminished their specialization in auto paper in recent years. Indeed, it appears that independent finance companies will abandon new car financing altogether before much longer, leaving this business to banks and finance subsidiaries. Third, between 1956 and 1968 there was a dramatic rise in the credit union share of instalment credit. Fourth, auto dealers have become distinctly minor holders of instalment credit in recent years, and retailers as a group have declined in importance since the mid-1950s despite the vigorous promotion of "revolving credit" by department stores.

Although instalment credit markets are less than perfectly competitive, significant competition does exist. For example, in a typical city of medium size a prospective purchaser of a new car has

<sup>7</sup>Federal Reserve Bulletin, December 1968.

**TABLE 1**

**CONSUMER INSTALMENT CREDIT OUTSTANDING  
END OF 1956 AND 1968  
(MILLIONS OF DOLLARS)**

Type of Paper Holder	Auto Paper	Other Consumer Goods Paper	Repair and Modernization Loans	Personal Loans	Total
<b>A. 1956</b>					
Commercial Banks	5,726	2,464	1,469	2,118	11,777
Sales Finance Companies	7,238	1,159	32	570	8,999
Credit Unions	—	—	—	—	2,014
Consumer Finance Companies	954	624	404	4,101	2,940
Other Financial Institutions	—	—	—	—	1,129
Retail Outlets	502	4,359	—	—	4,861
All Holders	14,420	8,606	1,905	6,789	31,720
<b>B. 1968</b>					
Commercial Banks	19,318	6,060	2,719	8,855	36,952
Sales Finance Companies	9,986	4,849	74	3,310	18,219
Credit Unions	—	—	—	—	10,178
Consumer Finance Companies	4,506	1,877	1,132	14,771	8,913
Other Financial Institutions	—	—	—	—	3,195
Retail Outlets	320	12,113	—	—	12,433
All Holders	34,130	24,899	3,925	26,936	89,890

Source: Federal Reserve Bulletin, December 1968, pp. 987-93, and March 1969, pp. A52-3.

a number of financial alternatives: he can finance through the auto dealer, which means that a sales finance company or a local bank is the ultimate source of funds; he can borrow cash directly from one of the four or five banks with offices in the city; or he can borrow from one of several consumer finance companies with local offices, or from a local credit union if he belongs to one. In practice there is a certain amount of specialization among lenders--for example, banks tend to concentrate on low-risk paper--so the amount of effective competition is undoubtedly less than one might think. There are also legal constraints. Most instalment credit is now subject to strict regulation by the states. Regulated aspects include rates, loan size, location of place of business, and methods of rate quotation. With adoption of the Truth in Lending Act in 1968 rate quotation has come under federal regulation as well. The effect of this law, which requires all instalment finance charges to be quoted in terms of simple annual interest, may have been to intensify competition since presumably it has made it easier for borrowers to compare credit costs between lenders.

#### *Channels of Fund Flows into Consumer Credit*

In this paper we have particular interest in the channels through which funds flow into consumer instalment credit. Directly or indirectly a large portion of these funds flows through the banking system. Not only are banks the leading consumer instalment lenders, but also they support nonbank instalment lending in at least three important ways. First, they extend loans, mainly short-term, to finance companies. Usually such lending is done under formal loan agreements that define the size of the credit line, compensating balance requirements, and the relationship of the interest rate to the bank's prime rate. Second, the lines of credit extended to finance companies facilitate borrowing by the latter on the commercial paper market. Third, short-term bank loans are an important source of funds supporting instalment credit extended by retailers. Indeed, the only important segment of instalment credit that is more or less insulated from the vagaries of the banking system is that furnished by credit unions. Their funds come almost entirely from savings of individual members.

An increased flow of bank funds in support of instalment credit may reflect (a) an increase in bank deposits resulting from an improvement in the reserve position of the banking system, (b) an increase in non-deposit borrowings of banks, or (c) a decrease in

other types of bank credit. Only the first of these possibilities is subject to direct influence by U.S. monetary authorities.

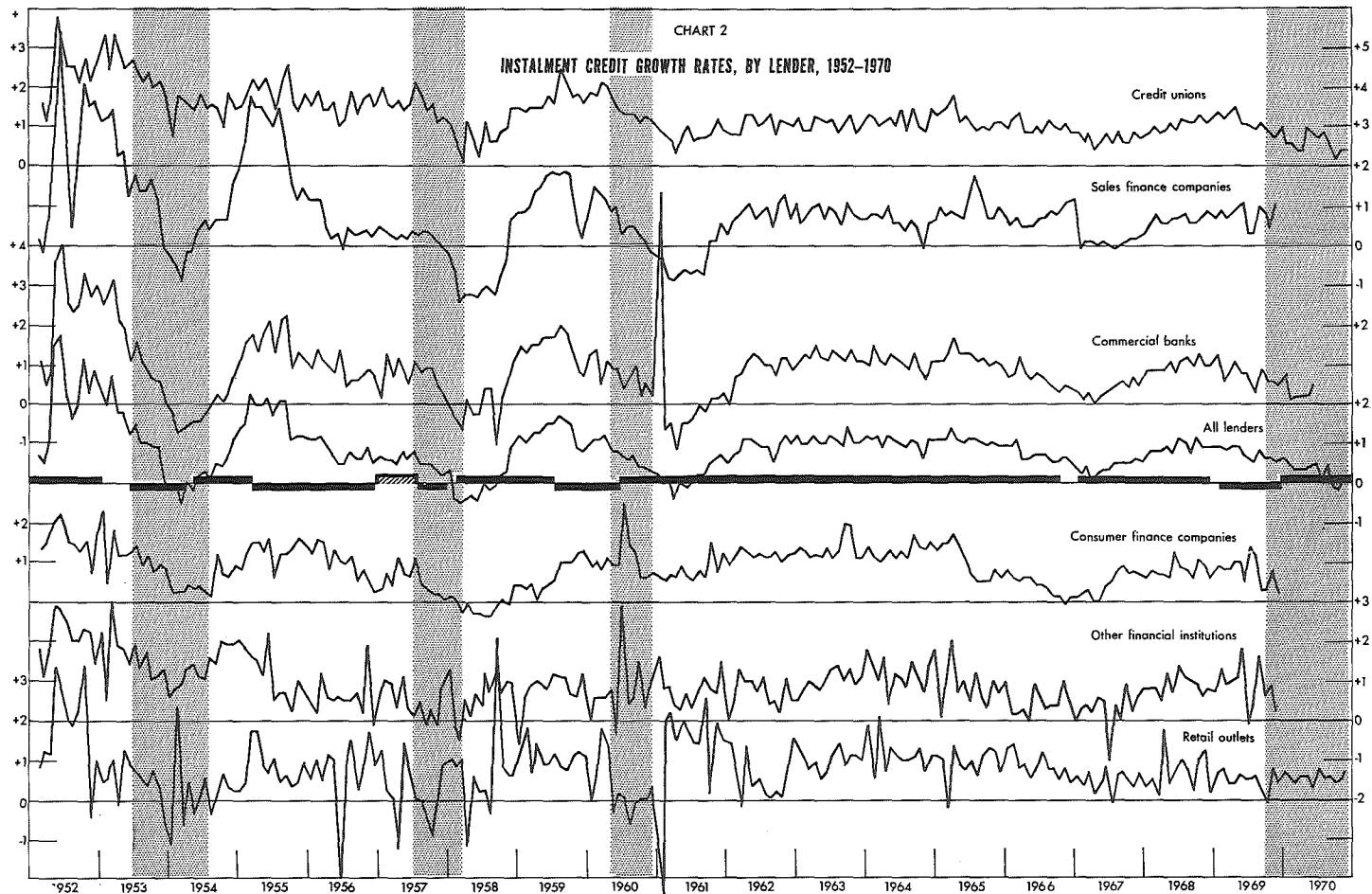
An increased flow of finance company funds into instalment credit may reflect, in addition to an increase in bank loans or commercial paper debt, any of the following: (a) an increase in long-term borrowings from such capital market participants as life insurance companies, bank-administered trusts, and pension funds; (b) a reduction in cash or other liquid asset holdings; or (c) a reduction in other types of credit held by finance companies. From a practical standpoint, however, only the first possibility is likely to be important. While finance companies hold large amounts of cash, these holdings consist mainly of compensating balances in support of bank lines; hence they are not available to finance any sizable expansion of instalment credit. Finance companies (especially sales finance companies) also hold large amounts of credit other than consumer instalment credit. However, much of this consists of "wholesale" credit or other loans that are basically complementary to consumer instalment credit.

