Nov 1 1929

Speech for Senator Glass before stockholders meeting of F.R. Bank of Boston

WE DID NOT KNOW HOW WEAK BANK ASSETS WERE

HOW WRONG COULD I BE

May 29, 1971

For the second time in its relatively short history the Federal reserve system has piloted the financial community through a crisis of major importance and emerged with enhanced prestige. Once again the country looks to the impregnable position of the Federal reserve banks as its strongest guarantee of financial stability. Throughout the recent collapse of inflated security values money was freely available to trade and industry despite a demand for credit so large that member banks were forced to increase their reserve balances by $275,000,000 in one week. This constitutes an increase in a single week of more than 10% in the reserves on which the entire volume of member bank credit rests. It could not have ~~taken place~~ been supplied under the old banking system without a money panic.

The first crisis weathered by the Federal reserve system was not anticipated when the Act was originally framed. We were not in a position to foresee that the great new system of credit reservoirs would first be called into use in the midst of a world catastrophe which would ultimately bring about the suspension -- or carry down to destruction -- practically every other monetary system in the world. That it did not also engulf the Federal reserve system was not due solely to the relatively favored position of our economic system at that time, but reflected in addition the panstaking research ~~of the National Monetary Commission on the basis of whose findings the outlines of the new system were largely conceived,~~ in this country extending over a fourth of a century prior to the passage of the Federal Reserve Act the meticulous care with which the Act was drawn, and the management with which its provisions were continuously made effective.

This second crisis from which the Federal reserve system is even now emerging has been more typical of what its sponsors had in mind when the

Act was framed. One of the outstanding evils of the old monetary system which we desired to prevent was the close dependence of American industry on the mood, temper, and extravagances of the speculative community. A direct affiliation of industry with the security markets is of course inevitable and unavoidable, since it is in the security markets that the going price of capital is made and through the security markets that much of our capital is marketed. We did, however, wish to avoid the regular recurrent sequence of speculative excesses leading to financial panics which seemed to be part of the order of nature in former days. The virtual certainty that a speculative orgy would celebrate every forward step of American industry and would drag with it in its collapse the very prosperity on which it was based, constituted a vicious circle which the Federal reserve system was designed to break. The extent of its fulfillment of this desire is apparent today. Despite the collapse of a speculative movement of huge proportions, the business elements of this country look to the future undismayed. Readjustments may be before us, as indeed they always are. The return to reality of inflated hopes may be reflected in a diminished demand for luxuries. The real losses of small traders whose credulity exceeded their knowledge will undoubtedly impose privation on thousands of our citizens. These events are deplorable but could not in the conditions of the time have been avoided. Their effects, however, will be largely confined to themselves. For nearly two years the Federal reserve system has pursued a firm policy against further increase of credit extended to the security markets, and today business remains sound with credit freely

available to all trade and industry where there is a genuine need for credit and sound assets on which to request it. For once, the effects of a speculative collapse will be confined largely to those who took the risks and sought to participate in the gains.

Causes of fluctuations in brokers loans. Dec. 1929

It has already been noted that the general ease in money conditions from 1922 permitted domestic corporations to improve their capital structure by financing themselves through issues of securities. The proceeds of these issues were used both for the repayment of bank and the refunding of outstanding obligations on more advantageous terms as well as for the expansion of plant and equipment. These issues took the form both of stocks and bonds, but the proportion represented by stocks increased rapidly after the first part of 1928 when bond prices turned down because of high money rates and the preference of investors for equities in common stocks. During the period when stock prices were advancing most rapidly, therefore, in the latter part of 1928 and the first eight months of 1929, the stock market was called upon to carry and distribute among investors an increasing volume of new issues. These issues in many instances were floated through the issuance of rights to stockholders for the purchase of additional stock in the security market below current quotations, a procedure which, at the inflated prices then prevailing, enabled corporations to raise large amounts of capital at times in excess of current needs, on extremely advantageous terms, and at the same time had the appearance of giving the stockholder a special dividend or disbursement on his stock. During the summer of 1929, increased issues of this character through the granting of rights to stockholders were frequent and probably created capital obligations far in excess of current savings. To these issues were added a flood of issues of investment trusts and bank holding corporations in August and September, which would not

in the final analysis have added to the capital which the market was called upon to subscribe since the proceeds would have been reinvested in existing securities, but which did, nevertheless, place a considerable strain on the absorptive capacity of the market during the process of distribution.

At the very time when the market was called upon to carry this large volume of new issues and at the same time maintain the existing inflated level of stock prices, foreign selling of American securities broke out in large volume reflecting both the collapse of the Hatry speculative adventures in London and the credit restriction abroad, which accompanied the raising of the discount rate of the Bank of England from 5½ to 6½ per cent. Under the influence of these developments, the speculative momentum which had carried stock prices on the average to a level over 200 per cent above 1926 and leading stocks considerably further, was broken. Stock prices turned downward during September and after fluctuating irregularly during the first part of October broke precipitately during the latter part of October and the first half of November. When the decline came to an end on November 17, representative averages of common stock prices were about 45 per cent below their September peak.

The decline was about the same in proportion as major declines in the past, but was unique in the short space of time in which it was accomplished, the almost complete absence of intermediate rallies and the tremendous volume of trading under which the mechanical facilities of the stock exchange seemed at times to break down. A

further unexpected development was the very rapid expansion of brokers' loans that accompanied the decline in its initial stages. Brokers' loans, as reported weekly to the Federal Reserve Bank of New York, increased $450,000,000 between September 4 and October 2 and did not turn down until after October 16. This absence of direct correlation between fluctuations in brokers' loans and the level of stock prices illustrated the many factors that are reflected in total brokers' borrowings and the relation of changes in these borrowings to changes in stock prices.

The general correspondence between changes in loans to brokers and common stock prices which has prevailed during long intervals in the past is frequently explained on the theory that investors and speculators are buying stocks on borrowed money and that the total volume of these transactions fluctuate with changes in stock prices and are frequently an important factor in these changes. A second explanation frequently offered is that increased listings and larger dealings in securities at higher prices, as a matter of course, increase the credit requirements of brokers and that brokers' loans may be expected to remain at a relatively constant percentage of the aggregate value of all shares listed on the stock exchange. Under a more exact analysis, however, of the specific operations which govern borrowing by brokers and changes in the total volume of brokers' loans all of these concepts are found to be only roughly true.

In the first place, it may be observed that fluctuations in security prices do not necessarily depend upon corresponding fluctua-

tions in brokers' loans. If all trading in securities were conducted on the basis of investment funds and without the additional aid of credit facilities, security prices would still be expected to fluctuate with changes in the volume of funds available for investment and the earnings and dividend prospects of the underlying securities. It may also be pointed out that the stock exchange is so organized as to minimize the requirements of brokers for current balances in the form of cash or bank deposits no matter how large the volume of transactions may be, e.g. the largest liquidations in brokers' loans during October and November occurred on those days in which the volume of trading was at a maximum. The relatively small balances which brokers are required to carry in order to finance the large transactions arises out of the fact that they have direct access to the call loan market where funds can be borrowed as directly needed and do not have to be carried as working balances from day to day. Transactions which affect the volume of brokers' loans therefore are limited largely to transactions involving an outpayment of funds on the part of a broker, but even in assessing the importance of these factors it is first necessary to eliminate those which are reflected in changes in the borrowing of individual brokers but do not affect total brokers' loans as a whole.

It is probably true that the great majority of transactions which lead to borrowing on the part of individual brokers have little effect upon the aggregate total of brokers' loans for the reason that a large proportion of funds borrowed by one broker to make payment for securities purchased are transferred to other brokers from the securities

were bought and these latter brokers use the funds to repay their own indebtedness. Such transactions reflect merely a shift in the position of individual brokerage houses and do not affect published figures on brokers' loans which reflect the aggregate borrowing of brokers as a group. The principal transactions which do affect that total, on the other hand, are those which involve deposits or withdrawals of cash with brokers by their customers. Since brokerage houses, as a whole, have little need for cash balances and usually use whatever funds they have for the reduction of their borrowing, it follows that brokers as a group are able to reduce their borrowing materially only when funds are transferred to them on balance by their customers, and that the continuous increase in the total of brokers' loans, such as have occurred up to October 1929 reflect practically equivalent withdrawals of cash by brokers' customers. Among the important purposes leading customers to transfer funds to brokers are the desire to purchase securities outright, to leave funds on deposit with brokers pending investment or because of the interest paid on brokers accounts and to establish margins for trading in securities. All of these developments place funds in brokers' hands as a group and enable them to reduce their borrowings. The principal factors leading to withdrawals of funds from brokers, on the other hand, which must have been dominant during the period when brokers' loans grew rapidly, are withdrawals of cash from brokers by customers whose securities have been sold, and accounts are liquidated, and the withdrawal of cash for current expenditures by customers whose securities have increased in value and can be used as

a basis for larger loans without impairment of the original equity. Such transactions lead to borrowing on the part of brokers that is not necessarily offset by receipts at other brokerage houses and thus lead to increases in the aggregate total of brokers' loans. The listing of new securities or flotations of new issues may also be reflected in an increase in brokers' loans, but only to the extent that the additional issues purchased by brokers or by their customers on credit rather than cash.

