The original documents are located in Box B77, folder "Liquidity" of the Arthur F. Burns Papers at the Gerald R. Ford Presidential Library.

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INTERNATIONAL LIQUIDITY

Russell J. Clark

INTRODUCTION

In the pamphlet inviting attendance at these meetings, the objective of the seminar was said to be to establish the current and future prospects of the Eurodollar and Eurobond markets and their implications for the industrialist as well as for the banking community. No-one will question the complexity of the subject before us, nor, I think, is there any doubt about its importance. My task, as I understand it, is not to discuss the mechanism of either the Eurodollar or theEurobond markets but rather to set the scene by talking about the international financial situation as it has developed and some of the factors that will influence its future progress. One of the significant aspects of the picture, and one directly relevant to the Eurodollar market, is international liquidity.

The Euro-currency, and in the particular the Euro-dollar, market is something that frequently arouses strong feelings. There are those who regard it as the source of very great dangers. We have, for example, recently been reminded by no less an authority than the former Governor of the Bank of England that this is a market in which there is no lender of last resort. There are also those who see in the Euro-dollar market evidence of the success of the U.S. in getting the world on to a dollar standard, and this arouses opposition on political and emotional, as well as on economic, grounds.

On the other hand, during the past month I have heard the Euro-dollar market described by two eminent authorities in most glowing terms. One, a representative of the City, spoke of it as the salvation of our monetary system. The other, a Continental banker, described it as the greatest private enterprise institution in the world, more important than many official institutions.

The size of the market is largely a matter for conjecture for the very good reason that, because it operates outside official jurisdiction, it is nobody's business either to make or collect returns of transactions. It is also a matter of dispute as to whether or not there is an important element of credit creation in this market. Milton Friedman, whose words on monetary matters command widespread respect, has recently accepted the size of the Euro-dollar market as around $30,000 million. Since he finds that no more than $9000 million can be accounted for as resulting from the U.S. balance-of-payments deficit and a further $5000 million as having come from official reserves, he attributes the remaining $15000 million - $16000 million in the market to the creation of credit by the participating financial institutions. If this were so, with no lender of last resort and the possibility of sudden surges of interest rates, there would certainly be a serious danger of instability, and even of disaster. The probability is, however, that though there has been some credit creation, it has been on nothing like the scale suggested by Professor Friedman. ~~Most~~

Most of the dollars for which he cannot account may well have come, over a long period, from non-official holdings in commercial banks and elsewhere. Be that as it may, whatever one's view of the disadvantages and dangers of this market, this at least can be said - it has facilitated a great deal of business that would otherwise have been frustrated for lack of funds.

TEMPORARY PHENOMENON?

The question then arises as to whether this very large and important market is to be regarded as a permanent, or only a temporary, feature of the international monetary scene. In part one's answer to this question depends on the view one takes of the future of the U.S. dollar as both a reserve and a vehicle currency. Leaving that on one side, however, perhaps one can be helped in finding the answer by recollecting the main factors that have given rise to the Euro-currency market.

It came into existence essentially as a commercial response to two things. First, restrictions imposed by national governments on the convertibility of other currencies, and hence on liquidity for international commercial transactions. This meant that there was potential import and export business round the world frustrated at the absence of suitable means of payment.

The second factor is that there were in the hands of non-residents big currency balances, primarily dollars, arising out of the deficit on the U.S. balance of payments, the holders of which were seeking more profitable employment for their funds than they could obtain by employing them in the U.S. It was the bringing of these two things together by foreign exchange dealers and brokers that resulted in the market which has now grown to such large proportions.

It seems to follow that if either of these factors disappeared the market would come to an end, or at least be severely curtailed. Thus, if all currencies were made completely convertible, the market in its present form would be unnecessary. If, on the other hand, foreign exchange restrictions of the severity that existed in the immediate post-war years were to be introduced, the market would be impossible.

Should the U.S. balance of payments swing from its present substantial deficit into surplus, dollar balances in the hands of non-residents would obviously be considerably reduced. Should the pattern of interest rates change markedly, it might become more profitable to employ dollar balances within the U.S. rather than use them externally.

Too much, however, should not be made of a possible shrinkage in the size of the market arising out of a correction of the U.S. deficit. In the hey-day of sterling, long before the expression "sterling balances" was invented, there were plenty of pounds

in the hands of non-residents of the United Kingdom. These were due, not to a British balance-of-payments deficit - we had a surplus - but to the fact that because people all over the world were doing business with Britain, they had to keep balances in sterling in London. These were also employed for the finance of trade between third countries.

Surely the same will be true of the dollar. The volume of the overseas trade of the U.S. and the place that the dollar has already acquired as a vehicle currency will ensure that there are always a lot of dollars innon-American ownership.

Nevertheless, if the measures already taken and those under discussion give us a reformed international monetary system, and if policies adopted by individual countries result in balance-of-payments equilibrium, there should be some easing of controls. In that case there would be a change in the Euro-currency market as we now know it which should, therefore, be regarded as having a limited, though not necessarily a very short, life.

THE MONETARY SYSTEM IN WHICH THE MARKET DEVELOPED

Reference to monetary restrictions and balance-of-payments deficits leads naturally to a consideration of the way in which the monetary system has developed. If a monetary system is to be judged by the extent to which it facilitates the international movement of goods and services, the arrangements made at Bretton Woods may be considered to have been remarkably successful. In the period since the War, the level of world trade has increased year by year almost without interruption, though not always at the same pace. Recently, however, some doubts have arisen as to whether the Bretton Woods system would, without modification, continue to meet the needs of the international business community. At times there has seemed to be the danger that trade and payments might be restricted in order to preserve a system that was intended to result in increased freedom of movement.

To understand why this should be necessary, look at the Bretton Woods arrangements and the assumptions that underlay them. An essential feature of the system is the fixing, within narrow limits, of rates of exchange. To meet the inevitable variations in the fortunes of the countries participating in the Bretton Woods arrangements, rates were permitted to move either side of their agreed parities by something like 1%. Of equal importance was the establishment of the International Monetary Fund itself, with reserves which, on conditions, it could lend to member countries to tide them over temporary deficits in their balances of payment.

There were three assumptions underlying these very practical arrangements for international monetary co-operation. These were that imbalances would normally be relatively small, that countries, both deficit and surplus, would take prompt domestic action to correct these imbalances, and that national reserves, supplemented by modest assistance from the I.M.F., would be sufficient to provide bridging finance.

It was, of course, recognised that occasionally things would not be normal. For one reason or another, the economy of a country, and consequently the exchange rate for its currency, might get seriously out of line with those of the rest of the world. This state of affairs was known as fundamental disequilibrium, for which the appropriate remedy was agreed to be the devaluation or revaluation of the currency concerned. In this connection it was assumed that, in consultation with the I.M.F., countries would readily recognise fundamental disequilibrium when it existed and would take the appropriate, and early, action with regard to their currencies.

All these underlying assumptions have, to a greater or less degree, proved false. For one reason or another, countries have not been willing to take prompt domestic action to correct a deficit or a surplus on their balance of payments. They have frequently been more concerned with maintaining full employment and growth than with correcting their balance of payments.

Then, with the growth of world trade, imbalances have, perhaps naturally, tended to become larger and national reserves have proved insufficient to finance them, especially in view of the dilatoriness of countries, surplus and deficit, in applying corrective measures.

Furthermore, again for a variety of reasons, there has been an unwillingness to make adjustments in exchange rates. Britain is, of course, one example of a country unwilling to devalue its currency, even after it had become pretty evident that the economy was in a state of fundamental disequilibrium. For a long time we defended the indefensible and in the process incurred an unmanageable burden of short-term debt and distorted the economy away from, rather than towards, export markets. We were not alone to blame for this, in that the other major countries were only too willing to provide the credits that permitted us to stave off a change in the parity. Had we had very much larger reserves, we could have run these down and at least have avoided incurring such substantial indebtedness.

Although the U.K. is the great example of a country sticking to the agreed parity far longer than was desirable, other countries have done the same. The result has been a series of international monetary crises, each more serious than its predecessor. Changes in parities have, more often than not, been made in crisis conditions and, because of the delays

in making them, have tended to be greater than was strictly speaking necessary. It is this failure of the Bretton Woods adjustable-peg system to work satisfactorily that has given rise to a call for greater flexibility in exchange rates.

EFFECTS OF THE EURO-CURRENCY MARKET IN THIS CONTEXT

It has now been conceded by most of the world's international monetary experts that the system needs to be reformed. First there is agreement that, in the sense that national reserves plus borrowing facilities are insufficient, there is a shortage of international liquidity. This by itself may not be important for businessmen, since commercial transactions are not financed from national reserves. Finance for commercial transactions is provided by commercial banks. That, however, is not the whole story. As I have already indicated, with the expansion in world trade, swings in national balances of payments have widened and if national reserves, either owned or borrowed, are insufficient to meet these, governments feel empowered to apply restrictions of one kind or another. This has certainly been the case with the U.K., with the result that many transactions can no longer be financed in sterling. Thus, at one remove, a shortage of liquidity in the national reserve sense, certainly affects business. The existence of the Euro-currency market has undoubtedly eased the problem

from the point of view of private enterprise. This is what the London banker meant when he said that the Euro-currency market had been the salvation of the system.

By the same token, the existence of this market has made it more difficult for governments to control domestic inflation. This may be bad from a central bank or treasury point of view but meanwhile it is good for private enterprise, at least in the short run. Less desirable from every point of view is the existence of a reservoir from which de-stabilising flows of funds can move rapidly from weak to strong currencies.

Another effect attributed to this international market in liquidity is some easing of the pressure on the U.S. balance of payments, certainly as measured on an official settlements basis. To the extent that this is true, it has permitted the U.S. to continue to run a deficit, which in their case involves a transfer of real resources from relatively poorer countries to the U.S. The market has also been the means by which American companies have been able, in spite of restrictions on the export of capital from the U.S., to purchase an ever-growing stake in Western Europe. For obvious reasons these effects do not command themselves to Europeans.