With this theoretical and institutional background let us now turn to some empirical evidence on the responsiveness of instalment credit to monetary restraint.

### *III. Alternative Measures of Instalment Credit*

We are still not quite out of the woods, conceptually. Although we formed some tentative notions in Section I of how to identify periods of monetary restraint, we must now consider how to measure instalment credit behavior. Like the money supply and many other time series in economics, instalment credit outstanding has had a pronounced uptrend which disguises its short-run movements. These movements can be perceived more readily by looking at either net changes in outstanding credit or extensions of new credit. However, both of the latter series suffer from the fact that absolute dollar changes are less meaningful, for many purposes, than relative changes. This is especially so when we are interested in comparing lenders of substantially different size (e.g. commercial banks and credit unions). In this paper we shall focus on month-to-month growth rates in seasonally adjusted outstanding credit.

The time span to be investigated, 1952-70, was selected for two reasons. First, instalment credit downpayments and maturities were controlled by the Federal Reserve's Regulation W during much of the period from August 1941 to May 1952, when the regulation finally



was revoked. This type of selective control, which undoubtedly did influence instalment credit growth rates, does not fall within the scope of "monetary restraint" as it is usually understood in this country. Second, from the early 1930s through the Treasury-Federal Reserve Accord of March 1951 there was only one brief episode of monetary restraint, in 1937. Moreover, prior to 1940 only year-end data on instalment credit are available.

*Monetary Restraint and Instalment Credit*

Chart 2 shows month-to-month percent changes in total instalment credit outstanding (middle line) and instalment credit held by each of the six main types of lenders. From the total line it can be seen that the rate of growth fell during each of the five periods of monetary restraint. In 1953, 1957, and 1969-70 the growth rates already were falling prior to the onset of the restraint period, as defined earlier. However, the rates did fall faster after restraint began than they did before, suggesting that there was some responsiveness to the tightening of policy. The restraint period of 1955-56 was rather different. Instalment credit expansion had been accelerating since early 1954, and after the switch to restraint the rate of acceleration quickened for the next five months. Instalment credit growth continued at a rapid rate for another six months before entering a long, drawn out period of receding growth rates. While it cannot be said that the restrictive policy initiated in 1955 had immediate effects on instalment credit, nevertheless one can argue that the expected effects did emerge after a lag of about half a year. The 1959-60 episode was more consistent with the view that policy affects instalment credit growth promptly. On that occasion the growth rate peaked in the third month of restraint. On the whole, then, the aggregate data seem to support the notion that instalment credit is quite responsive to monetary restraint.<sup>8</sup>

<sup>8</sup>Since the Nantucket Conference I have been experimenting with regressions of growth rates in instalment credit on lagged values of growth rates in the various monetary aggregates. This work was still in progress at press time, so the detailed results will have to be presented elsewhere. On the basis of preliminary results, however, it can be stated that statistically significant  $R^2$  values can be obtained for equations of the form:

$$\ln C_t - \ln C_{t-1} = a_1 + a_2 (\ln M_{t-n} - \ln M_{t-n-1}),$$

where the  $C_t$  denote seasonally adjusted levels of consumer instalment credit outstanding and  $M_{t-n}$  seasonally adjusted levels of a given aggregate  $n$  months earlier. For the particular aggregate  $M_1$  it appears that the closest fit is obtained when  $n = 7$ ; i.e., changes in  $M_1$  appear to influence instalment credit with a lag of about six to eight months.

The data for commercial banks, sales finance companies, credit unions, and consumer finance companies--together they have accounted for over 95 percent of instalment credit held by financial institutions and for more than 80 percent of total instalment credit in recent years--are quite consistent with the aggregate data. In fact, it is remarkable how similar these four institutions were in the behavior of their growth rates when one considers the heterogeneity of their instalment paper holdings. Sales finance companies, for example, run heavily to auto paper, while consumer finance companies concentrate on personal loans, yet their cyclical undulations are really quite similar. Even the other two holders, other financial institutions and retail outlets, have tended to move in step with the aggregate movements if one ignores the sizable erratic components in their data.

To compare institutions one should correct for differences in credit mix. This can be done very simply by examining the behavior of a given type of paper at each holder. Chart 3 shows auto paper growth rates for commercial banks, sales finance companies, and all other financial institutions. The similarity between banks and sales finance companies is very close, except in 1960 and, to a lesser extent, in 1969. These two institutions accounted for about five-sixths of outstanding auto paper in the late 1960s. The peaks and troughs for "other financial institutions" are also highly similar to those of banks and sales finance companies; however, since the mid-1950s their growth rates have been somewhat less volatile than those of the two major holders.

I cannot take time here to display comparable charts for the other types of instalment paper.<sup>9</sup> Suffice it to say that they tend to support the same conclusion that the auto paper data suggest: interinstitutional differences in instalment credit behavior largely disappear when one takes account of differences in credit mix. On the other hand, when one compares the movements of total auto paper with those of the other three types of instalment paper, one finds that auto paper consistently reached growth peaks ahead of personal loans; auto paper also led both other consumer goods paper and repair and modernization paper on three occasions and peaked simultaneously with the other categories on three of the four remaining comparisons (see Table 2).

<sup>9</sup>The results reported here are part of the findings of research conducted at the National Bureau of Economic Research which will be published in the near future. For additional results (based, however, on unrevised data) see my chapter in Murray E. Polakoff and others, *Financial Institutions and Markets* (Boston: Houghton Mifflin, 1970), Ch. 10.