An increase in brokers' loans during periods of rising security prices reflects generally, therefore, either new capital flotations in excess of current investment funds, or net withdrawals of cash from brokerage houses by both customers who have been induced to take profits through the sale of securities in a rising market, or customers who consider that the increase in the market value of their account justifies the withdrawal of cash for other uses. When funds are obtained from brokers in this manner on a rising market and not reinvested in securities, it is necessary for brokers to meet these outpayments by borrowing additional funds from banks. Decreases in brokers' loans during periods of falling security prices, such as occurred in the closing months of 1929, on the other hand, reflect the fact that at such periods cash receipts of brokers are in large volume partly because customers are being compelled to put up additional cash to reestablish their margins and partly because lower levels of security prices usually attract a considerable volume of investment buying into the market. A striking example of the effect of these factors on the brokers' loans total was afforded during 1929 by the activities of investment trusts. These trusts were an important factor

in the rise of brokers' loans both because of new issues which they floated in large volume during the year and because of sales of securities induced by the high prices which prevailed, both factors causing brokers to borrow if their customers subscribed for the new issues or purchased the securities sold without investing fresh funds. Such transactions, however, did not usually increase the demand of brokers for bank loans since the funds so obtained by investment trusts were customarily reloaned in the call loan market and were a factor in the sharp increase in loans for the account of nonbanking lenders. When stock prices broke, on the other hand, the action of investment trusts in purchasing securities at the lower prices with these funds, served the double purpose of withdrawing a source of borrowing to brokers at the same time that it placed funds in the hands of brokers' customers with which to liquidate the occasion for this borrowing.

April 9, 1930

Mr. Goldenweiser

Mr. Riefler

Comments on letter on mortgage loan situation

I think the general outlines of the letter are excellent, but would make the following suggestions as to emphasis:

(1) In the first section dealing with the economies of increased efficiency of production and technological unemployment, I think it might be well to introduce the idea of the effect of lower costs in stimulating consumption of new articles. There is no question, for example, but that the tremendous expansion in the use of electrical appliances, which you suggest, awaits lower costs for these appliances and the electric current needed to run them.

(2) In the introductory discussion of the building situation, I think that it would be well to bring out more clearly the thought that the inquiry was directed toward home ownership by workers so that the following discussion will not be confused with the mortgage situation for apartment house bonds. A further thought in this same direction is that the recent trend toward apartment house living expresses partly the high cost of individual home ownership, including both construction costs and financing costs for that type of mortgage.

(3) In the five suggestions as to improving mortgage financing, I would place somewhat more emphasis on the idea of a mortgage bank issuing blanket debentures and somewhat less emphasis on the selection of risks. The small home owner, who is the person mainly to be helped by this inquiry, will never be a good risk in the market sense unless the agency which

grants the loan can pool these mortgages against the debentures which it issues to the public. In other words, the general public who furnish mortgage money are never in a position to evaluate the individual risks underlying small mortgages. I think, therefore, that points 1 and 2 should really follow the discussion of debenture issuing mortgage banks rather than precede it.

April 5, 1930

Mr. Goldenweiser

Mr. Riefler

Mortgage loan situation

In analyzing the mortgage loan situation in its relation to residential building activity, particularly the building of small homes, it should be noted that we are at the present time in a period of transition. The building shortages which accumulated during the war and the higher level of prices which took place during and after the war had marked effects upon the building industry, to which the industry has not yet in all cases adjusted itself. The past ten years have been characterized by a residential building boom with all its accompaniments of high rents, land speculation and mushroom growth of building enterprises. At the present time this boom seems to be thoroughly deflated, but it is doubtful whether its full effects can yet be measured. Building costs are still high, with little evidence of the effect of technological changes in prices charged, and the mortgage loan situation is still characterized by miscellaneous charges, commissions, etc., which accompany a strong lenders' market.

There have been numerous studies made of the situation in various localities. All seem to agree as to the still high level of rents, the high level of building costs, and the high rate which is actually paid for mortgage financing. They also agree as to an overbuilt condition at the present time.

The demand for better housing is potentially unlimited. Practically all investigators agree, however, that the present level of family budgets cannot afford a greater expenditure for housing; in fact present expenditure

seems to be somewhat higher proportionately than has been customary in the past. If there is to be a revival in residential building, therefore, of more than moderate proportions, it seems obvious that it will have to be accompanied by a lower level of costs. I have not undertaken to analyze the possibility of cost reduction in building construction and land valuation, although there are, undoubtedly, large economies to be effected in both of these elements. One of the largest elements in the cost of housing, however, is finance charges and I have gone into the studies made on this subject in some detail.

First mortgage financing--Prior to the recent credit stringency, first mortgages on small homes were available in most urban centers at around 6 per cent. These mortgages were customarily placed at up to about 50 per cent of the appraised value of the property. In addition to the carrying charge of these mortgages, there is the commission for placing them, which is normally small. The ordinary term of mortgages appears to run from three to five years.

In view of their excellent security, the cost of first mortgages could be lowered somewhat by pooling the collateral behind them. At the present time most mortgage loans are transactions between individual borrowers and individual lenders, and the lender must bear the full risk of default on the particular mortgage which he holds. The experience of foreign countries with land banks abundantly proves the utility of substituting for this system an arrangement by which a chartered land or mortgage bank lends money on first mortgages to borrowers and then sells debentures against all of the mortgages in its possession, thereby reducing the risk to the ultimate lender

to a minimum. If such a plan were adopted in this country, it is probable that as much as one per cent per annum could be cut off the carrying charge of first mortgages. The cost of first mortgage financing also seems unduly burdened on account of the short term for which they are granted in this country, which causes the payment of legal fees and commissions for renewals every few years. These fees are a legitimate element in the cost of conducting the mortgage business, but there is no reason whatever why they should be paid every three or five years. Under proper supervision first mortgages could safely be placed for periods of ten or even more years, with the result that the cost of handling them would be correspondingly reduced.

Second mortgage financing--Second mortgage financing is much less organized in this country and investigators almost universally agree that the cost to the borrower on second mortgages ranges from 10 to 20 per cent. It is probable that 12 per cent per annum at the present time is a fairly reasonable cost for second mortgage financing on small homes. These mortgages usually cover that portion of the equity between 50 and 80 per cent of the appraised valuation and are amortised by monthly payments. Under these circumstances there would seem to be no legitimate reason whatever for such high carrying charges. The composition of these charges is much the same as in the case of first mortgages, namely, a flat 6 per cent interest charge on the face value of the loan, augmented by large commissions, discounts, and fees.

The period of the loans customarily ranges from one to three years, with the consequent necessity of frequent payment of commissions and fees for renewal. There would seem to be no reason why a mortgage bank with proper capital and reserves could not make second mortgage loans at much

lower cost to the borrower than at present prevails, and sell its own debentures at a reasonable rate against the whole of these loans in its possession. Such a plan would greatly minimize the risk to the lender.

Suggestions--From this survey of available material, it appears that there are two main devices by which the cost of financing home ownership can be lowered. One is to provide for the sale in the open market of long-term debentures secured by a pool of mortgages, thus eliminating the risk at present inherent in mortgage practice, and the other is by making provision for less frequent renewals. If the customary term of mortgages was ten or twenty years instead of one, three, or five, the cost of refinancing would be greatly reduced.