The Euro-currency market is also often condemned as being the channel through which high interest rates in one country are transmitted to another. While this may be true, it seems to me evident that even if there were no Euro-currency market

as we know it, the introduction of a tight monetary policy and high interest rates in the most important financial centre in the world would, by one means or another, make itself felt in other countries. Thus adverse criticism of the Euro-dollar market on this ground seems misplaced.

PRESENT CALM

The monetary system is at the moment enjoying a period of quite unexpected calm. This is a welcome change after the financial crises of the past two years and more. How long the present lull will last no-one can tell, but it may help in forming a judgment if one considers some of the factors that have produced it.

Undoubtedly the most important element is the exchange rate adjustments that have occurred, starting with the devaluation of the pound in November 1967 and ending with the revaluation of the D.Mark two months ago. These adjustments have resulted in all the major currencies looking far more credible than they have done for a long time, and this credibility has made speculation, particularly at current rates of interest, somewhat unattractive.

Secondly, in both the two main deficit countries, a measure of monetary and fiscal discipline has been introduced. In neither is it working as quickly as the authorities would like but in both there seems, for the moment at least, a political determination to see the policy through. ~~Whether or not we~~

Whether or not we shall like the results of hard-hitting deflationary policies, particularly in the U.S., remains to be seen.

Thirdly, there has been concerted action via the I.M.F. to increase international liquidity. A decision was taken at the I.M.F. Meetings in Washington at the end of September to activate the scheme for S.D.R.s. Thus on 1 January next the I.M.F. will make the first allocation of these, the total of the first issue being $3500 million, of which Britain's allocation will be something in excess of £400 million. This is significant in that it is the first sizeable addition to our owned reserves for a very long time.

Other countries who are participating in the scheme, and this means most, if not all, the 100 and more member countries of the I.M.F., will also receive allocations of S.D.R.s in accordance with the size of their quotas in the Fund.

Reserves will from now on consist of gold, foreign exchange, reserve positions with the I.M.F. and S.D.R.s. After the allocation of S.D.R.s, the total reserves for all member countries will on current figures be held in the following proportions: gold 49%, foreign exchange 39%, reserve positions in the I.M.F. 7½%, and S.D.R.s 4½%.

The 4½% for S.D.R.s makes them appear rather unimportant, yet 1 January will be an exciting day because something new in the way of international monetary collaboration will have begun.

International liquidity is to be deliberately created and the increases are to be jointly managed through the I.M.F. Whatever the ultimate outcome, the decision taken last September has certainly contributed to the measure of stability we now enjoy.

One can hardly refer to the present calm without some reference to gold. The behaviour of the free gold market is important both as a symptom of the calm and also as a promoter of continuing calm. What will happen if the free market price falls below $35, even for a short time, isbeing debated by the experts. Perhaps, for the purposes of national reserves, gold may become a sort of metallic S.D.R.

THE FUTURE

In thinking about the future of the Euro-currency market a number of factors require brief consideration. Having referred to S.D.R.s, one must raise the obvious question as to the prospects for this experiment. One may hope that it will be successful and that its success will help to make it possible for national governments to relax or even ultimately remove, their exchange controls; but will the experiment succeed? To me the omens seem good. S.D.R.s have not been hastily introduced as a stop-gap arrangement. They are the product of discussions between the I.M.F. and national governments over a period of five years and more.

They have been endorsed by all the major trading countries of the free world and their value in terms of gold is guaranteed jointly by the members of the I.M.F. Now we may expect that they will be accepted by governments in settlement of deficits and will be held by them in reserves on a par with the other main constituents, gold and foreign exchange. If this proves to be the case the resultant addition to international liquidity should increase confidence.

A second element in the present situation that must have a bearing on the future of the international monetary system is the study being conducted by the I.M.F. on the possibility of introducing greater flexibility into exchange rates. The ability of exchange rates to move would have the effect of making balance-of-payments deficits and surpluses to some extent self-correcting. Moreover, as there occurred a persistent movement, downwards or upwards, in an exchange rate it would be evidence to the entire world that some internal adjustment was required in the economy of the country concerned; and one might hope that governments might thereby be induced to take earlier corrective measures. If they did so, such measures would need to be less punitive than if they were left to the last possible moment, as has so often been the case in the past. With some flexibility in the exchange rate, accompanied by appropriate domestic policies, we in Britain might even get away from the abrupt stop-go policies that have plagued us for so long.

When thinking about the future of the Euro-currency market, one must include the prospects for the U.S. balance of payments. Even with an unprecedentedly severe monetary policy, this problem is proving very difficult of solution, and few people either inside or outside the U.S. seem to expect that the coming year will see anything other than a still larger deficit. One can only wish the Administration success in their endeavours while hoping that they will not produce a recession of exportable dimensions, nor allow balance-of-payments considerations to draw them into isolationist economic and financial policies.

Meanwhile, as I have already indicated, the tight monetary policy in the U.S. is bound to result in high rates of interest in the Euro-currency market. It also seems likely that when and if domestic policies in the U.S. are successful in reducing their deficit, some curtailment of the market may well result, with a consequent pressure on interest rates. That is unless some other country begins to run a deficit and its currency thereby becomes available to take the place of dollars.

There is one other factor of which brief account should be taken in this context. I refer to the European Economic Community and the efforts being made to carry integration further by monetary means. For many within the Community the goal is not only the further unification of monetary and fiscal policies, but also a single currency. This is undoubtedly a long way off but asa halfway house many would welcome an agreement that would permanently fix exchange rates between the currencies of the Six. To the extent that the Six are successful in achieving this aim, they will clearly have introduced a considerable element of stability into the world's monetary arrangements. In the process they may well have provided the world with a new reserve and vehicle currency to operate alongside the dollar, especially if the U.K. and sterling become a part of the European system.

CONCLUSION

These then are some of the aspects of the international monetary scene that affect the future of the Euro-currency market, itself an important feature of that scene. If the S.D.R. scheme succeeds in being a useful improvement in international liquidity, if greater flexibility is introduced into exchange rates, and if balance-of-payments disequilibria are brought under control, the need for national exchange controls will be reduced. With a relaxation of controls there would be a correspondingly reduced need for the Euro-currency market.

I think the prospects for some relaxation, while not bright, are considerably better than they were only a few months ago. Should the hoped-for improvements not materialise, however, and national controls be intensified, the Euro-currency market would become much more restricted. There might also be an attempt on the part of governments to secure some official control of the market.

Thus changes of some kind seem a distinct possibility. It would be surprising if the market simply went on getting bigger. Though these and other changes may occur, it seems safe to predict that for the foreseeable future the Euro-currency market will continue to provide a useful addition to liquidity and thus facilitate the international movement of goods and services.

[1970?]

A small group of the staff met at 12 Noon, Monday, May 18, in Mr. Holland's office preparatory to a meeting to be held in Chairman Burns' office on May 19. Those present were:

Messrs. Holland
R. Solomon
F. Solomon
Molony
Partee
Axilrod
Gramley
Keir
Ettin

Grimwood, Secretary

There was a discussion of the nature of any liquidity crisis that might arise, and the ways in which the crisis might affect broad sectors of financial markets. There was general agreement that institutions holding money or near money -- commercial banks, savings and loan associations, and mutual savings banks -- in the aggregate were not in a weak position and that contingency plans to aid institutions of this type are adequate.

Insurance companies are making policy loans at a record level, but cash flows apparently are adequate. Commitments out to six months are holding up and do not give any indication of a sharp pinch.

Some commercial paper issuers could find the market shrinking to the extent that rollovers of outstanding paper might be difficult; however, it is believed that most corporations have bank lines of credit which would cushion the immediate effects. This would have effects on bank loan expansion that would need to be taken account of by monetary policy.

Two sectors of the market were identified as vulnerable -- stock brokerage houses and mutual funds. Both are closely tied in with the stock market and are threatened with problems that are more of confidence than of liquidity.

Stock Brokerage Houses. These institutions are vulnerable to continued erosion of asset value. Currently there is no plan in place to meet a liquidity crises in the industry. A bill introduced by Senator Muskie would provide protection to customers by insuring brokers' liabilities to customers.

Contingent plans to funnel bank funds to brokerage firms would face two problems: (1) lack of a suitable asset against which to lend; and (2) a reluctance on the part of brokerage firms to acquire a fixed-dollar liability when asset value was declining.

Mutual funds. There was no indication that mutual funds are suffering net redemptions at this time, but it was recognized that large-scale and prolonged redemptions might force liquidations on a falling market. There is no plan in place to meet this possibility.

Plans to make conduit loans through banks would face the same problems described above.

It was recognized that some marginal alleviation of liquidity pressures could be provided by somewhat greater provision of reserves to support a moderate expansion of bank credit and deposits, but that such an action would have to be considered in the context of other objectives of monetary policy.

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

DATE 2/13/70

TO Chairman Burns

FROM J. CHARLES PARTEE

This report, prepared under the supervision of Ed Ettin, Chief of our Capital Markets Section, is in response to your request for an analysis of the liquidity situation relayed to me by Bob Holland. A Wall Street Journal roundup on the subject had appeared about 2 weeks ago.

BOARD OF GOVERNORS
OF THE
FEDERAL RESERVE SYSTEM

Office Correspondence

Date February 12, 1970.

To Mr. J. Charles Partee

Subject: Current liquidity and debt burden in the U.S. economy.