CHART 3  
AUTO PAPER GROWTH RATES, BY LENDER, 1952-1970

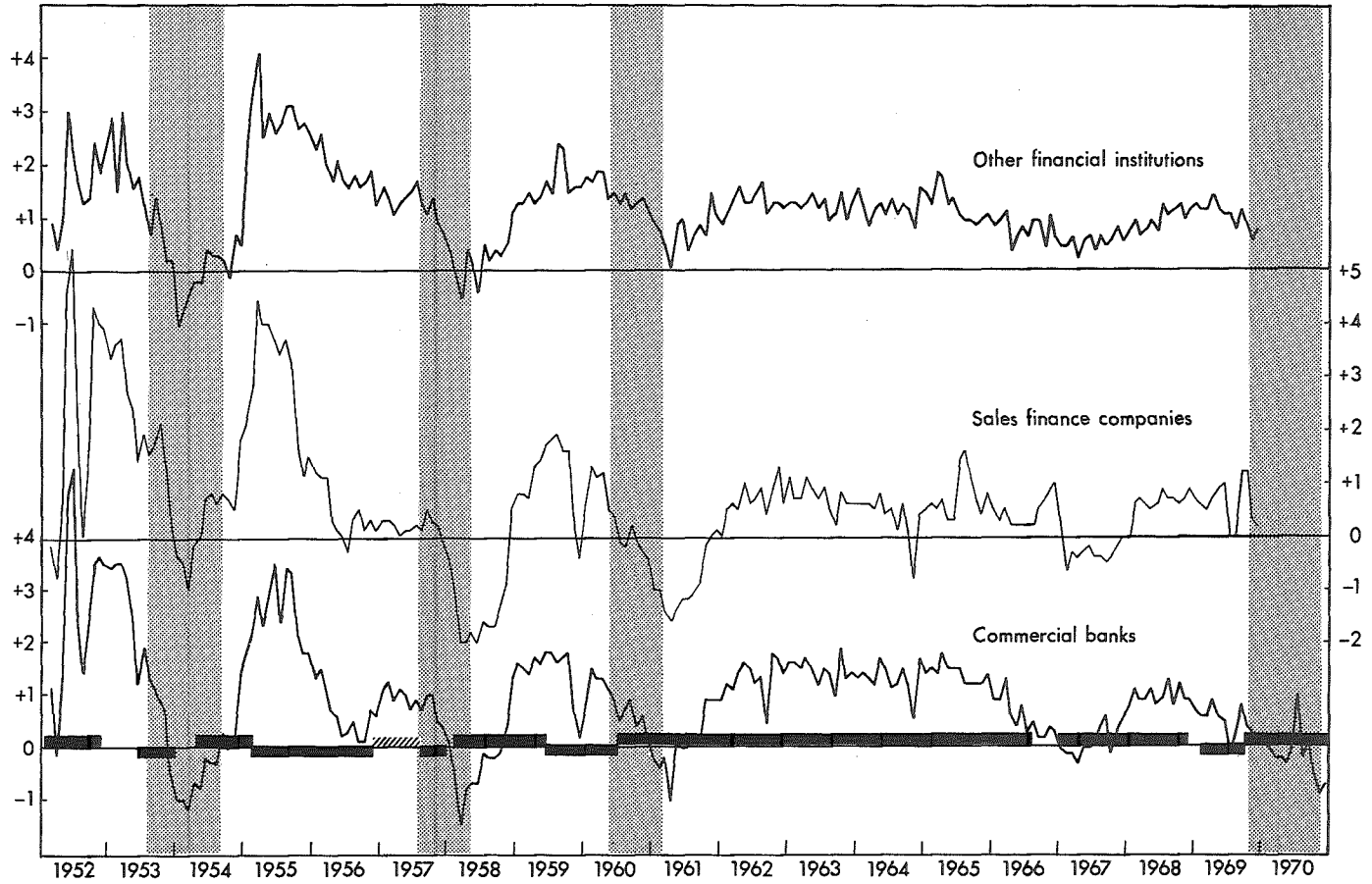




TABLE 2

## GROWTH RATE PEAKS IN INSTALMENT CREDIT, 1952 TO 1970

Auto Paper	Other Consumer Goods Paper	Repair and Modernization Loans	Personal Loans
10/52	10/52	10/52	1/53
3/55	11/56	6/56	4/55
7/59	8/59	7/59	9/59
10/63	3/64	1/65	4/65
7/68	4/68	6/69	4/69

The policy implications of these findings are important. They suggest that there is hardly any difference in responsiveness to monetary restraint between the "regulated" lender, commercial banks, and the various unregulated lenders. Moreover, the general similarity among the latter institutions is especially significant when one recalls that these lenders differ widely in their sources of funds. It is unlikely that inability to obtain funds can explain the responsiveness of nonbank lenders to monetary restraint. The fact (not documented here but supported by related work for another study) that one finds systematic lag patterns among the various types of paper--similar for all types of lenders--suggests that the driving forces behind instalment credit movements come from the side of demand rather than supply. Demand conditions are likely to be different for each type of credit, but similar for a given type for all lenders. If this interpretation is correct then the responsiveness of instalment credit to monetary restraint must come about for reasons quite different from those assumed by the standard theory of monetary policy. If this is not the case, then the strong correlation between periods of monetary restraint and those of falling instalment credit growth rates must be regarded as a spurious relationship.

*Instalment Credit vs. Other Types of Credit*

Let us briefly compare instalment credit with other types of credit. One comparison that can readily be made is that between

bank-held instalment credit, shown in Chart 2, and total bank credit, shown in Chart 1.<sup>10</sup> We are interested especially in the timing of the peaks in these series. The results are as follows:<sup>11</sup>

<i>Instalment Credit</i>		<i>Total Bank Credit</i>	
October	1952	July	1952
September	1955	October	1954
August	1959	April	1958
April	1965	September	1964
January	1969	August	1968

Clearly, instalment credit of banks responds to monetary restraint more sluggishly than total bank credit. A more relevant comparison, however, is between instalment credit and all other bank loans. This is shown in Chart 4. Since the "other bank loans" series was subject to much more pronounced irregularities than the "bank-held instalment credit" series, I have elected to compare them after removal of both seasonal and irregular movements--in other words, in terms of what the Census Bureau calls "Henderson curves."<sup>12</sup> The most striking feature of the chart is the general similarity of these two time series, particularly in the timing of responses to monetary restraint. Noninstalment bank credit growth rates peaked ahead of instalment credit growth rates on four of five comparisons, but the average lead was only 2.2 months and the range was only zero to five months.<sup>13</sup> The instalment credit series experienced wider swings, at least during the 1950's, and was considerably slower to snap back after the ending of restraint. From this point of view, therefore, it could be argued that instalment credit is more responsive to tight money than other types of bank loans.

<sup>10</sup>Note the differences in the scales of these charts, as well as the fact that the instalment credit series has not been smoothed.

<sup>11</sup>The peak in instalment credit in June 1952 was ignored since it surely reflects the suspension of Regulation W in the preceding month.

<sup>12</sup>The Census X-11 method was used for removal of seasonal and irregular movements. For a description of this method see Julius Shiskin, Allan H. Young, and John C. Msgrave, *The X-11 Variant of the Census Method II Seasonal Adjustment Program* (Bureau of the Census, Technical Paper No. 15, February 1967).

<sup>13</sup>This calculation is based on a choice of February 1953 rather than July 1952 as a peak month for instalment credit growth. The earlier peak represents an abnormal adjustment to suspension of Regulation W controls in May 1952.