I would suggest therefore:

(1) That the Federal Government provide for Federal incorporation of mortgage banks with a minimum subscribed capital of at least $10,000,000; such banks to be examined by the Comptroller of the Currency;

(2) That paid out dividends on this capital be limited to 6 per cent of its book value;

(3) That these mortgage banks be empowered to make first mortgage loans up to twelve years at not over 50 per cent of the appraised valuation of the property, and second mortgage loans also up to twelve years for not more than 80 per cent of the appraised valuation--the second mortgage loans to be fully amortized at the end of twelve years;

(4) That appraisals be at estimated cost of reproduction or market, whichever is lower;

(5) That the volume of second mortgage loans be limited to not more than one third of the total resources of the bank;

(6) That commissions, fees, etc., be limited to not more than $10 per thousand dollars of loan, except that a minimum fee of $25 per loan may be charged;

(7) That the mortgage bank be permitted to sell in the open market its own twelve-year debentures against all of its assets, these debentures to carry a uniform coupon of 6 per cent, and to be limited in volume to 15 times the book value of the capital;

(8) That cash payments to borrowers when they place mortgages with the bank be adjusted to the market, that is, that when the bank can sell its own 6 per cent debentures at a premium (or in cases, discount) the cash payment be of an equivalent amount. In such a case, if these $1,000 debentures can be sold at 105, for example, in times of easy money, the borrower would receive $1,050 instead of $1,000, and vice versa if credit conditions are stringent and the debentures have to be sold at a discount, say at 90, the borrower would receive cash at the rate of $900 for a $1,000 mortgage. This would permit borrowers on mortgages to profit by fluctuations in conditions in the market;

(9) That the rate paid by the borrower to the mortgage bank on mortgage loans should not be in excess of 7 per cent on first mortgage loans and 8 per cent on second mortgage loans. This would give the bank a margin of one or two per cent respectively for the risk involved.

Explanation--I believe that such a plan would be feasible, would make mortgage money available to home owners on much lower terms than are at present possible, and would do this through the use of private funds without drawing on public credit. It will be noted that the plan involves mortgages of

twelve years. This would seem to me to be a minimum period of financing that should be a current practice for a fixed good such as a housing project, and has the advantage of reducing the refinancing costs to a minimum.

It will also be noted that the plan reduces the risk to the ultimate lenders, that is purchasers of mortgage bank debentures, to a minimum in that it pools the security back of all the mortgages and also in that it provides for a fixed capital equity on the part of the mortgage bank of at least 1/15th of the debentures outstanding. That means that the capital equity would be sufficient to absorb total loss of one out of five of second mortgages placed, or one out of ten of first mortgages placed. Certainly this would appear to be adequate protection for a conservatively run institution.

The plan should also attract private capital in that potential earnings would be extraordinarily high. The commissions permitted, while somewhat lower than those currently in force, should be sufficient to cover practically all of the running expenses of a large-scale, efficiently run bank, with the result that the excess interest charge of one per cent on first mortgages and two per cent on second mortgages would be available for the capital equity as a return for the larger risk involved. By limiting the dividend return on the capital to 6 per cent of its book value, the plan insures that this high rate of current earnings would be applied first to the building up of the capital equity and that the stockholders would receive increased paid out profits only as the book value were increased.

January 14, 1931

Dr. Miller

Mr. Riefler

I am transmitting herewith the memorandum you requested on the relation of credit expansion, and especially Federal reserve policy, to the industrial situation which developed between 1921 and 1929. On reading the memorandum over, I feel that it is inadequate in many respects, especially in its failure to explain sufficiently the importance which I have placed on developments in urban real estate and in security speculation. With regard to urban real estate, I feel that construction is our largest industry, that it moves in long cycles, that it ties up credit over long periods and liquidates very slowly, and that building was overdone in the period from 1921 to 1929 more than in any other boom since that which culminated in the early nineties.

With regard to the situation in common stocks, I feel that the importance of security speculation lay largely in the fact that for a time the capital markets of this country became to all intents and purposes stock markets and that capital was easily available to enterprises in a position to float stocks and therefore encouraged an overdevelopment of capital facilities in those industries; also that while the speculation lasted it increased through its profits the current purchasing power of certain types of consumers above the normal demand and created therefore a temporary market for certain types of goods which appeared for a time to be unlimited. The collapse of constantly rising stock prices consequently leaves us with seriously overdeveloped facilities in certain lines and makes the period of readjustment, complicated as it is by the real estate situation, peculiarly difficult. Underlying both of these situations, of course, are still the basic difficulties in agriculture and in foreign economic conditions left by the war.

January 14, 1931

Dr. Miller

Mr. Riefler

Federal Reserve Policy,

1922-1930

The depression of 1930 marks the end of an economic era in this country that began roughly toward the end of 1921--the year in which the worst consequences of the war and postwar inflation were liquidated. That inflation had been most marked in two directions: (1) commodity speculation including the accumulation of huge inventories of commodities, and (2) speculation in farm lands. A reaction from these developments in 1920 led to severe liquidation in 1921 which was complicated by demoralization both economic and monetary abroad. Indeed the failure of Europe to recover quickly after the war was an important factor in bringing the inflation in this country to an end in 1920.

During the intervening decade, this country has again experienced a great wave of productive activity which has again led to overconfidence and been followed by a severe depression. During this period, however, there was little general speculation in commodities and farm lands, in fact, prices in both of these fields were relatively heavy throughout most of the period. Speculation became rampant, rather, in the fields of urban building and in common stocks. As in 1921, however, the reaction from these speculative movements and the following period of liquidation and depression has been accompanied by profound depression abroad. The current period on the other hand has not been accompanied by the foreign currency demoralization of 1921. In both periods, a severe depression in agriculture in this country accompanied depression in industry.

Industrial factors

To a considerable extent, the causes for these developments can be traced directly to specific industrial factors. The currency troubles of Europe after the war and the relatively depressed state of foreign industry throughout the following decade are both direct outgrowths of the war itself and to a considerable extent inevitable in view of the magnitude of the war effort. The rise in commodity prices during the war, likewise, was in part a genuine expression of the scarcity of goods at that time. This scarcity was especially marked in foodstuffs, the production of which was curtailed in many parts of the world; in Europe because of the lack of fertilizers and also because a large part of the population was under arms; in South America, Australia, and the Orient because of a shortage of shipping facilities to transport foodstuffs over long distances and also because of a slowing down in the normal rate of development of new territories due to the cessation of developmental work in road building and railroad construction. The consequent rise in agricultural prices was reflected in a rapid expansion in our agricultural output and a rapid rise in farm land values in this country, until after the war when a return to more normal levels of agricultural output was accompanied by a continued state of world overproduction of agricultural commodities and a collapse in the value of agricultural lands. In more recent years, the urban building boom which began in 1921 and expanded rapidly until 1928 can also be traced to the shortage of housing that developed during the war and the rapid increase in urban population which has accompanied depression in agriculture, while the broad speculative movement in common stocks which culminated in 1929 was to a certain extent at least the inevitable reaction of speculative sentiment to a period of industrial

prosperity in which profits accruing to holders of common stocks increased at an exceptionally rapid rate.

Credit factors--Gross measures of credit expansion

To account for these developments in terms of basic industrial factors, however, does not imply that they were unaffected by credit conditions. The relative availability of credit affects and is affected by the whole range of industrial developments. If particular phases of our economic organization are in a position for rapid expansion, a large supply of credit will facilitate that expansion and the speculative movements which always accompany it. When there are weak industrial situations, on the other hand, a shortage of credit is almost bound to uncover them. It is particularly important, accordingly, for the Federal Reserve System to assess the degree to which credit was a factor in these situations and the extent to which the situation could have been improved by a different type of credit administration on the part of the Federal Reserve System.

Expansion of bank credit

There is general agreement that overexpansion of bank credit was present on a large scale during the war period and contributed heavily to those strains within the price structure which finally culminated in the liquidation of 1921. The extent to which credit expansion was a provocative factor in the 1921-1929 period of expansion is more debatable. The following table indicates beyond a doubt that in this period credit expanded at a much less rapid rate than during the war.