From Edward C. Ettin

As requested by you, the attached paper represents the staff's evaluation of the current state of liquidity and debt in the U.S. economy. While numerous tables summarize the available statistical information, the analysis was severely restricted by the lack of adequately disaggregated data. However, it is the conclusion of the paper that generally there seems to be no risk of widespread debt defaults or a liquidity crisis, although some savings and loan associations and, possibly, some nonfinancial corporations are now in a very exposed position. This conclusion rests on the twin assumptions of a less restrictive monetary policy in 1970 and a recession no longer or deeper than those that have already occurred in the postwar period.

Messdames Stockwell and Opper and Messrs. Fisher, Struble and Stone joined me in preparing this paper.

Edward C. Ettin

CURRENT LIQUIDITY AND DEBT BURDEN IN THE U.S. ECONOMY

A continuing concern of economists interested in the business cycle and stabilization policies has been the potential risks of a liquidity crisis both during periods of monetary restraint and the initial phase of recessions. Specific concern centers on the ability of both financial institutions and the nonfinancial sector to meet their commitments, and the effect of any inability to do so on both the economic structure and general confidence.

While no liquidity crisis has, in fact, developed in the U.S. economy in the postwar years, concerns regarding liquidity and failures by financial and nonfinancial institutions have become more pronounced in both the "credit crunch" of 1966 and during the current period. This paper, by reviewing selected major economic sectors, will discuss the state of current liquidity and debt burden in the U.S. economy in order to evaluate the risk of a liquidity crisis in 1970.

Three general qualifying factors, however, should be emphasized at the outset. First, the micro-data needed to disaggregate totals and averages do not generally exist, or at least are not available to Board staff. Thus, aggregate trends and ratios must be used for illumination, but they restrict the analyst to general, qualitative, statements.

Second, the analysis presented in this paper assumes that monetary policy will not be as restrictive in 1970 as in 1969. It also assumes that if a recession develops, it will not be any more severe than those that have occurred in the postwar period.

Third, there is a presumption that the Federal Reserve System stands willing and able to be a true "lender of last resort" to the entire financial system. Emergency credit procedures for the savings and loan industry already exist, and contingency plans have been considered for the savings banks and life insurance companies. With the long standing procedures for emergency loans to both member and nonmember commercial banks, it thus seems clear that those financial institutions most likely to face a liquidity crisis will be directly assisted by the Central Bank if and as assistance is needed. This does not mean that very marginal financial institutions will be immune from failure--although most of the depositors are insured. It does suggest that spiraling failures among financial institutions is not a likely event. It also suggests that the greatest risk may be in nonfinancial sectors, where, unfortunately, the least disaggregated data exist.

I. FINANCIAL INSTITUTIONS

In this section, developments at commercial banks, mutual savings banks, savings and loan associations, and life insurance companies

will be considered. By recent historical standards, each of these institutional groups is operating with far less than normal liquidity and flexibility, and--for some--pronounced further policy restraint could have serious repercussions.[1/] But, for this group of institutions, the onset of a modest recession--accompanied by a relaxation of monetary policy--would rather quickly improve their liquidity. Deposit inflows would expand as market rates decline, loan demands would moderate, loan repayments would probably accelerate as businesses converted some working capital to cash, and life insurance companies would face a smaller demand for policy loans.

Commercial Banks

Commercial bank liquidity declined considerably further during the 1960's. This is clearly suggested by the two measures of bank liquidity presented in Table 1. As may be observed, the ratio of loans to deposits rose from about 53 per cent at the end of 1960 to nearly 68 per cent by the end of 1969. A similar uptrend, although somewhat more moderate in slope, was displayed by the ratio of loans to total bank liabilities. The smaller advance in this latter ratio reflects the much greater use of non-deposit sources of funds that banks have made in recent years.

1/ Most--if not all--financial institutions are probably insolvent in an economic sense (i.e. the market value of their assets is less than their liabilities). They are not insolvent in a regulatory sense because governmental authority permits assets to be carried at cost. The questions of solvency are ignored in this paper.

Table 1

SELECTED LIQUIDITY MEASURES
All Commercial Banks

	Total loans as a per cent of:*	
	Total Deposits	Total Liabilities
1929	73.0	67.0
1933	51.0	48.0
1946	19.0	19.0
1960	53.0	51.0
1966	65.0	61.0
1967	60.0	57.0
1968	61.0	57.0
1969	68.0	60.0

* - All ratios computed with year-end data except 1966 ratios which are based on end-of-September data. This latter date was selected to give some indication of conditions during the period of financial strain in 1966. All ratios have been rounded to the nearest decimal point.

The decline in bank liquidity during the 1960's extended a downtrend that was begun soon after World War II. At the close of the War total loans amounted to only 19 per cent of total deposits and to a slightly smaller proportion of total liabilities. These early post-War levels were exceptionally low by historical standards, and each ratio has risen almost steadily since the end of the War, except during periods of recession when Federal Reserve monetary policy was easy and loan demand was weak. However, despite the nearly continuous rise,

both ratios remain below their 1929 values, and the banking system appears to be in a somewhat more liquid condition than before the financial collapse of 1929-1933.

To shift to a more recent period for comparison, according to most traditional measures of liquidity, the banking system appears to be in roughly the same liquidity position today as it was in during the credit crunch period of 1966. As may be seen in Table 1, the ratio of loans to deposits for all commercial banks was somewhat higher at the end of last year than during the fall of 1966. Conversely, the ratio of loans to total liabilities for all commercial banks was somewhat lower on the recent date than in 1966.

Essentially the same impression is conveyed by the data presented in Table 2. The present liquidity position at large weekly reporting banks appears somewhat lower if the ratio of liquid assets to total liabilities is used as a measure and somewhat higher if the ratio of loans to total liabilities is used. Both ratios suggest that country bank liquidity is presently somewhat lower than in 1966.

Table 2

SELECTED LIQUIDITY MEASURES
Large Banks and All other Banks

	1966[2/]	1967	1968	1969
Large weekly reporting banks				
Total loans/total liabilities	64.0	58.0	59.0	62.0
Total liquid assets[1/]/total liabilities	20.0	20.0	19.0	16.0
All other commercial banks				
Total loans/total liabilities	55.0	54.0	55.0	58.0
Total liquid assets[1/]/total liabilities	28.0	27.0	26.0	22.0

1/ Total liquid assets include assets that serve as legal reserves for Federal Reserve member bank, total U.S. Treasury securities, and short-term municipal securities.

2/ Data for 1966 are as of the end of September. Data for all other years are as of the end of the year.

It is a well recognized fact that a single liquidity measure, or for that matter even a group of measures, cannot provide a precise indication of the state of bank liquidity and changes therein. Between 1966 and 1969, for example, large banks in the United States discovered several new sources of funds of which the Euro-dollar market and the commercial paper market are the most important. Since these markets have enabled banks to weather a rather substantial deposit decline during

a period of considerable financial strain, it appears prudent to view the new ability of banks to tap these markets for supplementary funds as at least a partial offset to -- if not a partial cause of -- the further erosion in conventional portfolio liquidity. To be sure, only large banks have the capability of using these markets, but as the data in Table 2 suggest, liquidity conditions at smaller commercial banks are not quite as depleted as those at large banks.

The recent further decline in liquidity has not, of course, fundamentally affected the ability of the banking system to meet a serious currency drain, for this depends not on the composition of bank assets but rather on the willingness of the Federal Reserve System to act decisevely under such circumstances. Nonetheless, the depleted state of bank liquidity would no doubt make the System's job more difficult if a period of serious financial strain were to develop.

The reduced state of bank liquidity should also be of some concern for another reason. With asset portfolios already heavily weighted with loans, it seems unlikely that banks will be willing to continue making loans with funds obtained from the sale of securities, at least not at the same pace as in other recent months. Therefore, unless the total volume of bank credit begins to expand again, it appears that some bank borrowers may be hard pressed to find the credit on which their own planning had been based. Indeed, the increased use of high-cost non-deposit funds by banks suggests that when large deposit inflows once again materalize, they would first be allocated to repaying non-deposit borrowings, rather than to new loans.

Savings and Loan Associations

The quality and adequacy of liquidity at savings and loan associations is particularly difficult to document. Data on the term structure of liquid assets are virtually non-existent. Moreover, the adequacy of liquidity must be measured not only against outstanding deposit claims, but also against binding commitments to acquire future investments--again, something that in practice cannot be documented with precision.

In terms simply of "liquid assets"[1/] held, the savings and loan industry is probably in an adequate position even though its current situation is low by historic standards. Relative to the FHLBB's minimum requirements for liquid holdings-- which have been reduced in three steps since mid-1968 in order to bolster the volume of funds available for mortgage lending--the industry in aggregate has held a fairly steady dollar volume of "excess" liquid assets except for the 1966 lows, and currently is only marginally below the highs of the 1960's (Table 3).

However, as with all financial institutions, some of the liquid assets held by savings and loans could only be sold at substantial losses, even though they are carried on balance sheets at cost.

1/ S&L liquid assets are defined here as their holdings of cash and all U.S. Government securities. This is not entirely satisfactory because there is no indication available as to the maturity structure of their Governments; furthermore, FHLBB minimum liquidity regulations allow "liquid assets" to include holdings of US Government Agency issues of less than 5 years, although in fact these are not included in the "US Government" holdings and cannot be isolated out of the aggregate data.

Moreover, paralleling the FHLBB regulatory reductions, liquid holdings relative to deposit liabilities are now at record lows (Table 4).

TABLE 3

LIQUID ASSET HOLDINGS
SAVINGS AND LOAN ASSOCIATIONS
($ billions, not seasonally adjusted)

	Cash + U.S. Governments[1]				Excess Over Required[2]			
	1966	1967	1968	1969	1966	1967	1968	1969
End of								
Q I	11.1	11.6	12.9	12.7	3.3	3.5	4.0	4.0
Q II	10.7	12.0	12.9	12.0	2.8	3.6	3.9	3.9
Q III	10.1	12.1	12.1	10.9	2.3	3.6	3.7	2.9
Q IV	11.1	12.7[3]	12.5	11.2	3.1	4.0[3]	3.9	3.7

1/ All U.S. Government securities excluding Agency issues.
2/ Required liquid assets consist of the minimum volume of cash and Government securities that must be held based on deposit levels. (The ratio was 7 per cent until 1968 and has been reduced in three steps to the current 5.5 per cent.)
3/ High dollar level for the 1960's.