TABLE 3

GROWTH RATE PEAKS AND TROUGHS,  
 INSTALMENT CREDIT AND OTHER CREDIT  
 1952 TO 1970

Type of Credit	Peaks (Percentages)			Troughs (Percentages)		
A. Sales finance company consumer instalment credit (monthly)*	Jan.	1953	(3.4)	Feb.	1954	(-0.6)
	May	1955	(3.4)	May	1958	(-1.2)
	July	1959	(1.9)	May	1961	(-0.8)
	Aug.	1965	(1.2)	Aug.	1967	(0.0)
	Jan.	1969	(0.8)			
B. Sales finance company business credit (monthly)*	Oct.	1952	(4.2)	Jan.	1954	(-3.4)
	Feb.	1955	(5.6)	Apr.	1958	(-2.2)
	May	1959	(4.4)	Feb.	1961	(-2.7)
	Apr.	1965	(1.8)	Feb.	1967	(-0.8)
	Nov.	1968	(3.9)			
C. Total consumer instalment credit (quarterly)	4th Q,	1952	(8.6)	1st Q,	1954	(-0.7)
	2nd Q,	1955	(6.4)	2nd Q,	1958	(-1.1)
	3rd Q,	1959	(4.9)	2nd Q,	1961	(-0.3)
	2nd Q,	1965	(3.6)	2nd Q,	1967	(0.5)
	4th Q,	1968	(3.0)			
D. Total domestic non- financial nonfederal credit (quarterly)	3rd Q,	1952	(2.6)	4th Q,	1953	(1.7)
	4th Q,	1955	(3.1)	2nd Q,	1958	(1.5)
	2nd Q,	1959	(2.7)	1st Q,	1961	(1.5)
	1st Q,	1966	(2.5)	4th Q,	1966	(1.5)
	4th Q,	1968	(2.7)			

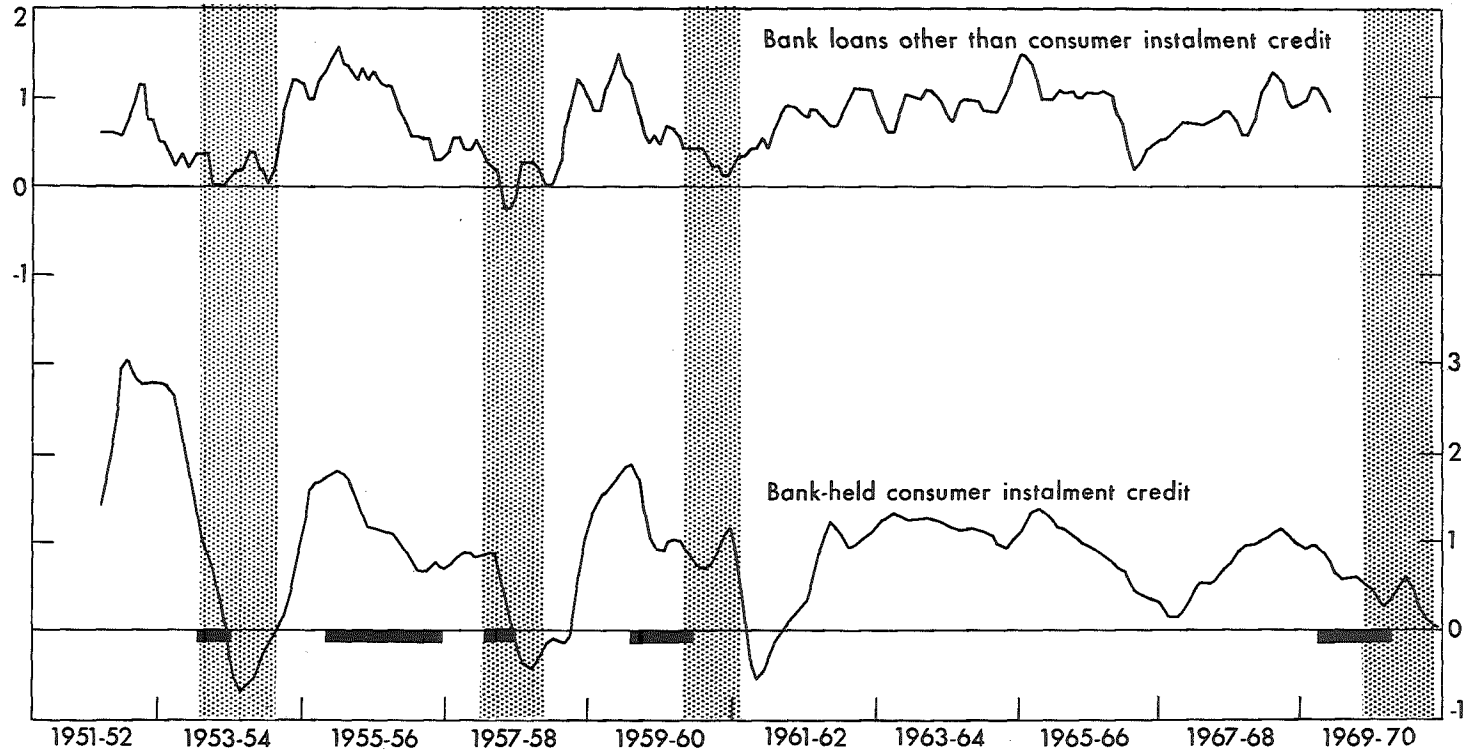
Mean lags at peaks:

A behind B: 2.8 months

C behind D: -0.6 quarters

\*Both seasonal and irregular movements were eliminated prior to calculation of growth rates for sales finance company consumer instalment and business credit. The series shown on lines C and D, on the other hand, were seasonally adjusted but were not smoothed to eliminate irregular movements.

CHART 4  
 GROWTH RATES OF COMMERCIAL BANK INSTALMENT CREDIT AND OTHER LOANS  
 1952-1970, ADJUSTED FOR SEASONAL AND IRREGULAR MOVEMENTS



Shaded areas represent business recessions. Black bars lying along instalment credit base line denote periods of monetary restraint according to M2 growth rate criterion(see text, section 1)

Finally, two additional comparisons can be made on the basis of the data in Table 3. Lines A and B of the table show the dates and levels of growth rate peaks in two types of sales finance company credit: consumer instalment and business. It can be seen that business credit was a great deal more volatile than consumer instalment credit, and that business credit consistently peaked first--a little less than three months ahead of instalment credit, on the average. Thus sales finance company data are consistent with bank data in pointing to a slight tendency for instalment credit to lag behind other credit in responding to monetary restraint.

Lines C and D of Table 3 offer what is probably the most meaningful comparison of the responsiveness of consumer instalment and other types of credit to monetary restraint. The peaks and troughs shown on line C are for quarter-to-quarter percent changes in total consumer instalment credit, seasonally adjusted. The information on line D pertains to percent changes in total debt, also seasonally adjusted, of the domestic nonfinancial nonfederal government sector; consumer credit was deducted from this total. From the figures in parentheses it can readily be seen that consumer instalment credit growth rates were much more volatile over alternating periods of monetary restraint and ease than other domestic nonfinancial nonfederal credit. As was suggested earlier, this can be interpreted as signifying that consumer instalment credit responds to monetary restraint and ease more strongly than other credit in the aggregate. The timing data are even more interesting. In 1952 and 1959 the growth rate of instalment credit peaked one quarter after that of other credit; in 1968 the peaks were simultaneous; and in 1955 and 1965 the instalment credit growth rate peaked ahead of that of other credit. Thus the median lag of instalment credit was zero, while the mean lag was -0.6 quarters.