PERCENTAGE INCREASE IN VARIOUS MEASURES OF CREDIT EXPANSION IN THE PERIOD FROM 1921 TO 1929 AS COMPARED WITH THE PERIOD FROM 1914 TO 1920 (AMOUNTS STATED IN MILLIONS)

	Percentage increase between	
	1914-1920	1921-1929
Gross volume of check payments 1/	193,000 - 611,000	500,000 - 1,111,000
Increase	220%	122%
Loans and investments--all banks	21,000 - 42,000	40,000 - 58,000
Increase	100%	45%
Individual deposits--all banks	19,000 - 38,000	36,000 - 54,000
Increase	100%	50%

1/ Estimated from Snyder and Copeland estimates of debits

All of these measures point to a rate of credit expansion in the eight years between 1921 and 1929 definitely lower than in the six years between 1914 and 1920. Despite the fact that there are two additional years in the most recent period, the gross volume of check payments increased 122 per cent as compared with 220 per cent in the earlier period, while total loans and investments increased 45 per cent as compared with 100 per cent, and total individual deposits 50 per cent as compared with 100 per cent respectively. Comparisons such as these, of course, indicate only the magnitude of credit expansion during a period of development, and tell nothing whatever regarding the amount of such expansion which was necessary for the support of the economic structure and its maintenance on a stable basis. It is significant, nevertheless, that those measures of credit expansion which are most easily invoked, such as the rate of increase in the use of money and the growth of bank credit, indicate that banking developments were much less

active in the crisis which developed in 1929 than in that which culminated in 1920.

A closer analysis of credit conditions during the period, on the other hand, calls into question the comparability of such figures as those used above. Though credit expanded at a less rapid rate during the past eight years than in the war period, the expansion started from a relatively high level, since credit liquidation between 1920 and 1921 was exceptionally small in comparison either with the magnitude of the preceding advance or with the price readjustments which took place at that time. In addition, it must be remembered that price inflation during the years 1922-1929 was most marked in the field of securities, where the marketing mechanism is highly developed, and that credit expanded most rapidly in brokers' loans and other loans on securities where the practice of requiring borrowers to maintain minimum deposit balances against loans is probably much less widespread than in the case of other types of loans. Commercial loans, on the other hand, where borrowing customers are regularly required to maintain sizable minimum balances against their borrowings, showed little growth during the period. All of these developments would tend to increase the efficiency of new credit which was created during the period and would slow up the rate of growth in the gross figures of bank credit outstanding. In the final analysis, consequently, gross figures on check payments, on bank loans and investments, and on deposits afford little basis for judgment as to the role played by credit expansion in the boom which has been undergoing liquidation during the last eighteen months.

Credit factors--Particular indications of credit expansion

Specific figures covering the distribution of bank credit among different types of assets as presented in the following table indicate that bank purchases of investments, and loans on securities and on urban real estate both grew at an

extraordinarily rapid rate during the period from 1921 to 1929. In some cases, the figures cited in this table are subject to some qualification because they are partly estimated. The margin of error, however, cannot be large enough to change the story which they tell, namely, that all of the growth in member bank credit during the period is accounted for by direct member bank purchases of securities, or loans on securities and on urban real estate. Other forms of member bank credit as a whole showed no change for the period and little fluctuation from year to year. It is evident, therefore, that credit was abundantly available to finance operations in urban real estate and in the security

ALL MEMBER BANK LOANS AND INVESTMENTS
(In millions of dollars)

June 30	Investments	Loans on securities	Loans on urban real estate a/	All other loans	Total loans and investments
1921	6,002	1/ 4,450	1/ 875	12,794	24,121
1922	7,017	1/ 4,550	1/ 1,100	11,515	24,182
1923	7,757	1/ 5,050	1/ 1,350	12,340	26,507
1924	7,963	1/ 5,480	1/ 1,575	12,149	27,167
1925	8,863	6,718	1/ 1,875	12,062	29,518
1926	9,123	7,321	2,161	12,578	31,183
1927	9,818	8,156	2,449	12,333	32,756
1928	10,758	9,068	2,624	12,611	35,061
1929	10,052	1/ 10,095	2,750	12,814	35,711
Actual increase 1921-1929	4,050	5,645	1,875	20	11,590
Percentage increase 1921-1929	67%	127%	214%	---	48%

a/ Real estate loans other than farm lands
1/ Partly estimated

markets from 1921 to 1929, and that paper created by these transactions furnished the collateral for the entire increase in member bank credit which took place during the period. It is further evident from the overbuilt situation of the country in 1929 and the extravagant height to which stock prices rose that credit stringency which finally developed in that year did not operate to check the building or the stock market inflation in time to prevent values from going to uneconomic levels, i.e., to levels which not only could not be sustained, but also led to serious economic complications when they broke.

Nor can it be shown that lack of credit facilities unduly depressed industries other than these during the greater part of the period from 1921 to 1929 in such a manner as to contribute the final breakdown in 1930. Credit conditions in this country were easy during the greater part of the period, the main cutcry against insufficient credit facilities coming mainly from our agricultural industries where more credit would have had the effect of further increasing a chronic state of overproduction. In view of this general ease in credit, the fact that loans other than security and real estate loans failed to grow indicates lack of demand for credit rather than insufficiency in supply. Large flotations of capital issues made possible by easy credit conditions in fact enabled our industrial corporations to expand their operations and at the same time to repay their bank loans. It is evident, consequently, that credit also was ample during most of the period to finance the bulk of legitimate needs.

Responsibility of F. R. policy for credit expansion

Various tests of the responsibility of the Federal Reserve System for the credit expansion which occurred during the period lead to conflicting results. An examination of credit conditions from year to year with reference to the credit policy pursued by the reserve banks during the same period indicates

clearly that credit expansion was rapid when Federal reserve policy was directed toward ease and that credit expanded less rapidly when the reserve banks pursued a firm money policy. A study of the period as a whole, on the other hand, indicates that the gold situation was really dominant and that the Federal Reserve System was much less free to pursue over long periods a firm money policy than is generally supposed. The short run relationship between Federal reserve policy and credit expansion is brought out in the following table where the percentage increase in member bank credit from year to year is compared with the Government security holdings of the reserve banks during the preceding calendar year.

PERCENTAGE GROWTH IN TOTAL LOANS AND INVESTMENTS OF ALL MEMBER BANKS BY YEARS ENDING JUNE 30, 1922-1929 COMPARED WITH FEDERAL RESERVE HOLDINGS OF UNITED STATES SECURITIES DURING PRECEDING CALENDAR YEAR

Year ending June 30	Average F. R. holdings of U. S. securities (preceding year)	Percentage increase in total loans and investments of all member banks
I Years of most rapid credit expansion		
1923	455	+ 9.6
1925	402	+ 8.7
1928	417	+ 7.0
Average for period	425	+ 8.4
II Years of moderate credit expansion		
1926	359	+ 5.6
1927	350	+ 5.0
Average for period	355	+ 5.3
III Years of little credit expansion		
1922	264	+ 0.3
1924	186	+ 2.5
1929	297	+ 1.3
Average for period	249	+ 1.4

This table clearly shows that credit expansion has been large in periods following increased purchases of Government securities by the reserve banks and that credit expansion has been at a slower rate in periods following sales of these securities. An examination of discount rate changes also indicates that lowered discount rates following a period of Federal reserve purchases of open market securities have accompanied or been followed by an expansion in member bank credit and that the sale of these securities followed by higher discount rates has accompanied or been followed by a slower rate of credit expansion.

Month-to-month comparisons lend further support to these evidences of the ability of the reserve banks to affect member bank credit expansion over short periods. The inclination of member banks to expand their credit rests primarily upon the condition of their reserves. In general when their required reserves are easily maintained without borrowing, they are disposed to expand their credit operations. When, on the other hand, they are forced to borrow at the reserve banks to cover their reserve requirements, they are less inclined to expand their credit. Credit expansion, consequently, would be expected to follow a period in which member banks have been able to obtain their reserve balances on relatively easy terms such as result from open market purchases by the Federal reserve banks. This expectation is confirmed by a study of the statistics. From January 1921 to December 1929 member bank reserve balances increased from $1,773,000,000 to $2,395,000,000. The increase of $622,-000,000 represents the immediate base for the entire expansion of member bank credit during the eight years. It will be shown later that this growth was due, in the long run, largely to gold imports. The short run timing of the expansion, however, coincided with periods when the reserve banks were pursuing an easy

money policy. Evidence for this is found in the fact that growth in member bank reserve balances was not spread evenly throughout the period, but was concentrated mainly in three periods of growth in 1922, in 1924, and in 1927, as is shown in the following table. In these three periods, totalling less than two years, member bank reserve balances increased by $595,000,000 while during the

GROWTH IN MEMBER BANK RESERVE BALANCES, IN F. R. HOLDINGS OF UNITED STATES GOVERNMENT SECURITIES AND IN GOLD STOCK DURING THREE PERIODS WHEN THE FEDERAL RESERVE BANKS WERE HEAVILY PURCHASING OPEN MARKET SECURITIES