In an attempt to measure truly unencumbered funds, the "net" liquidity measure of Table 4 has been developed which relates liquid holdings less outstanding FHLBB advances to total deposit liabilities. By this measure--which reflects the reductions in required minimum liquid holdings, but primarily the record volume of funds advanced by the FHLBB during

Table 4

SAVINGS AND LOAN ASSOCIATIONS

LIQUIDITY RATIOS
(Per Cent)

End Of	Legal 1/					Net 2/				
	High For The 1960's 3/	1966	1967	1968	1969	High For The 1960's 3/	1966	1967	1968	1969
Q I	12.0	9.9	10.0	10.2	9.5	9.4	4.5	5.3	6.6	5.3
Q II	11.9	9.5	10.0	10.0	8.9 5/	8.9	3.0	6.2	6.0	3.9 5/
Q III	11.4	9.1	9.9	9.4 4/	8.1	8.1	2.2	6.3	5.3 4/	2.0
Q IV	12.0	9.8	10.2	9.5	8.2 6/	8.2	3.2	6.4	5.2	1.0 6/

1/ Ratio of cash and U.S. Governments to share capital.
2/ [Cash and U.S. Governments - Borrowing] / Share Capital.
3/ All highs occured in the 1960-62 period.
4/ Required minimum decreased from 7% to 6.5%.
5/ Required minimum decreased to 6.0%.
6/ Required minimum decreased to 5.5%

1969--the industry's net liquidity is at an all-time low. This is an extremely harsh test, of course, because in the event of any emergency the FHLB Board could waive repayment of at least some portion of these outstanding loans.

In addition, however, California S&L's have been a special problem case for some time; as indicated in Table 5, since 1964 they have placed extraordinary reliance on borrowed funds--which by the end of 1969 amounted to double their holdings of cash and US Governments. These particular associations have characteristically been aggressively growth-and profit-motivated--many are stock, as opposed to mutual companies--and they had used borrowed funds not so much for liquidity purposes as for profit-oriented leverage. This behavior was fairly lucrative in the financial environment in which they had operated--with higher-than-average mortgage yields as well as above average offering rates. Since the adoption of rate ceilings in 1966, these institutions have had particular difficulty in maintaining deposits since they had counted heavily on out-of-State funds attracted at above average rates. Their resultant lower deposit growth has, consequently, accelerated their need to borrow from the FHLB; as opposed to pre-1966 borrowing, which had been used for aggressive growth, more recent borrowing has been required to supplement lost deposits.

TABLE 5

CALIFORNIA INSURED S&L's
LIQUIDITY AND BORROWED FUNDS
(billions of dollars held at year end)

End of	Borrowed Funds	Liquid Assets[1/]	Excess Liquid Assets[2/]
1960	.6	1.0	.4
1961	.9	1.3	.5
1962	1.0	1.6	.7
1963	1.4	1.8	.6
1964	1.9	1.9	.5
1965	2.2	1.9	.4
1966	2.9	1.9	.4
1967	1.9	2.1	.5
1968	2.3	2.1	.5
1969	3.7	1.8	.5

1/ Cash plus U.S. Governments of any maturity.
2/ Holdings of "liquid assets" (as defined above) in excess of the minimum required by the FHLBB.

The Federal Home Loan Bank System during 1969 provided an unprecendented volume of funds to the entire savings and loan industry in order to maintain mortgage activity. As indicated in Table 6, such lending was equal to deposit growth at the S&L's in 1969. The FHLB currently holds about $1 billion in liquid assets available for future lending (Table 7). This amount is somewhat below recent "normal" levels, but probably represents an adequate working balance--particularly in light of the FHLBB's market borrowing scheduled for the first quarter, the maximum $4 billion special borrowing privilege it now has with the Treasury, and the emergency credit agreement arranged with the FRB. It should be noted that the FHLBB's own obligations are very short term, on average, and maintenance of anything like the recent pace of advances to the S&L industry will require not only additional borrowing of new money but also a considerable amount of refunding over the near future.

Despite the ability of the FHLB to maintain or increase the aggregate volume of advances, the distribution of lending presents some special problems. While 40 per cent of insured savings and loans had no borrowed funds outstandings as of November 1969, fully 12 per cent--holding nearly one-fourth of industry deposits--had advances outstanding that amounted to more than 10 per cent of their deposits (Table 8).[1/] Under existing FHLBB regulations, these is a 17.5 per cent maximum on the allowable ratio to savings capital of advances for expansion purposes; advances to meet withdrawals are currently limited by FHLBB regulation to a maximum of 50 per cent

1/ These associations are not exclusively located in California; there are some in Illinois and in the Southeastern states that also have high borrowed funds ratios.

Table 6

INSURED SAVINGS AND LOAN ASSOCIATIONS
SOURCES AND USES OF FUNDS

(Billions of Dollars)

	1964	1965	1966	1967	1968	1969
Deposit accounts 1/	10.3	8.2	3.5	10.5	7.3	4.0
Borrowed funds	.6	.8	1.0	-2.8	1.0	4.1
Subtotal	10.9	9.0	4.5	7.7	8.3	8.1
Mortgage sales and repayments 2/	16.0	17.0	13.8	14.2	14.5	14.1
Reduction in liquid assets 3/	-.6	-.7	.1	-1.6	--	1.3
Other sources, net 4/	-.1	.4	-.9	1.3	.8	--
Gross mortgage acquisitions	26.2	25.7	17.5	21.6	23.6	23.4

1/ Includes interest credited.
2/ Includes funds from sales of loans and participations, loan repayments, and miscellaneous credits. Excludes interest, taxes, etc.
3/ A drawdown of liquid assets (cash and government holdings) is shown as a positive source of funds and an increase as a negative source.
4/ "Other" includes the net amount of loans in process, allocations to reserves and surplus, accruals of dividends and other loans and investments.
Note: Components may not add to totals because of rounding.

Table 7

LIQUIDITY OF THE FHLB SYSTEM
(Billions of Dollars)

End Of	1966	1967 1/	1968	1969
Q I	.9	2.5	1.8	1.4
Q II	1.3	2.4	1.9	1.1
Q III	1.2	2.0	1.4	1.1
Q IV	1.8	1.6	1.5	1.2

1/ The highest level of FHLB liquidity in the 1960's.

TABLE 8

RATIO OF FHLB ADVANCES TO SAVINGS CAPITAL
INSURED SAVINGS & LOAN ASSOCIATIONS
November, 1969

Ratio of FHLB Advances to Savings Capital (Per cent)	Number of Associations	Per cent of Total	Per cent of Total Advances	Percent of Total Savings Capital
over 17.5	90	2.0	23.3	5.8
15.1-17.4	61	1.4	6.6	2.8
10.1-15.0	385	8.7	29.5	15.5
5.0 - 10.0	840	18.9	29.4	26.5
less than 4.9	1,286	29.0	11.2	27.8
no borrowing	1,778	40.0	0	21.6
Total	4,440	100.0	100.0	100.0

Source: FHLBB

of savings capital. It can be seen in Table 8 that associations holding nearly 6 per cent of industry deposits had already exceeded the 17.5 per cent-of-savings limitation; this is not only increased significantly from a year earlier, but given the large volume of funds advanced during December, it is very likely that current data would show an even more serious situation. To be sure, some of the associations included in this upper category are "supervisory cases" not necessarily borrowing heavily because of current financial conditions.

However, even allowing for this and assuming the FHLBB would relax its maximum limitations, there is probably a practical limit on the amount of borrowed funds that could be absorbed in the near future by those individual S&L's that probably have the most need for external funds--those currently in the over-10-per cent borrowing/deposit category. Thus, while aggregated ratios indicate a fair amount of borrowing leeway for the industry, there appears to be far less flexibility when consideration is made of the already high borrowing by those S&L's most likely to continue to need borrowed funds.

Moreover, the industry's commitment position is such that in the absence of a significant improvement in deposit inflows, savings and loans will soon have to draw down their liquid asset balances further and/or continue their large volume of borrowings from the FHLB System. Despite a steady reduction since mid-1969, the total amount of commitments currently outstanding for future acquisition of mortgages looms quite large relative to recent cash flows (Table 9). Unless takedowns of these commitments are scheduled further into the future than the normal 3-month average, this factor represents a potentially significant drain on the liquid resources of either the S&L's or the FHLB System.

Table 9

SAVINGS AND LOAN ASSOCIATIONS

RATIO OF OUTSTANDING MORTGAGE COMMITMENTS

TO RECENT CASH FLOW 1/

	Q I	Q II	Q III	Q IV
1966	.92	1.03 2/	1.13	1.09
1967	.89	.93	.91	.99
1968	1.09	1.13	1.14	1.12
1969	1.19	1.20	1.23	1.26
Memo:				
Outstanding mortgage commitments (average outstanding over the quarter)(Billions of dollars).				
1966	5.4	4.8	3.8	3.3
1967	3.5	4.3	5.3	5.8
1968	5.9	6.0	6.1	6.5
1969	6.9	7.1	6.5	6.0

1/ Ratios computed from seasonally adjusted quarterly data. Average outstanding mortgage commitments divided by total cash flow during the same quarter. This measure is distorted to the extent that there is a difference between cash flow expected at the time the commitments are scheduled for disbursement and the current quarter cash flow used for these ratios.

2/ The second quarter of 1966 marked the first time that this ratio exceeded 1.0 in the 1960's (the period for which these data have been maintained).