One could use historical data to explore many other dimensions of the responsiveness of instalment credit to monetary restraint, and undoubtedly one would find the evidence somewhat mixed, as we have. However, we have reviewed enough evidence to feel confident that the differences between instalment and other credit in *promptness* of response to monetary restraint are not substantial. In terms of *degree* of response, on the other hand, it seems likely that consumer instalment credit is one of the more highly responsive types of credit.

*IV. Instalment Credit at Sales Finance Companies*

Our final task is to look more closely at sales finance companies, the most important nonbank provider of instalment credit. The data examined are quarterly figures compiled from individual company reports. Depending on the period covered, from 13 to 15 companies (not always the same firms) were included, ranging in size from small companies (consumer receivables under \$5 million in 1953) to very large firms (\$100 million or more receivables in 1953). Together these companies held about 75 percent of all sales finance company debt in 1960. Unfortunately, it has not been possible to extend the series beyond the end of 1961 because of mergers and other structural changes that limit comparability over time. The discussion is organized chronologically.

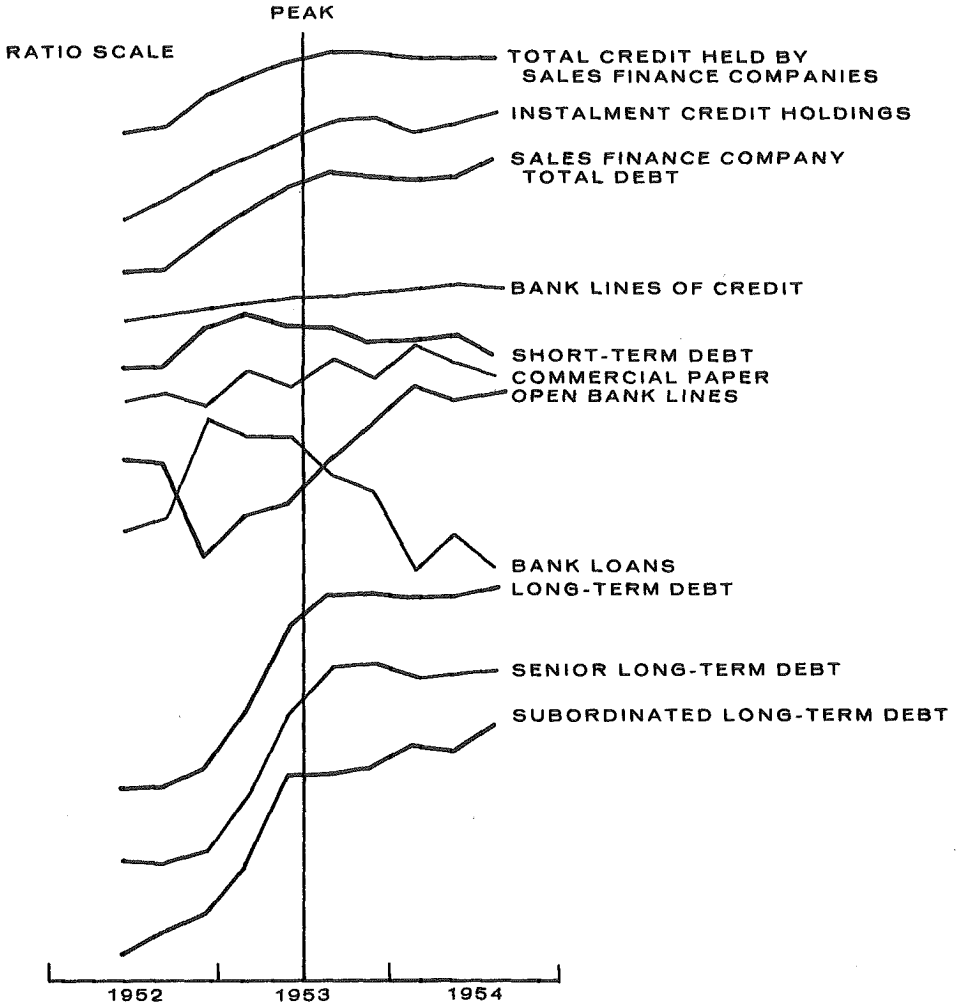
1952-54

From Chart 5 it can be seen that from mid-1952 through the 1953-54 recession there was a very close correspondence between total credit, both consumer instalment and other types, held by all sales finance companies and total debt of our sample companies. This implies that variations in holdings of cash or securities did not play a significant role in instalment credit movements of sales finance companies in this period. Furthermore, except in the final two quarters of this period instalment credit moved roughly parallel to total credit, implying that sales finance companies did not finance instalment credit growth by slowing down expansion of other credit. In other words, we must look at the liability side of sales finance company balance sheets if we are to understand instalment credit movements.

The lower part of the chart shows several categories of debt, as well as bank lines of credit and open bank lines. It can be seen that short-term borrowings peaked in the first quarter of 1953. Since the commercial paper component of this debt followed a zig-zag upward course throughout the period, the decline resulted wholly from the downward trend of bank loans after the end of 1952. Long-term debt, both senior and subordinated, rose very sharply during the first three quarters of 1953. During the rest of the period long-term debt was essentially stable.

Earlier I argued, from the instalment credit growth rate information of Chart 2, that sales finance companies did respond to monetary restraint in 1953-54. Since the total debt of our sample of

CHART 5  
 SALES FINANCE COMPANY FINANCIAL DATA,  
 SECOND QUARTER 1952 TO THIRD QUARTER 1954



Note: Levels are arbitrary; data not seasonally adjusted.

Sources: Top two lines, Board of Governors of the Federal Reserve System;  
 All other lines, National Bureau of Economic Research,  
 Finance Company Sample.

companies behaved very much like the aggregate instalment credit series for sales finance companies, it is clear that the same conclusion would have to be reached from an analysis of growth rates in their borrowings. Still, it is not at all clear from these data that sales finance company growth was inhibited by difficulties in raising funds. Particularly significant is the fact that these companies were able to acquire new bank lines right through the tight money period, with only the faintest sign of any retardation. *Open* bank lines, it is true, did fall sharply in the last quarter of 1952, probably more than the normal year-end decline associated with repayment of commercial paper for window-dressing purposes. Conceivably this development drove companies into the capital market in the first three quarters of 1953. A more plausible interpretation, I believe, is that sales finance companies revised upward their estimates of long-run growth prospects for their industry and decided to seek permanent funding as a cheaper means of finance than bank credit over the long haul. The proceeds of new debt issues were used in part to pay off bank loans.