(In millions of dollars)

Period	Growth in--			
	Member bank reserve balances	F. R. holdings of discounts & bills	Monetary gold stock	F. R. holdings of U.S. securities
February-June 1922	+ 131	- 284	+ 72	+ 234
April-Dec. 1924	+ 277	---	+ 124	+ 280
February-Dec. 1927	+ 187	+ 210	- 160	+ 299
Total	+ 595	- 74	+ 36	+ 813

remaining six years of the period they fluctuated to a certain extent and showed a net growth of only $127,000,000. Now there were three main sources from which member banks could obtain immediately these $595,000,000 of reserves, first by borrowing or selling acceptances to the reserve banks, but reserve bank credit in these forms actually decreased by $74,000,000 during the three periods taken as a whole; second by an increase in our monetary gold stock, but this increased by only $36,000,000 during the same periods; and, third, by receiving funds paid out by the reserve banks in purchases of government securities in the course of open market operations. As the table shows, reserve bank purchases of U. S. Government securities during these periods totalling $813,000,000 were plainly responsible

for the simultaneous growth in member bank reserve balances. The conclusion is inescapable, consequently, that in the short run large scale reserve bank open market operations in U. S. securities during the years 1921-1929 made available to member banks reserves which served as a base for subsequent credit expansion at a rapid rate, and also that the three periods of most rapid credit expansion during the eight years were initiated by such open market purchases. It is almost equally evident that subsequent sales of U. S. securities by the reserve banks following periods of heavy purchases were reflected in a slower rate of credit expansion on the part of member banks but did not result in a full return of the reserve balances so advanced.

At first sight this conclusion would appear to imply that most of the growth in member bank credit during the period was the result of Federal reserve open market policy and also that a different policy might have been reflected in a materially smaller growth of bank credit in this country. This conclusion, however, cannot be supported without important qualifications if the period is reviewed as a whole. A study of the elements in the demand for reserve bank credit between 1922 and 1930, such as is presented in the following table, indicates that continued growth in our stock of monetary gold during the period was the one great permanent underlying force making for credit expansion and suggests that open market operations on the part of the Federal reserve banks were important mainly in timing this expansion. In this table, annual averages of daily figures are used to avoid fortuitous changes due to seasonal factors, and comparability is further assured by contrasting the years 1922 and 1930, both years of easy money and inactive business.

FACTORS ACCOUNTING FOR GROWTH IN MEMBER BANK RESERVE BALANCES BETWEEN 1922 AND 1930

(Annual averages of daily figures in millions of dollars)

	1922	1930	Change
Changes in factors which supplied funds available for member bank reserve balances			
1. Increase in gold stock	3,820	4,472	670
2. Increase in Treasury currency	1,604	1,786	182
3. Decrease in nonmember clearing balances	30	28	2
Total of funds placed at the disposal of the market			854
Absorption of these funds by factors other than member bank reserve balances			
1. Decrease in reserve bank credit	1,226	1,087	139
2. Increase in unexpended capital funds of the F. R. bank	286	392	106
3. Increase in money in circulation	4,535	4,545	10
Total of funds absorbed by other factors than member bank reserve balances			255
Increase in member bank reserve balances	1,781	2,380	599

The facts presented on this table show conclusively that the fundamental force making for credit expansion throughout the eight years was an increase in our gold stock of $670,000,000 and that of this amount $599,000,000 actually went into credit expansion by increasing the reserve of our member banks. In addition there was an increase of $182,000,000 in Treasury currency due largely to coinage of silver under the Pittman Act which also put funds at the disposal of the member banks. There was little change in currency in circulation as between these two years; an increase from 1922 to 1925 being offset by a corre-

eponding decrease between 1926 and 1930. The Federal Reserve System finally, far from expanding credit, actually absorbed $245,000,000 of funds made available to the market, $139,000,000 in a decrease in reserve bank credit, and $106,000,000 through an increase in their unexpended capital funds.

It is clear, therefore, that gold imports were the active factor releasing funds available for credit expansion during the period as a whole. Not all of these funds went into member bank reserve balances, however, since the net effect of reserve bank operations was to absorb a part of the funds thus released. It is highly doubtful, furthermore, whether reserve bank operations could have absorbed a greater volume of these funds except for short periods, since to have done so would have required a firmer credit policy and this would undoubtedly have been reflected in a smaller volume of foreign loans, a slower return on the part of Europe to the gold standard, and an even greater volume of gold imports than actually occurred. The final result, consequently, might conceivably have been an even larger growth in member bank reserve balances than was witnessed.

Conclusions

1. Credit expansion in the "new era" from 1921 to 1929 was at a decidedly lower rate than during the war period and does not appear on a superficial examination to have contributed largely to the boom which culminated in the drastic depression of 1930.

2. In opposition to this conclusion, there is no question but that credit was in ample supply and that the most characteristic features of the boom--expansion in urban real estate and in security speculation--drew heavily on the credit supply. In fact all of the expansion in bank credit during the period was based on securities and urban real estate. There was no increase in financing

based on other collateral during the period but likewise there is no evidence that this was the result of a restricted credit supply. Indeed, until 1929 credit was freely available for all major activities. There was considerable stringency in that year attributable in the final analysis to extraordinarily heavy demands from the security markets, but this stringency came too late to prevent the development of a serious surplus of housing and a waterlogged market for securities.

3. Heavy open market purchases of U. S. securities in 1922, 1924, and 1927 placed at the disposal of member banks the reserves on which most of the credit expansion during the period was based.

4. The ultimate responsibility of the reserve system for this expansion, however, appears to be confined to its timing. Taking the period as a whole the conclusion is inescapable that gold imports were the final source of growth in member bank reserve balances, that gold imports in the volume in which they occurred would somehow or other have given member banks even under a different F. R. policy the same increase in their reserve balances for the period as a whole as actually occurred, and finally, that a firmer policy throughout on the part of the reserve banks directed toward a more moderate rate of credit expansion would probably have been defeated by even larger gold imports.

5. From the foregoing, it would appear that the Federal reserve system faced an unsoluble dilemma during the period in that a policy sufficiently firm to preserve a sound domestic credit situation was inevitably defeated by the gold which this firmness attracted from abroad, while a policy sufficiently liberal to prevent gold imports inevitably encouraged unsound uses of credit in the domestic market.

6. This dilemma is not surprising but exactly what any central bank would

experience which served a country situated similarly to the United States at this time. When the balance of payments of any country is seriously out of line, the central bank is the first to feel the effects. During the last fifteen years this country has constituted an economic anomaly--we are since the war a huge creditor nation which at the same time possesses a large favorable balance of trade. Our industries, economic opportunities, and consumptive habits, furthermore, are such as to give considerable momentum to a continuance of this favorable balance of trade. The Federal Reserve System has borne, consequently, the full brunt of the problem here presented; gold has tended to flow continuously into the country as a consequence of these aspects of our balance of payments except when foreign loans were exceptionally large, and a credit policy easy enough to encourage foreign lending has also unduly encouraged domestic speculation while a credit policy firm enough to maintain sound credit conditions in the domestic market has been defeated in the end by fresh accretions of gold from abroad.

February 20, 1932

Mr. Ralph Sayles
24 Federal Street
Boston
Massachusetts

Dear Mr. Sayles:

I am quite overwhelmed by your letter of the 15th. Things like that don't happen around here. Many thanks.

Very truly yours,

Winfield W. Riefler

WWRgow

LOOMIS - SAYLES - & - COMPANY
INCORPORATED
INVESTMENT COUNSEL
BOSTON - NEW YORK - HARTFORD - PHILADELPHIA
WASHINGTON - DETROIT - CHICAGO
SAN FRANCISCO

24 FEDERAL STREET
BOSTON
CABLE ADDRESS "LOOMISAYLS"

February
Fifteenth,
1 9 3 2.

W. W. Riefler, Esq.,
Division of Research and Statistics,
Federal Reserve Board,
Washington, D. C.

Dear Mr. Riefler:

Last summer, when I was in Washington, Corrie Gill mentioned to me the book you had written on the subject of "Credit". I secured a copy and mentioned the fact to Corrie last week. I also advised him that Mr. Freeman and I felt that the book had been of more value to us than any other we had ever been able to get on the subject and although we were obliged to work quite hard in order to get it, we were amply repaid in the end. Corrie told me that he thought I should write you to that effect so I have repeated my remarks to him.