Mutual savings banks

The kind of detailed analysis just presented for the savings and loan industry is not possible for the mutual savings banks because of limited data availability. However, mutual savings banks tend to operate on a far more self-sufficient basis than do savings and loan associations. Very few savings banks have exercised their option to join the FHLB System, and very limited use is made of borrowed funds, even though nearly all have arranged lines of credit with commercial banks. New York and Massachusetts institutions, in addition, have access to state-established liquid sources.1/

As has been the case with commercial banks, liquidity ratios at savings banks have declined throughout the postwar period essentially without interruption (Table 10). In large part, of course, this trend reflects a basic adjustment in portfolio management from war inflated finance, accelerated by the rising level of market yields in the 1960's. The liquidity measurements in Table 10 do not reflect all of the portfolio liquidity of the savings banks. In the last few years, the savings banks have acquired some Agency securities and since 1967 have acquired almost $4 billion of corporate bonds. While, of course, not all of the latter can be readily sold without loss, these securities do augment the general marketability of their portfolios.

1/ The Mutual Savings Central Fund, operating for Massachusetts savings banks as both an insuring agency and a lender of last resort, has a small fund available for loans to savings banks which has not been used since the late 1930's. In New York, the Saving Bank Trust Company operates as a central bank for savings banks in the state and typically has a moderate volume of repurchase arrangements on loans held by these institutions.

TABLE 10

LIQUID ASSETS[1/]
HELD BY ALL MUTUAL SAVINGS BANKS
December

	Liquid assets	
	$ billions	as % of deposits
1945	11.3	73.4
1950	11.8	58.8
1955	9.4	33.5
1960	7.1	19.6
1963	6.8	15.2
1964	6.8	13.9
1965	6.5	12.4
1966	5.7	10.4
1967	5.3	8.9
1968	4.8	7.5
1969	4.2	6.3

1/ Cash plus U.S. Government securities.

Data are available, since 1966, for all securities maturing in less than one year held by the New York State mutual savings banks, a group accounting for 60 per cent of the industry's deposits. As indicated in Table 11, this ratio, while declining, has been relatively more stable than the total holdings of cash and government securities held by all savings banks.

With their recent relative stability in short-term liquid asset holdings, their more marketable portfolio, and access to borrowing at commercial banks and state-established liquid sources, savings banks as a group do not appear to be overly exposed at this time.

TABLE 11

NEW YORK STATE MUTUAL SAVINGS BANKS[1/]

Cash[2/] plus Securities[3/] Maturing Within 1 Year
as Per cent of Total Assets

End of	1966	1967	1968	1969
Q I	3.5	3.9	3.6	3.4
Q II	3.3	3.6	3.5	3.1
Q III	3.5	3.2	3.4	2.8
Q IV	3.7	3.5	3.1	3.0

1/ These banks account for about 60 per cent of industry deposits.
2/ Cash and due from banks.
3/ Includes any securities--Governments, corporates, etc.--maturing within one year.

Life insurance companies

The life insurance industry's holdings of liquid assets are not particularly relevant. The unique and generally predictable nature of their cash flows suggests that analysis of the liquidity position of life insurance companies is appropriately directed to their commitments to acquire investments relative to reasonable estimates of the funds available for such acquisitions. Thus, the industry's disruption during the 1966 "credit crunch" was a result primarily of unexpectedly large policy loan claims diverting loanable funds at a time when life insurance companies were relatively "fully committed".

As indicated in Table 12, in late 1965 and early 1966 the industry had allowed very little flexibility for unexpected shortfalls in its projected fund flows. Since that time, however, the industry has been quite careful in maintaining a margin between projected claims on its cash flow funds and its best estimates of the

TABLE 12

LIFE INSURANCE COMPANIES
SIX-MONTH PROJECTIONS 1/
COMMITMENT DISBURSEMENTS AS PER CENT OF EXPECTED AVAILABLE FUNDS

	I	II	III	IV
1965	76	82	82	89
1966	89	89	89	84
1967	75	74	74	79
1968	79	75	72	75
1969	71	75	76	78p/

1/ This represents what the reporting companies expected in takedowns of commitments as a per cent of funds available for investment. The sample represents about two-thirds of life insurance industry assets.

p/ preliminary

funds that would be available for lending. Since 1966, life insurance companies have been able to meet unprecedented policy loan demands and cope with other shortfalls in their loanable funds without resorting to extraordinary cash sources, primarily because of this conscious leeway maintained in their commitment scheduling.

In 1969, the industry had experienced a marked retardation in its loanable funds, as shown in Table 13. It can be seen that despite the large drain from policy loans, sales of securities have not been as large in any one year as they were in 1966. However, cumulatively they have sold a very large volume of securities in recent years to provide funds for new lending, and there is evidence that these sales have entailed considerable loss. It is probable that there now remains an increasingly limited degree of marketability of securities still in portfolio.

The latest evidence suggests that, although the volume of policy loans remain high, it appears to have stablized. With the flexibility now built into the temporal pattern of their commitment schedules, and with the likelihood of no further unexpected shortfall in their loanable funds, life companies will probably not have to resort to their own portfolios to any great extent to meet their commitments.

II. NONFINANCIAL SECTOR

In this section, the household and nonfinancial sectors, and financing of non-residential properties, will be discussed. As in the financial sectors, the impact of restrictive monetary policies is readily apparent.

Table 13

SOURCES OF FUNDS INVESTED BY LIFE INSURANCE COMPANIES 1/

(Billions of Dollars)

	1964	1965	1966	1967	1968	1969p/
Ledger assets 2/	7.0	8.0	7.8	8.4	8.5	8.0
Return flows 3/	7.7	8.4	7.3	7.4	7.8	7.9
Security sales 4/	1.8	2.4	3.4	2.0	2.2	2.0
Policy loans	-.7	-.7	-1.7	-1.2	-1.4	-2.7
Other 5/	.9	.1	.1	.2	.2	.5
TOTAL	16.7	18.2	16.9	16.8	17.3	15.7

1/ Estimated for the entire industry, with the components derived from a sample representing 80 per cent of industry assets.
2/ Net increase in ledger assets reflects primarily receipts from insurance premiums and net investment income (including net gain or loss from securities sold).
3/ Return flows from existing mortgage and securities holdings.
4/ Consists only of sales out of long-term portfolio; reflects primarily sales of non-Government securities.
5/ "Other" includes miscellaneous sources of funds and adjustments to liquid assets (cash, commercial paper, and short-term Governments).
p/ Preliminary.

Mortgage Debt on Multifamily and Commercial Properties.

A slowdown in general economic growth could impinge on some $128 billion in mortgage debt outstanding against multifamily and commercial properties, on which average default rates are probably unusually low at the present time. This debt covers a broad range of types of structures(such as apartment houses, office buildings, industrial facilities, and churches), and is distributed among a wide variety of types of borrowers (individuals, partnerships, and corporations, including nonprofit institutions).

Virtually no information exists about the incidence of this debt, whether in the aggregate or in detail. There are also few statistics bearing on the ability of the various types of borrowers to meet scheduled debt payments. In the absence of reliable data which would illuminate these aspects of the issue directly, some broad observations of an indirect nature must suffice.

During 1969, mortgage debt secured by multifamily and commercial properties expanded at rates of 9 and 11 per cent, respectively (Table 14). These rates of growth were essentially unchanged from the annual averages prevailing since the mid-1960's for mortgages on multifamily properties, and over the entire postwar period for mortgages on commercial properties. By the end of last year, about a third of the total outstanding amount of both types of indebtedness had apparently been added in the preceding 5 years, and hence was relatively unseasoned and prone to default.

Table 14

Mortgage Dept on Multifamily
And Commercial Properties

(Dollar Amounts in Billions)

End of Year	Multifamily		Commercial	
	Amount Outstanding	Annual Percentage Rate of Growth	Amount Outstanding	Annual Percentage Rate of Growth
1945	$ 5.7	--	$ 6.4	--
1950	10.1	12	11.4	12
1955	14.3	7	18.3	10
1960	20.3	7	32.4	12
1965	37.2	13	54.4	11
1966	40.3	8	60.1	10
1967	43.9	9	64.8	11
1968	47.3	8	71.4	10
1969p/	51.7	9	76.5	11

p/ Preliminary.

Source: Federal Reserve estimates. "Commercial" includes commercial, industrial, institutional, and other types of private nonfarm nonresidential properties.

As a rule, multifamily and commercial properties securing mortgage debt are rather small in size, despite the dramatic exceptions of skyscrapers and shopping centers. Their modest scale can expose them to sharp change in occupancy rates whenever a few occupants move in or out. As a result, gross operating revenues available to meet operating expenses and principal and interest payments are inherently volatile. Even so, it is common trade practice to set aside reserves against only

those debt service payments due in the period immediately ahead.

While there is no statistical evidence bearing on the point, mortgaged multifamily properties may, on balance, be somewhat more subject to volatile earnings than mortgaged commercial properties. Nearly all owners of apartment houses depend solely on the course of market rents and occupancy to generate revenues to meet their current and capital expenses. While the short term of apartment leases makes for flexibility in adjusting scheduled rents to market conditions (including hopefully changes in operating expenses), it also makes earnings available for debt service more vulnerable to any curtailment in demand for apartment space.

Under current conditions of unusually low vacancy rates however, the problem of reduced demand for apartment space has not been pressing during a period when consumer incomes, in general, have been rising. In fact, vacancy rates in rental-type residential units have recently been running at the lowest average level in more than a decade.

TABLE 15

VACANCY RATES IN RENTAL HOUSING
(in per cent)

Quarter		Average by Type of Structure: All types	Average by Type of Structure: 5-or-more units only
1957	II	4.9	n.a.
1958	II	6.0	n.a.
1960	II	7.3	8.3[a]
1961	I	8.0	n.a.
1968	III	5.4	6.4
1969	III	5.0	6.6

a) Census of Housing, April.
Source: Census Bureau, current housing vacancy reports, series beginning in 1956.