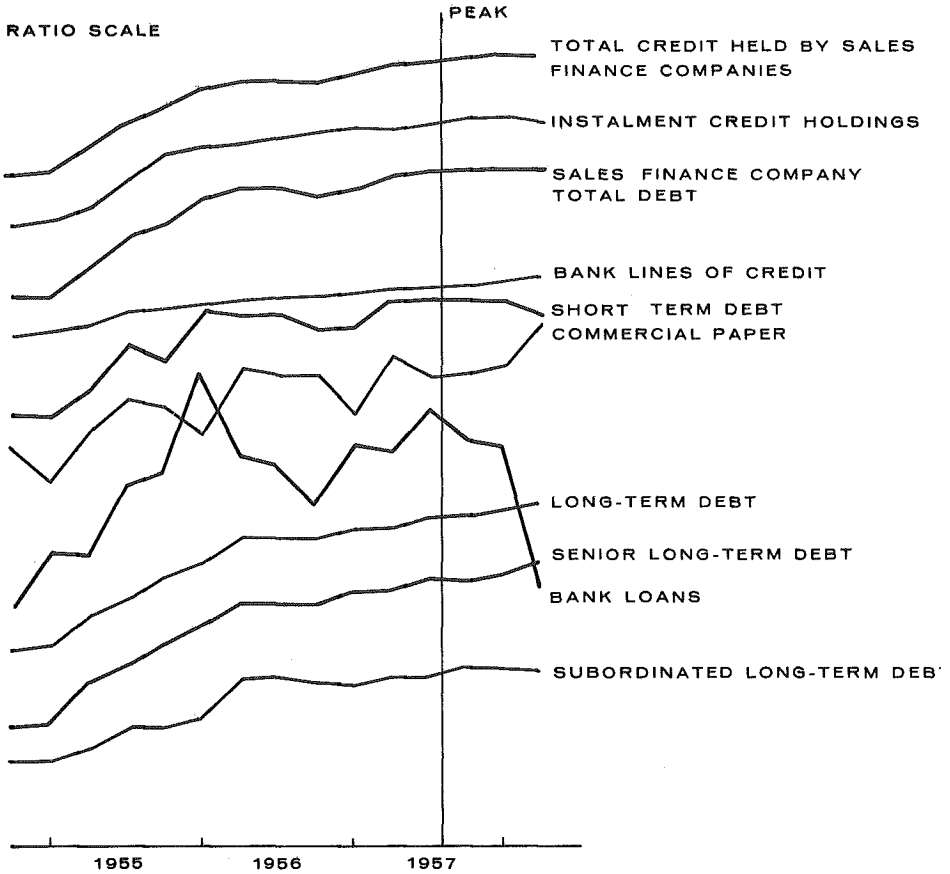
My belief that monetary restraint did relatively little to choke off the flow of funds into sales finance companies is bolstered by comparison of data for smaller and larger companies--data which unfortunately cannot be presented here. The general expectation would probably be that small firms tend to be more responsive to restraint than the giant firms that dominate industry statistics. To some extent this was true during 1952-54: very large firms had a faster rate of expansion than large firms (those with \$25 million to \$100 million consumer receivables in 1953) or small-medium firms, and their growth continued longer into the tight money period, ending only in September 1953, compared with June 1953 for the small-medium companies. However, movements of the small-medium and large categories were quite similar. Moreover, data for a few small firms indicate that they were able to expand bank lines as rapidly as the nation's largest sales finance companies.

Finally, how about finance subsidiaries? Data for two very large subsidiaries indicate total debt peaks in September 1953 and March 1954. Three very large independents, on the other hand, peaked in May, October, and December 1953. Although firm conclusions cannot be based on such slim evidence, this hardly suggests a major difference between subsidiaries and independents in degree of responsiveness.



CHART 6

SALES FINANCE COMPANY FINANCIAL DATA,  
THIRD QUARTER 1954 TO FIRST QUARTER 1958



Note: Levels are arbitrary; data not seasonally adjusted.

Sources: Top two lines, Board of Governors of the Federal Reserve System; all other lines, National Bureau of Economic Research, Finance Company Sample.

From Chart 6 it is clear once again that the drawing down of liquid assets or noninstalment credit played at most a negligible part in the growth of sales finance company instalment credit from the third quarter of 1954 to the first quarter of 1958. On this occasion short-term debt grew, albeit slowly, through the second quarter of 1957 and then fell only slightly. Bank loans, as before, peaked early in this expansion while commercial paper followed an irregular upward path again. Bank lines continued to push ahead steadily. Long-term debt behaved more sedately than in 1952-54, increasing at a fairly steady pace. During this period small-medium companies followed a course almost identical to that of the industry's giants in short-term borrowings; their long-term debt grew substantially faster than that of the very large companies. In terms of total debt the evidence suggests the largest and smallest companies were equally responsive to monetary restraint.

The evidence on finance subsidiaries was mixed again: their debt peaks were in August 1957 and March 1958, compared with August 1957, December 1957, and February 1958 for the three very large independents.

#### 1958-61

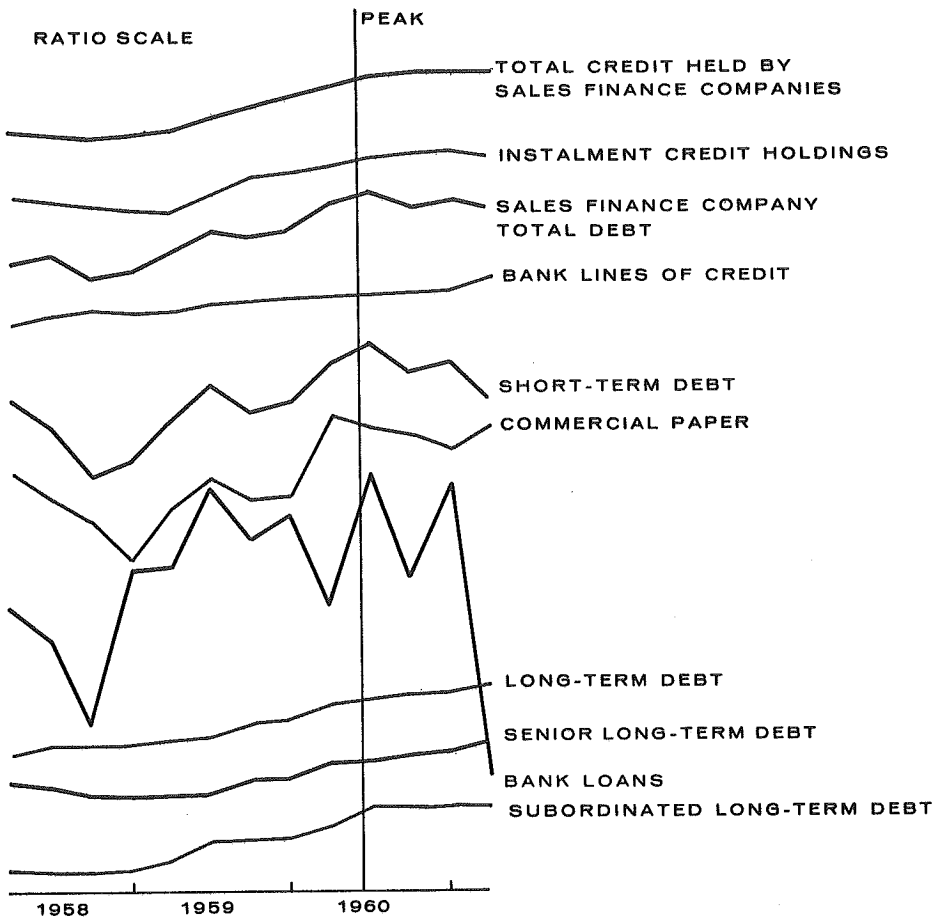
Data for the final period are plotted in Chart 7. The contours of the total debt and total credit lines do not match quite as closely as before. However, for the period as a whole it is clear that changes in non-credit assets such as cash made only a negligible contribution to growth of instalment and other credit. Bank loans again went through wide swings, peaking at the cycle peak, in contrast to bank lines, which rose steadily. Commercial paper followed a mildly cyclical path this time, with the peak coming one quarter ahead of the bank loan peak. Long-term debt again expanded steadily throughout the cycle.