Likewise, just yesterday, I read the report of the Committee on Bank Reserves of the Federal Reserve System, of which you were Executive Secretary. The report makes it quite clear to me why the change should be made in bank reserves and I am surprised that greater publicity has not been given to it. It has not been clear to me before.

I hope you are able to stand the pressure of the present situation.

With kindest regards, I remain

Very truly yours,

Ralph Sayles

August 25, 1932

Dr. Miller

Economics of equilibrium

Mr. Riefler

In a society resting basically upon specialization of function, the primary problem of economics is the problem of equilibrium. In such a society the ability of the average individual to consume is determined by the presence of a market for his products as a producer and the development of lack of equilibrium causing the over-production of any single specialized commodity or service exerts of itself a tendency toward subsequent under-consumption. In other words, over-production of specialized goods means subsequent under-consumption for the producers of such goods cannot function as consumers so long as existing demands are met out of accumulated supplies previously produced rather than current production.

August 25, 1932

Dr. Miller

Mr. Riefler

Characteristics of Recent Boom

Over-production in the recent boom was concentrated mostly in the durable goods industries, particularly in the construction industry and in the industries producing capital goods. During the initial stages of the era, prices of foodstuffs and raw materials were especially low. This created low manufacturing costs and favored large scale industrial operations provided a market could be found for the product. Such a market was found in the industrialised areas; the shortage of housing left over from the war initiated widespread employment in the construction industry in all urban areas as soon as capital became available for housing in 1921; this in turn furnished a wide market for manufactured products and manufacturers in exploiting this market further increased its breadth through the employment which they gave. As a result there started an era of intense urban industrial activity. The urban areas of the country had to export very little of their products to agricultural and raw material producing areas in return for the foodstuffs and raw materials which they needed, and so were enabled to expand their own consumption of their own production enormously.

As these developments went on and became accentuated by lower costs of production due to increasing efficiency, profits mounted and caused great activity in the production of more and more capital goods, diverting existing labor and capital into industries for the creation of capital goods. Finally the process broke down. When the newly-created factories attempted to market their products and the newly-built houses bid for occupants, they were found to be in over-supply and severe unemployment set in among workers involved in the creation of these capital goods.

August 25, 1932

Dr. Miller

Mr. Riefler

Profits Inflation

These developments reflected essentially an inflation of profits. Prices of manufactured goods were relatively high in 1922 and the subsequent unrolling of a boom in the urban industrialised sections of the country made their continuance more probable. The intellectual atmosphere, moreover, was favorable to profits inflation. There was a universal demand for price stability and a universal feeling that unstable prices were dangerous. This atmosphere grew out of the disaster which accompanied widely fluctuating prices during the war and did not take into account the fact that in some situations price stability is equally dangerous. The spirit of the times, therefore, was unfavorable to price competition, trade agreements and retail price maintenance schemes flourished, and competition took new forms of excessive high pressure selling, of installment sales, of large advertising outlays, etc. The era consequently was characterised by stable retail prices, by low and decreasing primary costs due to increased efficiency, by increasing selling costs, and by increasing profits. All of these factors tended to accentuate the boom while it lasted and to make the final reckoning more drastic when it collapsed. In the first place they encouraged over-expansion of the facilities of production. In the second place mass production did not develop a mass market by the competition of lower prices, instead, it found its enlarged market through installment sales, and among consumers who draw their income from merchandising and especially from speculation. When unemployment appeared among producers of durable and capital goods because of over-production, the consumption of these elements was withdrawn from the market. This helped to undermine

the speculative bubble and when that burst, the consuming power of a large speculative public was withdrawn from the market. In an effort to readjust to this situation, manufacturers cut their advertising and merchandising outlays and thus cut further into consumption. Then installment purchasing fell off. In short, under the conditions prevailing in this era, stable prices meant profits inflation, and profits inflation in turn fostered the growth of a huge market which was by nature temporary and susceptible to shock.

August 25, 1932

Dr. Miller

Mr. Riefler

Proposals

General prosperity cannot return until all our people are at work. This includes the large numbers employed in the construction industries. As capital goods are now in excess supply, there does not appear much chance of immediate employment for these groups except in so far as such employment is furnished by specific social projects such as slum-clearance, etc., which is now being undertaken.

There is no basic reason, however, why paralysis should continue to grip the remainder of the body economic, why existing plant and equipment should not be fully occupied turning out products for its own producers. In other words, it would be possible to have high activity in these industries even if the capital goods industries are sick, just as it was possible to have high urban activity during the last decade in the face of depression in agricultural and raw material industries, since we have capital goods in excessive supply, the best prededure to get rid of the excess is to use up the supply, wear them out.

This will not be possible without more price readjustment, especially in sheltered lines. If production should remain at its present level, our existing capital goods would be worthless since they would not be in use. There is no way on earth to give economic value to existing capital except through activity, through its intensive use. It should be the policy of industry, consequently, to get activity and to sacrifice profits and price policies based on estimates of capital costs if necessary in the meantime.

8-e 1932

EASY MONEY IN ITS RELATION TO CONSTRUCTION

The relationship between changes in the availability and cost of money in the short-term money markets and changes in the volume of business is not always immediate, simple, or direct. Volume of business activity began to decline in the summer of 1929 and has persisted with little interruption to the present time, notwithstanding the fact that short-term money rates began to decline abruptly in the fall of 1929 and that conditions in the open markets since early 1930 have remained continuously easy, with the exception of a six months' period in the winter of 1931-32. This is in contrast to developments in the 1921 depression in which resumption of activity followed closely upon the appearance of genuine easing in the short-term open markets. It is not, however, altogether unique. In certain depressions in the past, particularly those of exceptional duration and magnitude, such as in the nineties, extreme ease in the open money markets had little immediate reflection in expanding business operations.

Influence of money rates on capital markets

In this contrast between conditions in the nineties and today, and conditions in 1921 and in other depressions, the most important difference is not in the direct effect of short-term money rates on the financing of current production and merchandising operations, where most of the short-term money is used, but in the effect of abundant supplies of short-term money on operations in the construction and other capital industries. The direct effect of abundant supplies of short-term money on operations

which depend entirely on short-time financing is probably not of sufficient magnitude to reverse the tide of those economic forces which determine the extent and duration of a major depression. A drop in the cost of short-term financing from 6 to 3 per cent, for example, has relatively little effect upon the total costs of manufacturing textiles for the market, or upon the price at which textile products can be merchandised. Any stimulus which cheap financing might give to current textile manufacturing and distributing operations, consequently, would be quickly offset by the depressing effect of overexpanded inventories, so long as consuming markets did not simultaneously expand sufficiently to absorb an enlarged output. In the capital market, on the other hand, changes in the cost of financing play a more important part. The availability of mortgage money at 6 or at 3 per cent has an important bearing on whether new construction will prove profitable at the prevailing level of rents, and funds made available through mortgage money and other long-term financing have an enormous effect, directly in creating employment and increasing consumption as well as indirectly in furnishing a broad market for construction materials, traffic for railroads, etc.

The most important effects of easy money on business conditions, therefore, are probably to be found in conditions in the capital markets. When the situation in these markets is such that easy short-term money is translated into more abundant long-term money at a time when there is an effective market demand for long-term funds, monetary ease in the short-term markets is likely to be followed shortly by a resumption of general activity. So long, however, as conditions in the capital markets are such that the flow of long-term money is not stimulated by the

availability of short-term money, its appearance does not of itself have much immediate effect toward stimulating activity.

The 1920-21 depression

Conditions under which easy short-term money may be expected to hasten the emergence of business recovery from depression were all well illustrated in the period 1920-21, for in that period large deferred demands for construction and other forms of capital equipment had been built up in the preceding years. During the war, private capital flotations in this country were restricted in order to facilitate the flotation of government bonds, and housing and other forms of construction were deferred, partly on account of high costs and restriction of capital flotations, and partly as a result of "priority" arrangements which gave war demands the first call on the productive resources of the country. As a result, at the end of the war there were many industries in a position to increase their capital plant as soon as the availability of funds made expansion possible. This expansion of equipment occurred in industries in which capital equipment had been deferred by the war, such as housing, railroad equipment, and state and municipal construction of all kinds. There was also probably a considerable demand arising out of the development of new industries, and the relocation of plants in new areas, which reflected the fact that from 1917 to 1922 large changes in freight rates and other important prices entering into costs of production had created new low cost production areas. The widespread introduction of the automobile, finally, increased greatly the demand for housing in suburban areas adjacent to large cities. As a result of these developments, demand for housing was so large--as will be shown later--that resumption of operations began at the very beginning of 1921 and did not await easing of credit conditions which came later in

the year. Building activity was, however, further stimulated by easy credit when it developed.