Commercial properties, in contrast, include a large number of structures occupied by their owners, who can draw on income from sources other than property operation in order to pay current and capital outlays on the real estate. Leases of space in rented structures often span a number of years, and can thus assure greater stability in occupancy and gross income during the term of the lease. On the other hand, such leases may make it more difficult to pass on quickly (in higher rents) any increases in expenses of operating the structure. But use of escalation-type clauses in longer-term leases, under which

rents are tied to designated operating expenses, has become a widespread practice in the 1960's, reducing the volalitity of the cash flow available for mortgage payments.

Data on new mortgage commitments of $100,000 and over, approved by certain life insurance companies on multifamily and commercial properties, indicate that the average debt-coverage ratio on rental structures has drifted down since 1965. Rather than a weakening in borrower ability to pay, the downtrend has reflected primarily the rationing of commitments among stronger borrowers eligible for larger loans that typically carry debt-coverage ratios that are lower than those associated with smaller-sized loans. By the third quarter of 1969 (the latest available data), an average margin of 27 per cent still remained between the level of expected annual property earnings and the amount of scheduled annual payments for debt service.

TABLE 16

New Commitments of $100,000 and over on Multifamily and Nonresidential Mortgages Made by 15 Life Insurance Companies

Third quarter	Average amount of loan commitment (millions of dollars)	Average debt coverage ratio
1965	0.9	1.45
1966	0.9	1.34
1967	1.0	1.32
1968	1.2	1.29
1969	1.7	1.27

Source: Confidential LIAA series for companies with slightly more than half of the nonfarm mortgages held by all U.S. life insurance companies. The average debt coverage ratio applies only to fully amortized level-payment loans for which an estimate of prospective net stabilized earnings (earnings after vacancy allowance+operating expenses but before income taxes, depreciation and debt service) is available.

The burden of mortgage indebtedness against multifamily and commercial properties has been accentuated in recent years by a growing, but still probably quite limited, volume of mortgage agreements incorporating so-called "equity kickers." These agreements typically call for interest, in addition to the contract interest rate, to be paid contingent on future increases in property earnings. The most common practice appears to require some increase in contingent interest payments over and above a specific level of gross earnings. For multifamily properties on which operating expenses often absorb considerably more than half of gross earnings, even at full occupancy, "equity kickers" may pose more of a threat than in the case of rental commercial properties with typically lower operating expense ratios. In either case, it seems probable that in event of borrower difficulty in meeting these contingent payments, lenders would likely modify the agreement rather than foreclose the mortgage. Such modification agreements are not uncommon in the trade even on mortgages bearing no equity kickers.

A moderate slowdown in the rate of economic growth would come at a time when delinquency rates on multifamily and commercial mortgages appear to be historically low, judging from information from a limited number of life insurance companies. The higher average for multifamily properties, indicated in Table 17, primarily reflects greater-than-average difficulties with FHA-insured mortgages. Such loans may

relate, in a significant number of cases, to apartment houses in slum areas or to properties in which occupancy is limited to disadvantaged families.

TABLE 17

Mortgage Delinquency Rates by Type of Structure, Reporting Life Insurance Companies (in per cent)

Third quarter	Type of Structure		
	1-4 Family	Multifamily	Nonresidential
1965	1.11	2.00	.68
1966	.95	2.28	.47
1967	1.01	.94	.76
1968	.72	.99	.64
1969	.75	.92	.36

Source: LIAA confidential reports for companies holding from 75 to 80 per cent of the total assets of all U.S. life insurance companies. Data not available prior to 1965. A delinquent loan is a city (nonfarm) mortgage with two or more monthly interest payments past due.

But with demand for space in both apartment houses and nonresidential structures apparently strong and with costs of buying and operating owner-occupied homes continuing to increase, a moderate slackening in general economic growth, of limited duration, would not appear to pose any undue threat, on the average, to either type of property. Experience with vacancy rates in rental housing in the 1957-58 and 1960-61 recession periods tends to support this generalization.

One remaining unknown in the picture, however, is how large a volume of newly-completed space is likely to come onto the market over the near term. A record number of new dwellings in apartment houses was started last year. Trade reports emphasize that substantial new office-building construction is coming to completion in a number of major cities. These newly-completed units will, of course, provide an important test of local markets, for both new and existing properties.

Nonfinancial Corporations

In the years since 1964, nonfinancial corporations have relied much more heavily on funds raised in credit markets than they did in the late 1950's and early sixties. As may be seen from Table 18, net new borrowing--in the form of bonds, mortgages, commercial paper, and loans from banks and other lenders--have financed 29 per cent of corporate outlays in each year since 1967, compared with only 17 per cent in 1964. In the past five years, the nonfinancial corporate sector has on balance incurred about $140 billion of additional interest-bearing debt and another $70 billion through increases in other liabilities--primarily trade debt; undistributed profits and net new stock issues, on the other hand, have together totaled only about one-half the increase in total liabilities over this period.

The increased reliance on borrowed funds has of course changed the structure of corporate balance sheets. Table 19 shows a percentage distribution of total resources of manufacturing corporations (the only part of the nonfiancial corporate sector for which full balance sheet

Table 18

Percentage Distribution of Corporate Sources of Funds
Flow-of-Funds, Nonfinancial Corporations

Source	1950-1963 Average	1964	1965	1966	1967	1968	1969
Internal sources 1/	63.8	70.3	60.8	60.8	65.0	57.2	53.0
Net stock issues	3.2	1.9	2/	1.2	2.4	-.7	2.2
Net borrowing	18.7	17.1	22.0	24.1	28.7	28.8	29.1
Bonds & mortgages	13.4	10.6	10.0	14.3	20.4	16.9	14.3
Bank loans n.e.c.	4.7	5.3	11.4	8.3	6.8	8.7	7.2
Other loans	0.6	1.3	0.6	1.4	1.5	3.3	7.7
Other liabilities 3/	14.3	10.6	17.1	13.9	3.9	14.8	15.6

1/ Undistributed profits (after allowance for inventory valuation adjustment and inclusion of foreign branch profits), plus capital consumption allowances.
2/ Less than 0.5 per cent.
3/ Accrued income tax liabilities, trade debt, and miscellaneous liabilities.

Table 19

Liabilities and Equity of Manufacturing Corporations
Percentage Distribution, End of Year

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969 1/
Short-term bank loans 2/	3.9	3.6	3.6	3.5	3.6	4.1	4.9	4.9	5.0	5.8
Trade debt & Federal tax liabilities	12.3	12.7	12.9	13.3	13.5	13.2	13.2	12.0	12.3	11.6
Other short-term liabilities	4.6	4.8	4.9	5.1	5.1	6.1	6.4	6.5	6.7	7.1
Total Curr. Liabilities	20.8	21.2	21.5	21.9	22.3	23.4	24.4	23.3	23.9	24.5
Long-term debt	12.2	12.5	12.6	12.6	12.6	13.1	14.0	15.5	16.3	16.7
Other non-curr. liabilities	1.4	1.6	1.8	2.0	2.2	2.7	2.8	3.0	3.6	3.7
Total long-term liabilities	13.6	14.1	14.4	14.6	14.8	15.8	16.8	18.5	19.9	20
Total Liabilities	34.5	35.2	35.8	36.4	37.0	39.2	41.1	41.8	43.8	44.9
Equity	65.5	64.8	64.2	63.6	63.0	60.8	58.9	58.2	56.2	55.1

1/ End of third quarter (latest available).
2/ Includes current instalments of long-term bank and nonbank debt.
Source: Quarterly Financial Report, U.S. Manufacturing Corporations.

data are available for recent years). As may be seen from the table, the relative importance of equity in manufacturing capital accounts declined gradually during the early sixties and more rapidly after 1964, though the growth in the dollar volume of manufacturer's equity compared more favorably with the expansion in their total liabilities than was the case for all nonfiancial corporations.

At some point, a sharply reduced margin of equity for corporations as a group means that the number of individual companies dangerously over-burdened with debt has become disturbingly large. Whether the decline in the equity share from 63 per cent of total manufacturing resources at the end of 1964 to 55 per cent in late 1969 means that such a point has been reached is impossible to say, though a mitigating factor may be that the corresponding rise in the liabilities proportion has been largely in long-rather than short-term debt. On the other hand, flow-of-funds estimates for all non-financial corporations (Table 20) show an increased importance of shorter-term borrowing; moreover, 1969--a year when many borrowers attempted to avoid being locked in to high interest rates--was marked by substantial reliance on sources of relatively short-term credit (e.g. banks and the commercial paper market) to finance fixed investment, which will only gradually generate the return flows to retire the debts. The staff expects a considerable share of this short-term debt to be funded in capital markets in 1970.

Table 20

Percentage Distribution of Corporate Liabilities 1/
Flow-of-Funds, Nonfinancial Corporations

	1955	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
Credit market instr.	50.2	54.2	57.1	56.8	56.6	56.8	56.7	57.1	59.2	59.7	60.3
Bonds & Mtges.	36.7	39.2	41.8	41.7	41.3	41.1	39.6	39.4	41.0	40.7	39.9
Bank loans, n.e.c.	12.4	13.4	13.5	13.4	13.7	13.9	15.4	15.8	16.2	16.5	16.5
Other loans	1.1	1.6	1.8	1.7	1.6	1.7	1.8	1.9	2.1	2.5	3.9
Other liabilities	49.8	45.8	42.9	43.2	43.4	43.2	43.3	42.9	40.8	40.3	39.8
Federal tax liabilities	10.0	5.0	5.4	5.2	5.4	5.4	5.4	5.0	3.7	4.1	4.0
Trade debt	24.5	23.8	24.5	24.2	24.0	23.7	23.8	23.5	22.4	21.4	21.1
Other	15.2	17.0	13.0	13.8	14.0	14.2	14.1	14.4	14.7	14.8	14.6

1/ Based on end-of-year outstandings.