During 1958-61 movements in total debt were almost identical for the small-medium and very large sales finance companies. Firms of intermediate size (large firms) peaked several months ahead of the others. Thus it appears that the largest companies responded to monetary restraint just as promptly as much smaller companies did. Bank lines of two small companies grew faster than those of three firms that were more than 70 times as large.

The two finance subsidiaries reached their maximum total debt in April and July 1960, while the very large independents peaked in August 1959 and June 1960 (two firms).

CHART 7

SALES FINANCE COMPANY FINANCIAL DATA,  
FIRST QUARTER 1958 TO FIRST QUARTER 1961



Note: Levels are arbitrary; data not seasonally adjusted.

Sources: top two lines, Board of Governors of the Federal Reserve System; all other lines, National Bureau of Economic Research, Finance Company Sample.

In summary, it seems fair to conclude from this evidence, as well as much further evidence that will be published elsewhere, that monetary restraint of the degree experienced between 1952 and 1961 did not have a substantial effect on the flow of funds into sales finance companies. Even tiny companies managed to find new bank lines during restraint periods, and only rarely were compensating balance requirements raised. One high executive of a major firm confided proudly to me that his firm had never been forced to limit its operations for lack of funds on reasonable terms. This may be discounted as idle boasting. However, the evidence I have seen shows relatively few indications of financial stringency, even among far smaller firms.

Thus the evidence from our sales finance company sample during 1952-61 is broadly consistent with the aggregate results of Section III--instalment credit does seem to respond to monetary policy, but not in the way that is usually assumed.

#### *V. Summary*

This paper has been concerned with the question of whether general monetary restraint does in fact restrain instalment credit. From the standpoint of conventional theory our results are somewhat paradoxical. On the one hand it is clear that instalment credit growth does slow down during periods of restraint--at least if we measure the latter as periods in which the money supply grows at a slower rate than potential real GNP. On the other hand, the ability of sales finance companies, large and small alike, to activate their massive bank lines, to obtain new lines, and to tap the open credit markets during even the most restrictive periods strongly suggests that these companies are not highly sensitive to the tightening of policy.

The resolution of the "paradox" lies in recognizing that the standard theory of monetary policy is inadequate. Through some mechanism such as the portfolio adjustments by firms and households that were set forth in the Friedman-Meiselman and Friedman-Schwartz studies,<sup>14</sup> it appears that a prolonged reduction of the rate of monetary growth below the economy's potential real growth rate leads directly to a decline in the demand for autos and other durable goods, independently of credit availability or interest rate effects. Since the demand for instalment credit is largely derived

<sup>14</sup>See the citations in f.n. 1.

from the demand for consumer durables, this means that instalment credit demand also falls. Finance companies, faced with a reduced volume of instalment paper being generated by retail outlets and by fewer customers for cash loans, cut back their borrowings. Bank credit is usually more expensive, at the margin, than commercial paper, so not surprisingly this is the debt component that is cut back first.

*Auto Paper Leads in Responding to Monetary Restraint*

In addition to the debt statistics of sales finance companies we found support for this portfolio balance theory of monetary policy in the behavior of instalment credit growth rates, classified by type of lender and type of paper. We found a broad similarity among banks, sales finance companies, and other financial institutions in their auto paper growth rate movements--a similarity that holds for other types of instalment paper as well. Yet at every lender auto paper tends to lead the other types of paper in "responding" to monetary restraint. In view of the differences in supply conditions facing the various lenders, this is a surprising result. One would expect monetary restraint to impinge first on the lenders that are heavily dependent on borrowed funds--specifically, finance companies. Credit unions, on the other hand, are almost completely insulated from the banking system and open credit markets, so one might expect them to respond only sluggishly to monetary restraint. However, such has not been the case. Moreover, it seems surprising that a lender who is reducing his rate of expansion of auto paper during a period of restraint because of borrowing difficulties will nevertheless continue to increase the growth rate of his personal loans. If reduced availability or increased cost of funds is responsible for retardation of auto paper growth why does it not produce simultaneous retardation of growth of other types of instalment credit? The simple answer, it seems, is that demand fluctuations are the main explanation of variations in instalment credit growth rates, and these are linked to policy changes in ways that are still only dimly understood.

For a time in the 1950s and early 1960s a favorite topic of discussion among monetary specialists was the nonbank financial intermediary question. Does the existence of unregulated intermediaries constitute a serious leakage for conventional monetary policy? Should the Federal Reserve's conventional tools such as cash reserve requirements be applied to nonbank intermediaries? Should

the Fed be armed with selective controls that would apply to all providers of given types of credit? The present study does not provide conclusive answers to these questions. However, it does document one important exception to the leakage hypothesis. Further, there seems to be no valid case whatever for extending cash reserve requirements to any of the intermediaries that participate in instalment credit markets. As for selective controls, these have been advocated from time to time for a variety of reasons, and this study does not pretend to be relevant to all of them. However, insofar as the call for selective controls over instalment credit has been based on the leakage assumption, in the hope that monetary policy could be strengthened at one of its weakest points, it seems to have been without basis. Instalment credit and the institutions that provide it are highly responsive to monetary restraint, even if in a manner that has not generally been recognized.

## DISCUSSION

DANIEL H. BRILL

Professor Selden's paper does provide some comfort to central bankers and ex-central bankers. He finds that monetary restraint does indeed get reflected in a reduction in the growth of consumer instalment credit, and usually fairly promptly. I am sure the Fed is happy to be able to add the scalp of the consumer to that of the home buyer and the municipal finance officer on its list of victims of restraint.

But Professor Selden has more important things to do than test the overall efficacy of monetary restraint. The important question to which his paper is addressed is the path through which this impulse of restraint is transmitted, because, as he indicates, the alternative paths one might visualize can lead to different longer-run policy considerations. Two major alternative routes are considered. The first is the traditional view emphasizing constraints on the funds available to consumer credit lenders and therefore on the ability of consumers to obtain financing of the durable goods they still wish to acquire. The alternative is one in which the changes in monetary policy operate directly on consumer portfolio preferences, with restraint resulting in the reduction of consumer demands for nonfinancial assets and therefore in a reduction of demands for instalment credit. Professor Selden admits, and all reasonable men must agree, that these alternatives are not mutually exclusive, and that likely some of both forces are operative. But he concludes that the credit availability argument is not well supported by the evidence he can induce.

Mr. Brill is Senior Vice President, Commercial Credit Company.

As I see the paper, the principal evidence indicates that after adjusting for differences in product-mix among different types of lenders, all of the major categories of lenders seem to have been equally responsive to monetary restraint. Given major differences in fund sources -- the availability of funds to these different categories of lenders -- it appears unlikely that the inability of lenders to obtain funds can explain the consistency and timing of their response. Therefore the driving force must be the shift in consumer demand for goods induced by reduced rates of monetary growth, rather than a change in the supply of funds available for instalment credit.

The second category of evidence cited is in effect an elaboration of the first, with particular reference to sales finance companies. Professor Selden finds that monetary restraint does not appear to have had substantial effect on availability of funds to sales finance companies, a lender group accounting for over a fifth of all the instalment credit outstanding. Since he finds no signs of significant limitation on the access these companies had to traditional funds sources, he again concludes that demand factors rather than supply elements dominated.