The current depression

One of the conspicuous features of the current depression has been the small demand for new capital. Periods of business inactivity are usually favorable periods for undertaking long-term commitments because of lower prices and cheaper financing. During the current depression, however, these incentives have failed to operate in volume not only during the past twenty months but also during 1930 before the general uncertainty of conditions had resulted in hesitation on the part of business men to make long-term commitments. This absence of demand for capital despite relatively cheap credit can be laid to two factors. In small part it reflected the fact that prices of building materials, labor, and other elements entering into the cost of capital goods had fallen more slowly than usual during the latter part of 1929 and most of 1930, thus offering less inducement for the inauguration of new undertakings. In major part, however, it reflected the fact that the preceding boom from 1925 to 1929 was a boom in housing construction and in capital goods of all kinds. Even after the residential building boom which began in 1921 began to taper off in 1928, other types of construction expanded further. The tightness of short-term credit in 1928 and 1929 in fact did not reduce capital available for construction, except possibly in housing. With respect to other types of construction, large corporate profits and stock market flotations continued to furnish capital in large quantities for capital construction of all kinds, such

as plant modernization and large scale utility construction. At the same time, furthermore, the bond market was furnishing ample funds to permit a continuance of a large construction program by state and local governments.

The absence of increased demand for new capital in 1930, consequently, reflected in part the fact that costs did not make new undertakings particularly cheap at that time, but in much larger part the fact that the preceding period of tight credit conditions had not succeeded in checking stock market activity and had not, therefore, checked new capital flotations during the peak of the boom, with the result that the industrial plant of the country as well as residential and business housing were overexpanded. Similar conditions prevailed in the long depression of the nineties, which was preceded by a construction boom in housing and railroads, with the result that subsequent abundant supplies of excess short-term funds persisted for years without stimulating a large volume of new construction.

Availability of mortgage funds

Expansion of construction activity, at the present time, therefore, depends on the presence of specific needs for construction, on the existence of a reasonable level of costs, and on the availability of funds to finance construction operations. These funds must come directly, in the main, from two money markets, both of which are stagnant at present, namely, the mortgage market and the bond market. Mortgage money is essential to residential and many types of commercial building, the annual volume of which averaged about $3,600,000,000 a year from 1925 to 1928. The extent of the subsequent decline in new mortgage financing is

illustrated by the fact that in 1932 building of this type aggregated only about $400,000,000.

The availability of mortgage money is affected both by general conditions in other money markets and by specific conditions in the market for real estate. At present, while short-term money is exceptionally easy, in the long-term markets generally yields are high, as is shown by Charts I, II, and III, and there is little money available at any price. This contrasts with conditions in 1920-21 when many high yield issues of bonds were floated successfully even before credit conditions eased. Fundamentally, the small current volume of long-term money of all kinds reflects the fact that savings available for investment are small or non-existent at the present level of national income. Even the insurance companies, for example, which usually invest a large volume of national savings, have invested large amounts in policy loans and have reduced the volume of their new investments, notwithstanding uninterrupted premium payments. The only real large source of funds in any of the money markets at present consists of bank credit which is ample for liquid short-term securities. This credit, however, has not moved into the mortgage or other long-term markets.

Current condition of real estate market

The present state of the real estate market is reflected, on the one hand, in declining rents and declining real estate values, and, on the other hand, in an almost complete cessation of many types of new construction in spite of substantial reductions in costs. In the face of a persistent oversupply of housing facilities, the volume of new residential construction has now declined annually for four years, to

an unprecedentedly low level. Four years is not a long time for a general downward movement in construction to persist, so far as can be judged from earlier experience, but the present decline has been by far the most drastic which the country has ever known. After the 15 year boom which ended in the early 1890's there was an irregular decline in construction to a low point in 1900, a period of about eight years; after expansion during the next decade there was a decline beginning about 1910 and continuing through 1918, accentuated after early 1917 by the diversion of men and materials to the construction of ships, cantonments and other war uses. The decline since 1928, therefore, is unparalleled not in duration but in extent; residential building of any character is at an extraordinarily low level.

The severity of the present decline in residential building and the disinclination of lenders to supply mortgage funds to finance new construction may be attributed largely to four factors: (1) the excessive expansion of housing which began in 1919 and lasted, with only a brief interruption in 1920, until 1928; (2) the high level of costs developed and maintained throughout that period; (3) the character of financing this expansion; and (4) the general depression in business which started after the decline in residential building was well under way.

Extent of overexpansion (1919-1928)

The shortage of housing facilities at the conclusion of the war resulted in a rapidly rising level of rents which made investment in mortgages attractive and stimulated construction whenever prices made

construction possible. Private building expanded rapidly as soon as the armistice was signed and continued to increase until the autumn of 1919. In the latter part of 1919, however, new residential construction fell off when building costs became very high at the same time that conditions in the long-term money markets tightened. Chart IV indicates that the total physical volume of new construction undertaken began to decline by early 1920. The chart also shows that the physical volume of new construction began to stabilize during the last half of 1920 and to advance rapidly at the beginning of 1921. The building boom of the 1920's consequently was not initiated by easy money. The shortage of housing was so great that an expansion of new construction was profitable throughout the worst of the depression of 1921 at a time when credit conditions generally were still extremely tight and also at a time when many other important lines of industrial activity were still contracting. A genuine shortage in housing facilities that made renewed construction profitable even at a time of general business depression was thus the basic factor in the quick revival of construction activity in 1921. The rapid expansion in activity continued until the latter part of 1926 and after that time the high level reached was maintained until 1928, as shown on the chart. By the end of 1924, however, rents had reached a peak, as shown on Chart V and in consequence, subsequent construction was undertaken to an increasing extent on a speculative basis. The oversupply of housing indicated by the downward movement in rents after 1924 was an important factor in the drastic decline in building which began in 1928.

Costs

Oversupply of housing is not an absolute term but depends at all times on the relation of costs to prospective income. The American people could make use of a much larger absolute volume of new housing than was made available to them between 1919 and 1928, provided that prices were cheap. After the most pressing shortages were met, however, they did not absorb in full at the prices charged the additional housing that came on the market in the latter phases of the boom. Building costs remained higher throughout the boom than at the beginning of 1919. In terms of prewar price relationships building costs from 1923 to 1928 were about 190 per cent of the 1913 average, according to the index of the Federal Reserve Bank of New York, whereas the Bureau of Labor's Wholesale Price Index averaged about 140 per cent during the same period. A considerable part of the building done during these and later years prior to the decline was done on a speculative basis with a view to quick sale rather than operating profits and consequently rested on an abnormal relationship between rentals and costs, including land costs, financing charges of all sorts, and taxes.

Financing

The character of the financing of construction in the period of prosperity was another factor accounting for the severity of the subsequent decline. That many projects were financed on a thoroughly unsound basis, is notorious, and the losses incurred by purchasers of such securities have continued to demoralize the market for mortgages and mortgage bonds. Good issues as well as bad must, at present, meet the skepticism of investors who have encountered heavy losses in real

estate investments.

General effects of the depression

All of these factors account for a severe decline in housing construction after early 1928. They do not alone, however, account for the drastic nature of the decline which reduced new residential construction by 90 per cent between 1928 and 1932; this is attributable in part to the general economic breakdown. As a consequence of a wide variety of developments at home and abroad, incomes have been reduced and people have been obliged in many cases to economize in their use of housing by "doubling-up" or by exerting pressure for rent reductions. Vacancies have also increased because of a considerable movement of population from city to farm as unemployment has increased. The effects of these developments on the volume of residential building have been particularly severe in the last year and a half. During 1930 the volume of residential building appeared to be stabilizing for a time at a level less than one-half that prevailing in the 1925-1928 period. At that time, however, costs were still at a high level and subsequent declines in business activity resulted in a further contraction in building volume during 1931 and early 1932. Since the spring of 1932 there has been little change in the volume of residential building except that of a seasonal character.