Many corporations are also reported to be planning issues of equity securities this year, to moderate the problem of refinancing short-term debt, to redress the structure of their balance sheets, and to lessen the drain of interest payments on their profits. The latter drain has apparently become quite substantial. While data on gross interest payments are not presently available, even the ratio of net interest payments (estimated amount of interest paid less interest received) to profits before such net payments and before taxes has risen dramatically since 1965 (Table 21). Similar ratios based on gross interest payments would undoubtedly show an even faster rise to a significantly higher level. For some companies--particularly certain conglomerates--interest payments in 1969 exceeded current profits, as the assets acquired with borrowed funds failed to generate the expected income.

The ability of corporations to carry their debt burden is adversely affected by the erosion in their liquidity positions. Corporate liquidity ratios reached new lows in 1969--as they did in every recent year except 1968 (Table 22). It is impossible to say what level of relative liquidity is dangerously low; throughout the whole post-war period, liquidity ratios have levelled off from time to time but there has been no floor they did not eventually pierce--without disaster.

Reflecting the more aggressive money management of corporate treasurers, innovations in available liquid financial assets, and rising yields, the composition of corporate liquid assets has changed dramatically

Table 21

Net Interest Paid by Nonfiancial Corporations[1/]

Year	Amount (Bill.$)	As per cent of: Nonfin. Corp. GNP	As per cent of: Nonfin. corp. profits. bef. int. & taxes
1955	1.6	0.7	2.0
1956	1.7	0.7	3.9
1957	2.2	0.9	5.2
1958	2.7	1.1	7.4
1959	2.7	1.0	5.9
1960	3.0	1.1	7.0
1961	3.5	1.3	8.0
1962	4.1	1.4	8.4
1963	4.5	1.4	8.4
1964	5.1	1.5	8.4
1965	6.0	1.6	8.4
1966	7.3	1.8	9.3
1967	9.1	2.1	12.1
1968	10.9	2.3	12.6
1969P	12.0	2.4	13.4

1/ Net interest = interest paid less interest received.

Source: Department of Commerce

Table 22

Corporate Liquidity Ratios
(per cent)

End of year	Liquid Assets (F.O.F.) / Nonfin. Corp. GNP	Dep. & US Govts. / Total Curr. Liab. (Securities & Exchange Comm.)	Dep., Govts. & Misc. / Total Curr. Liab. (Securities & Exchange Comm.)
1955	27.1	48.0	51.5
1956	23.6	41.3	45.8
1957	22.5	40.2	45.2
1958	24.2	41.1	46.6
1959	23.8	38.6	44.6
1960	21.8	35.8	42.4
1961	22.6	35.6	42.3
		(new series)	
1961		38.4	46.7
1962	21.9	37.0	45.6
1963	22.2	35.4	44.8
1964	20.9	32.6	42.3
1965	19.6	29.1	38.9
1966	18.4	25.4	35.3
1967	18.0	24.1	34.5
1968	18.4	23.4	34.4
1969	17.9	19.6[1/]	30.6[1/]

1/ Ratios for end of third quarter, not seasonally adjusted. Ratios usually rise in fourth quarter. Third quarter 1968: 22.8 and 33.7 resp.

in the last 10 years (Table 23). Holdings of money and Treasury issues now account for a smaller share of the total and--reflecting Regulation Q ceilings--the sharp increase in corporate holdings of bank CD's, which began in the early 1960's, was reversed in 1969. Increased holdings of the short-term notes of other corporations, together with holdings of short-term tax-exempt obligations, are now estimated to account for a sizable proportion of corporate liquidity, although these estimates are necessarily a little shaky. However, since no secondary market for commercial paper exists and municipal notes can often be liquidated only at substantial losses,[1/] about one-third of corporate liquid assets are probably not very liquid for emergency purposes--an increase over the one-tenth of such assets held in this form in the early 1960's.

1/ Commercial paper dealers will sometimes take back this paper before maturity as a favor. Discount tax-exempt obligations of less than 6 months maturity must fetch a price to compensate the buyer for the lack of capital gains treatment for the difference between purchase price and par.

Table 23

Percentage Distribution of Corporate Liquid Assets 1/
Flow-of-Funds, Nonfinancial Corporations

	1955	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
Demand dep. & curr.	54.5	54.0	53.7	49.4	45.0	41.2	38.1	38.1	35.9	33.5	34.8
U.S. Government securities	39.7	32.8	30.5	29.5	28.4	25.7	23.0	20.8	17.3	16.7	14.7
Time deposits	1.7	4.7	7.3	12.5	17.2	21.3	25.9	24.5	29.3	28.5	18.5
State & local government sec.	2.0	4.0	3.8	3.2	3.2	3.5	4.1	5.3	4.7	4.6	6.9
Open market paper	2.0	4.5	4.8	5.3	6.2	8.3	8.8	11.2	12.8	16.7	25.1

1/ Based on holdings at end of year.

Consumer debt

Liquidity and debt burden have not proven to be a serious general problem to the household sector in the postwar period, despite the large increase in consumer debt. Both mortgage and consumer instalment debt have increased rapidly since the end of World War II; non-instalment debt has also increased but less rapidly (Table 24).

The largest share of consumer debt reflects mortgages against owner occupied homes. While homeownership involves fixed costs, there is flexibility in the timing of maintenance and repair expenditures, and some measure of leeway in timing even for mortgage payments and taxes. Moreover, mortgage debt has the offset of asset ownership, which may be substantial, especially following a period of rising house prices.

Figures from the Michigan Survey of Consumer Finances indicate that in 1967 (the latest available data), 97 per cent of all homeowners had equities of $1,000 or more, and 76 per cent had equities of $5,000 or more. With rising house prices and the more restrictive terms of recent mortgages, homeowner equities are probably larger today. The protection afforded lenders by these margins could, of course, decline during a recession. Moreover, in evaluating the protection offered the mortgagor by this margin, allowance should be made for real estate commissions in the event of sale, and the present difficulty of a subsequent purchasor's obtaining

Table 24

Mortgage and Consumer Debt
(Billions of Dollars)

End Of Year	Mortgage Debt *	Consumer Instalment Debt	Consumer Non-Instalment Debt
1945	18.6	2.5	3.2
1950	45.2	14.7	6.8
1955	88.2	28.9	9.9
1960	141.3	43.0	13.2
1965	212.9	71.3	19.0
1966	223.6	77.5	20.0
1967	236.1	80.9	21.2
1968	251.2	89.9	23.3
1969	266.8	98.1	24.1

* One-to-four family houses, including those held for rental. No similar mortgage series for owner-occupied houses is available.

financing if the existing mortgage cannot be assumed.

Liquidation values implied by equity measures, while important, are not especially indicative of debt burden and sensitivity to restrictive public policies and recessions. Unfortunately, however, no satisfactory series on the ratio of scheduled debt service payments on residential mortgages to the income of the mortgagor exist.[1/] Some empirical indication of ability to carry home mortgages can be determined from delinquency and foreclosure rates, although the available information in this area is statistically suspect. Table 25 presents the best available series on delinquencies and foreclosures; it is based on a very small sample and is overly weighted by VA and FHA mortgages. These data suggest that there has been some general increase in the last 15 years in the rate of delinquencies on home mortgages, and noticable sensitivity of delinquencies to recessions. On the other hand mortgage loans in foreclosure, data for which are only available in the 1960's, have shown a general down-trend.

On balance, given the fixed nature of mortgage debt service payments contrasted with the secular trend of rising money incomes, the ratios of income to debt service on "seasoned" home mortgages are probably considerably higher than at the time the loans were made--

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1/ The Commerce Deparment does keep an unpublished estimate on aggregate scheduled debt service on 1-to 4-family properties. Both the Commerce and Board staffs, however, do not think the estimated data are accurate enough to be analytically useful. Among other problems, the data probably include mortgage liabilities of partnerships and syndicates. For what it is worth, the ratio of these scheduled payments to aggregate disposable income has been stable at about 6 per cent since the mid-1960's, up from 5 per cent in 1960.

Table 25

Delinquency and in Foreclosure Rates on Home Mortgages
(Per Cent of Loans)

	Delinquent 30 Days				Delinquent 31-90 Days				In Process of Being Foreclosed			
	QI	QII	QIII	QIV	QI	QII	QIII	QIV	QI	QII	QIII	QIV
1953	n.a.	n.a.	n.a.	2.00	n.a.	n.a.	n.a.	0.53	n.a.	n.a.	n.a.	n.a.
1954	1.76	1.74	1.76	1.89	0.56	0.54	0.56	0.55	n.a.	n.a.	n.a.	n.a.
1955	1.63	1.55	1.65	1.71	0.49	0.43	0.45	0.47	n.a.	n.a.	n.a.	n.a.
1956	1.71	1.66	1.71	1.77	0.52	0.47	0.51	0.50	n.a.	n.a.	n.a.	n.a.
1957	1.60	1.59	1.56	1.63	0.49	0.42	0.48	0.52	n.a.	n.a.	n.a.	n.a.
1958	1.67	1.63	1.64	1.71	0.59	0.56	0.59	0.62	n.a.	n.a.	n.a.	n.a.
1959	1.61	1.47	1.64	1.74	0.63	0.51	0.59	0.57	n.a.	n.a.	n.a.	n.a.
1960	1.56	1.63	1.73	2.01	0.65	0.60	0.68	0.79	n.a.	n.a.	n.a.	n.a.
1961	1.82	1.82	2.09	2.27	0.91	0.84	0.93	0.83	n.a.	n.a.	n.a.	0.29
1962	1.92	1.99	2.14	2.26	0.77	0.68	0.73	0.79	0.34	0.32	0.30	0.30
1963	2.14	2.29	2.27	2.37	0.89	0.80	0.90	0.98	0.34	0.36	0.33	0.34
1964	2.12	2.08	2.20	2.35	0.90	0.75	0.84	0.86	0.41	0.39	0.38	0.38
1965	2.06	2.18	2.30	2.40	0.88	0.82	0.90	0.89	0.37	0.38	0.38	0.40
1966	2.13	2.16	2.25	2.54	0.89	0.79	0.84	0.86	0.38	0.38	0.36	0.36
1967	2.17	2.14	2.36	2.66	0.87	0.71	0.79	0.81	0.38	0.34	0.31	0.32
1968	2.11	2.23	2.23	2.43	0.73	0.66	0.70	0.74	0.32	0.28	0.26	0.26
1969	2.04	2.06	2.18	n.a.	0.73	0.62	0.73	n.a.	0.26	0.25	0.25	n.a.