In responding to these arguments, I must confess immediately that my information base is limited in both scope and time. I see the problem from the vantage point of only one lender, and that a large lender with alternatives in the use of funds. Further, I have had first hand experience in only one cycle and this happens to be a cycle which Professor Selden doesn't deal with extensively. So it may be that differences in the structure and practices in the industry between the earlier time periods he is examining and the most recent example might indeed be significant. I think, however, that there is a difference of some substance that might not easily be explained away in terms of structural shifts.

I think Professor Selden has overlooked or at least underemphasized two very important considerations in the credit extending process -- prices and costs. He recognizes that instalment credit is largely a price-fixed business. I quote from his paper: "Most instalment credit is now subject to strict regulation by the states. Regulated aspects include rates, loan size, location of place of business, and methods of rate quotation." That very definitely accords with the limited experience I have had. There is not very much downward deviation in rates from state imposed ceilings, even in periods of monetary ease. Also there is not much tendency among state regulatory bodies to increase the ceilings during periods of monetary restraint. Thus, profit margins on consumer lending swing



widely and cyclically. For finance companies with options for allocating funds away from the consumer area -- and this includes banks and many of the large and diversified sales finance companies, which together probably account for 50 to 60 percent of instalment credit outstanding -- rising money costs become the signal to look for other areas in which to employ funds. Increasingly, attention is focused on lending where the rates of return can be adjusted rapidly to increases in money costs. This includes variable rate business loans and leasing, which to an increasing extent are now tied to the prime rate for nonbank lenders, and also lending in areas where terms can include equity participation. Thus, there is a rationing effect by lenders who can move funds out of the consumer area.

Even within the consumer area, the area of instalment credit, there are options for rationing. Dick points out that he finds simultaneity of response within each of the major categories of credit. Auto paper tends to respond to restraint simultaneously at different classes of lenders, personal loans tend to respond with roughly the same timing, etc. Again, I would submit that this can be partly explained on a rationing basis. Auto lending is less profitable than other types of consumer credit lending. When money costs go up, the first reaction is to try to employ funds in areas where the margins can still be maintained, such as in personal loans.

I must admit that such cyclically-induced shifts in the use of funds tend to be marginal. Major changes in business, such as the massive withdrawal of independent finance companies from wholesale auto financing, are structural shifts taken only after profitability trends become overwhelmingly evident to management. Such massive shifts are not undertaken lightly. After all, there are structures to be maintained and skills to be preserved, pressure of customer relationships to be accommodated, and of course, internal competitive pressures to be considered. Moreover, management must be convinced that the consequences of monetary restraint will likely persist for some time and perhaps become accentuated before it becomes worthwhile to shift resources on a significant scale. But it does happen; there is rationing and the mechanisms for rationing are pretty well developed. Many banks and many finance companies have developed scoring systems for the determination of eligibility of customers for credit. These are systems which can be applied to purchased paper or direct loans; the minimum qualifying score for borrowers can be adjusted in order to bring lending volume closer to desired levels. I conclude that rationing of credit by lenders is feasible and is practiced, and it can occur without any rationing of credit to financial organizations.

I agree that the availability of traditional sources of funds to the finance companies tends to be maintained during periods of monetary restraint. The commercial paper market has continued to function -- at least before the Penn Central development. It has been my observation, too, that bank line availability does not tend to change markedly, and with good reason. Finance companies are banks' good customers. They pay handsomely for a banking service that is used only sparingly, for the name of the game is to have a large volume of bank lines (paid for by compensating balances) but to use high cost bank money only at seasonal peaks. So if there is a drive to ration, it is not principally in response to contractions of credit availability to finance companies. I wouldn't look for it in the data, and I am not surprised that Professor Selden didn't find it. It is merely a change in the relative profitability of different types of business.

Rationing can also take place not only for diversion to other forms of lending but also sometimes simply to cut back on gross growth. I realize that the growth syndrome is supposed to dominate business considerations, but sometimes one can make a rational business decision, at certain points in the cycle and under certain forecasts of the future, that it is not wise to expand any price-fixed category of loan. For example, during a period of monetary ease, if the prospects are for a significant rebound in money costs within the time period which would cover the life of loans put on the books today, it may be more profitable over the longer run to let the volume of price-fixed assets run down, rather than to compete for business at declining rates or else lower the quality standards. This observation isn't directly germane to the thrust of Professor Selden's investigation, which is focused on restraint effects. But I do note it because I think it reflects another instance of price and cost considerations resulting in rationing, a development which I think was pretty much ruled out in Dick's terms by his own observations.

I will repeat my apology for not being able to quantify the rationing effect of price and cost considerations. It may be that these are too recent developments, or too localized to a few alert banks or diversified finance companies, to be of sufficient magnitude to refute Dick's findings. But at least conceptually, it does provide an alternative explanation for some aspects of the cyclical behavior he has observed.

Nor would I deny that at certain stages of the cycle, demand influences become dominant in determining the growth of instalment credit. I would have thought that this would have been more likely to occur after the peak of monetary restraint had passed. Here, since

Dick doesn't reach this conclusion, I must question whether he has given the supply theory a fair shake in his analysis.

In two of the five periods he characterizes as those of restraint, there is almost a precise coincidence with the beginning of what the NBER terms a shaded area, an economic downturn. In 1953, Selden dates the beginning of monetary restraint in June while the NBER dates the beginning of the downturn in July. In 1957, he dates the beginning of restraint in August; the NBER downturn begins in July. This could be subject to many interpretations. One is that there has been almost instantaneous response of the economy to monetary restraint, but I think that sort of theorizing would out-Laffer Laffer. The other alternative is that the Fed has managed to choose the wrong time to begin monetary restraint in each cycle, and that I can't accept if for no other reason than institutional loyalties. I feel that if one tries to accept both the NBER cyclical dating and Dick's restraint dating, it might support the role of demand influences on consumer credit but it leaves us quite unclear as to whether demand is being driven by income or wealth effects of a downturn, or whether the dominant influence is the portfolio balance theory that Dick has suggested. This is the problem I find in two of the five periods examined.

In a third period, 1959-60, I don't think that adequate attention has been given to the impact of the extended steel strike -- the unavailability of some types of automobiles before that period was over -- and its effects on instalment credit. If you try to exclude the steel strike period from the analysis, then again I think you have the problem of a downturn coinciding with what Selden classes as monetary restraint. So I wind up feeling that the portfolio balance theory has not very strong statistical support -- it doesn't seem valid for two out of the five periods identified and I am a little suspicious about its validity in the third.

Professor Selden concludes that since monetary restraint operates directly on consumers' demands for durable goods and therefore on their demands for credit, there is no need to consider selective controls, either in the form of extending cash reserve requirements to nonbank intermediaries, or by fixing maximum terms and conditions of instalment credit.

I am not sure that my own analysis of his findings come to that happy conclusion. If the growth rates of consumer credit decline under restraint because some portion of the funds usually allocated to consumer credit is diverted to business lending, then I think the question of selective controls -- perhaps selective controls over

business lending -- still remains an issue of some moment for the Fed to consider. Obviously as an entrepreneur in the field I am not asking for selective controls, but I don't think the arguments advanced in this paper obviate the need for them.