Note: Mortgage Bankers Association of America data from reports on 1-to-4 family FHA insured, VA guaranteed, and conventional mortgages held by more than 400 respondents, including mortgage bankers (chiefly) commercial banks, savings banks, and savings and loan associations.

even adjusted for the long-run rise in costs of other goods and services which would tend to have increased the difference between money income and the actual net income available for debt service. Assuming no severe recession in 1970, the staff does not see any reason to expect a pronounced rise in residential mortgage delinquencies and foreclosures.

In the case of consumer instalment debt, the postwar period has not experienced widespread delinquencies and defaults or a collapse of consumer credit, even during periods when unemployment exceeded 7 per cent. Delinquency figures for instalment credit at commercial banks collected by the American Bankers Association have not shown a secular uptrend since World War II, but do show that the proportion of delinquent loans has risen during past periods of business slowdown, and that a rise has been taking place recently (Table 26). While loss rates are not available, most of these delinquent loans are ultimately paid, so anticipated losses are low.[1/] No comparable overall delinquency series exists for finance

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1/ Unlike delinquencies, personal bankruptcies have risen throughout most of the post-war period with a strong secular trend. However, this pattern of growth was reversed in late 1967, and present filings continue to run well below 1967 levels. It is not clear the extent to which the postwar growth in these bankruptcies was due to increases in the number of people in financial difficulty, and the extent it was due to greater public awareness of bankruptcy precedures.

Table 26

Delinquency Experience at Commercial Banks
Consumer Instalment Credit
(Per Cent of Loans Delinquent 30-89 Days)
(Not Seasonally Adjusted)

Year	Feb.	April	June	Aug.	Oct.	Dec.
1948	1.64	1.59	1.43	1.45	1.50	1.55
1949	2.10	1.90	1.73	1.65	1.80	1.88
1950	1.91	1.66	1.34	1.47	1.46	1.62
1951	1.55	1.40	1.32	1.41	1.30	1.59
1952	1.44	1.36	1.52	1.58	1.44	1.65
1953	1.54	1.40	1.45	1.58	1.58	1.78
1954	1.88	1.53	1.52	1.51	1.49	1.49
1955	1.50	1.29	1.23	1.23	1.21	1.42
1956	1.31	1.28	1.23	1.27	1.20	1.46
1957	1.39	1.25	1.26	1.22	1.24	1.49
1958	1.53	1.41	1.41	1.45	1.24	1.43
1959	1.40	1.17	1.13	1.21	1.35	1.51
1960	1.46	1.32	1.32	1.36	1.44	1.66
1961	1.69	1.49	1.38	1.39	1.34	1.55
1962	1.51	1.27	1.25	1.26	1.26	1.54
1963	1.48	1.28	1.32	1.34	1.29	1.67
1964	1.51	1.22	1.26	1.35	1.34	1.56
1965	1.57	1.28	1.30	1.45	1.46	1.51
1966	1.59	1.37	1.34	1.44	1.42	1.62
1967	1.68	1.45	1.30	1.33	1.37	1.59
1968	1.35	1.20	1.20	1.30	1.22	1.56
1969	1.41	1.27	1.28	1.43	1.40	1.76

Source: Bi-Monthly American Bankers Association data, sum of component loan categories weighted by amounts outstanding.

companies, but reports from individual companies indicate a generally similar situation.

A factor reducing the impact of increasing debt levels is the corresponding increase in prices and incomes. The ratio of debt repayments on instalment credit to income has shown little change since 1965, halting an upward trend over the earlier part of the postwar era (Table 27). Furthermore this relationship does not appear likely to worsen during the coming year, assuming that repayments continue to grow at the same rate as in 1969, and disposable income according to the Division's projections. These assumptions indicate quarterly repayments ratios for 1970 of 14.7 to 14.8, compared to last year's rates of 14.8 to 15.2.

Aggregate measures such as these can be misleading in that the distribution of debt by consumer income differs. Instalment debt is most heavily used in the middle income brackets, but some lower income families do have heavy commitments according to the University of Michigan Survey Research Center data comparing repayments with previous year's income (Table 28). In recent years there has been some shift in the more heavily indebted group towards higher income classes.

Table 27

Ratios of Consumer Credit To
Disposable Personal Income

(In per cent)

Year	Outstanding consumer credit			Instalment credit	
	Total	Instal.	Noninstal.	Extended	Repaid
1945	3.3	1.4	1.9	3.6	3.4
1950	9.2	6.4	2.8	10.4	8.9
1955	12.6	9.5	3.1	14.2	12.2
1960	15.2	11.7	3.4	14.2	13.2
1965	17.7	14.0	3.7	16.6	14.8
1966	18.1	14.4	3.7	16.1	14.9
1967	17.9	14.2	3.6	15.5	14.9
1968	17.9	14.3	3.6	16.4	14.9
1st quarter	17.6	14.0	3.6	16.1	14.9
2nd quarter	17.6	14.0	3.6	16.3	14.9
3rd quarter	18.0	14.4	3.6	16.8	15.1
4th quarter	18.3	14.6	3.7	16.6	14.9
1969 p/	18.4	14.8	3.6	16.3	15.0
1st quarter	18.3	14.7	3.7	16.5	15.1
2nd quarter	18.4	14.8	3.7	16.8	15.2
3rd quarter	18.4	14.8	3.6	16.2	15.0
4th quarter p/	18.6	15.0	3.6	15.8	14.8

Note: Ratios of consumer credit to Department of Commerce estimates of disposable income, both series seasonally adjusted.

p/ Preliminary

Table 28

Ratio of Annual Instalment Debt Payment Rate to
Previous Year's Disposable Income
1969 Survey of Consumer Finances, University of Michigan

(Percentage Distribution of Families)

	No debt	Less than 10%	10-19%	20% or more	Total
All families	49	21	19	11	100
Annual family income:					
Less than $3,000	77	7	7	8	100
$3,00-4,999	62	17	7	14	100
$5,000-7,499	39	18	26	17	100
$7,500-9,999	35	24	29	12	100
$10,000-14,999	32	30	29	9	100
$15,000 or more	52	31	11	6	100

Note: Percentages may not add due to rounding.

Liquid assets of families have also been increasing somewhat, but most of the increase has come in the highest asset group. (Table 29). The distribution of debt by size of liquid asset holding, shown in Table 30, suggests that families with the largest liquid assets are the least likely to have instalment debt; conversely, 53 per cent of families with debt show no liquid assets at all.

Table 29

Liquid Asset Holdings* in 1963, 1965, 1968 and 1969
(Percentage distribution of families)

Amount of Liquid Assets	1963	1965	1968	1969
None	22	20	19	19
$1 - 199	15	17	15	14
$200 - 499	14	11	12	12
$500 - 1,999	21	21	24	22
$2,000 - 4,999	14	14	13	15
$5,000 - 9,999	8	9	8	8
$10,000 or more	6	8	9	10
TOTAL	100	100	100	100
Median (all families)	$490	$570	$660	$730

* Liquid assets include savings accounts, certificates of deposit, checking accounts and bonds.

Table 30

RELATION OF LIQUID ASSET HOLDINGS TO INSTALMENT DEBT

(Percentage distribution of families)

Total Installment Debt	All families	Liquid Assets: None	$1-499	$500-1,999	$2,000 and over
None	49	47	27	41	69
$1-499	15	30	17	14	8
$500-1,999	23	15	35	28	14
$2,000 and over	13	8	21	17	9
Total	100	100	100	100	100
Median debt for those who owe	$1,020	$430	$1,140	$1,280	1,080

1969 Survey of Consumer Finances, University of Michigan, SRC

The likely effect of an economic slowdown on consumer debt really relates to the extent to which a recession would depress incomes and employment--and the distribution of the impact and the extent to which those most affected would have significant debt burdens. Under the assumption of only a modest recession in 1970 there is no evidence to suggest a substantial increase in consumer credit delinquencies or defaults can be expected.

III. CONCLUSION

While liquidity throughout the U.S. economy has been eroded by the restrictive monetary policies of 1969, available data do not suggest that a liquidity crisis and accelerated debt defaults are near--assuming that in 1970 financial restraint does not continue to the same degree as in 1969, and that any recession is no longer or deeper than those of the postwar years.

Two exceptions do stand out as possible areas of concern. First, some savings and loan associations--particularly those in California--appear extremely vulnerable to further deposit attrition. With Federal Reserve emergency lending procedures as a supplement to FHLBB resources and the Treasury tap, no broad increase in failures can be expected--given the assumption above. But some S&L failures cannot be ruled out, and the attendant publicity can hardly be helpful to the S&L industry.

Second, it is possible that some business corporations may face difficulties in funding short-term debt and meeting other commitments. The staff, however, is unable to be any more precise than this because of the unavailability of disaggregated current data in sufficient detail to evaluate the distribution of business liquidity and debt.