Present prospects for new residential construction

Some of the elements in the situation which in recent years have restricted the flow of funds into the construction industry, particularly into residential building, are beginning to change. Restriction of

activity to extreme low levels during the past year, for example, has tended to limit the supply of houses, and further downward revision of rents has undoubtedly prevented much contraction in use of space which might otherwise have occurred. Lower rents are discouraging to lenders and borrowers if they result in reduced incomes from properties as a whole, but if they permit larger use of space they may speed the adjustment of supply to demand. The pressure of reduced construction activity has also led to large reductions in costs in many areas.

At the present time it is probable that in most localities excessive costs are no longer a real deterrent to renewed construction activity. The published indexes which show costs down only 20 - 30 per cent from 1929 levels are based in part on inaccurate wage data and do not take into account large decreases in many important costs, such as land values. Actual wages now paid on construction are usually much lower than stated wages, and it is probable that costs of construction, taking into account all factors, have had much larger declines than the indexes show. Moreover, when there is a prospect that lower prices will stimulate increased purchases, present quotations for steel and other materials would probably break further.

Scarcity of mortgage money is a more serious deterrent to building at present than costs. This obstacle, however, will begin to disappear when building operations become profitable. It would not require any appreciable volume of mortgage money to increase residential building 50 or even 100 per cent from its present abnormally low levels.

The most important deterrent to resumption of building activity remains, therefore, in the depressed state of the real estate market,

for so long as vacancies exist in suitable dwellings which are being pressed for sale, it will be difficult to market new dwellings at a profit in the same area, even at low levels of cost. With any real resumption of activity, however, there would appear two factors which would lift the real estate market appreciably. First, the present volume of vacancies would tend to disappear quickly with even a relatively small resumption of employment, since in many cases unemployed workers who have "doubled-up" or gone to live with relatives, will have to find new shelter near their places of occupation as soon as opportunities for work again appear. Secondly, the drastic decline in general price levels, operating differently on wages, taxation, and on cost of transportation, fuel, power, etc., has in all probability again developed new low cost production areas which will attract industrial developments during the next decade. When industry relocates its plants in this manner, there may follow a demand for new construction for housing, paving, sewerage and water systems, etc., which would not be greatly affected by the fact that surplus facilities exist in other sections.

Supreme Court of the United States.
Washington, D.C.

Jan. 8. 1953

Dear Winfred Riefler:

My thanks for your letter.

Cordially

Louis D. Brandeis

Personal

Supreme Court of the United States.
Washington, D.C.

1/5/33

Dear Louis Ritzler:

Enclosed - the Editorial of which I spoke.

Will you kindly return it and let me know the probable facts as to subject discussed.

Cordially

Harlan F. Stone.

January 6, 1933

Dear Justice Brandeis

The figures referred to in the News editorial come from the Standard Statistics Company which gives as its source of compilation the Journal of Commerce. I have never looked into this compilation personally but I am informed that it is made up simply by adding together each month all the interest and dividend payments of which record can be found. This method may introduce various discrepancies in the comparability of the figures over any considerable period of time.

The separate figures for dividends and interest in this compilation for 1926, 1929, 1930 and 1931 are as follows:

CORPORATE DIVIDEND AND INTEREST PAYMENTS
As compiled by the Journal of Commerce
(In millions of dollars)

	Dividend	Interest	Total
1926	1,691	2,700	4,391
1929	3,449	4,139	7,588
1930	4,203	4,375	8,578
1931	3,653	4,607	8,260 1/

1/ Partly estimated; the monthly and annual figures published by Standard Statistics do not check exactly with each other.

This shows an increase in dividends between 1926 and 1929 of 104 per cent and can be checked against a 41 per cent increase shown by the Treasury figures on dividend payments reported by corporations subject to the income tax as follows:

GROSS DIVIDENDS PAID BY CORPORATIONS AS COMPILED BY TREASURY
(In millions of dollars)

1926	5,945
1929	8,356

Since the Treasury figures are by far the more comprehensive and authoritative of these two sets of compilations, it is clear that the

TURGOW

series reported in the News is not trustworthy for year to year comparisons. Both of these compilations are inflated by duplications, however, since they represent gross dividends and do not exclude dividends paid by one corporation to another. The income of both utility holding companies and investment trusts, which have grown rapidly during recent years, consists in part of dividends received from other corporations with the result that total dividend figures include duplications if the dividend paid by a subsidiary to its holding company is added to that paid out to the public by the parent corporation. The Treasury figures on net dividend payments by corporations, which eliminate intercorporate payments, show an increase of only 30 per cent between 1926 and 1929.

NET DIVIDENDS PAID BY CORPORATIONS AS COMPILED BY TREASURY
(In millions of dollars)

1926	4,439
1929	5,763

Treasury figures on dividend payments since 1929 are not yet available. Moody's, however, makes a compilation of gross dividends of 600 leading corporations since 1929 which runs as follows:

(In millions of dollars)

1930	2,602
1931	2,135
1932	1,328 (partly estimated)

For 1933 the figures will be much lower since many dividends have been dropped during the current year. I think it is safe to assume that current dividends are running at exceptionally low levels as compared with other years.

Net interest payments are much more difficult to determine than dividends since interest is not limited to corporations, and defaults have been large outside the field of corporate returns. New borrowing was fairly large in 1930 but has since fallen to small proportions, at the same time that defaults--especially in mortgages and foreign securities--have increased rapidly. Current interest payments in consequence are probably decreasing but so far not at a rate comparable to dividends. They also probably have remained relatively higher than dividends in comparison with their levels in the years before 1929.

I am sorry that I cannot give you any really good information for recent years. I think it is clear, however, that the increase in these payments prior to 1929 was much smaller than the Standard Statistics figures indicate and that there has been a large subsequent decrease.

WWRgcw

Mr. George Terborgh of our Division, who has gone into this whole subject in great detail, feels that in 1929 American individuals, as distinguished from corporations, institutions, etc., received about $8,000,000,000 in total dividend and bond interest payments including corporate dividends and bond interest, and total Government payments of interest (on foreign as well as domestic government issues). This excludes receipts on most mortgage interest. He estimates that in 1931 this total had shrunk to about $6,500,000,000, i.e. around the level of 1925, and that in 1932 it has shrunk considerably more. On this basis, 1933 would probably show the lowest total since the war.

We are exceedingly grateful for the opportunity of seeing you again the other night.

Sincerely yours,

Justice Louis D. Brandeis
Supreme Court of the United States
Washington, D. C.

WWRgcw

February 17, 1933

Mr. Goldenweiser
Mr. Kiefer

Memorandum on the Michigan moratorium

I would like to submit the following points on the Michigan situation:

1. The fact that a moratorium is already in existence changes the banking problem radically. In order to avert a run and a subsequent suspension or moratorium, it is essential to pay out money freely to meet all withdrawals on demand. This calls for such expedients as liquidation of marketable assets, rediscounting with the Federal reserve banks, and borrowing from the Reconstruction Finance Corporation. Once a suspension has occurred, this technique becomes irrelevant, and, instead, it is necessary to adopt a plan of action which will permit reopening of banks on a completely sound basis. There should be no question whatever in anyone's mind that the banks will be able to remain open on whatever plan is adopted. All other considerations are subsidiary to this.

2. Any plan for reopening must be formulated and appraised in the light of the facts of the situation. In the case of Michigan it is essential to find out immediately two outstanding pieces of information: (a) what is the liquidity of the banks and groups in terms of their liabilities for deposits and borrowed money, (b) what is the impairment of capital on a true accounting basis? This information should be available for all Michigan banks and not for the Guardian group alone since the mere fact of suspension has widened the problem. Without this information in considerable detail, it will be impossible to judge the workability of any plan that is proposed.

3. The simplest and most workable plan would be to allow each depositor to withdraw only that portion of his account which is covered prorata by

liquid assets or by liquid assets plus a certain percentage of slow but good assets upon which the Reconstruction Finance Corporation consented to extend loans. This percentage would differ for each bank. If this procedure were adopted, there would be no question of the ability of the banks to live up to the announcement. It would preserve the principle of dealing with each bank individually according to the soundness of its assets and would also prevent some depositors from withdrawing their accounts in full at the expense of those which remain.

4. It will be impossible to reopen without a writing down or freezing of depositors' claims without changes in the law. Clearly the Reconstruction Finance Corporation cannot legally undertake to make loans of the size necessary to carry this out. At least it is my impression that the facts called for above would substantiate this assertion. Plans permitting full withdrawal, therefore, should be preceded by an amendment to the Reconstruction Finance Corporation Act permitting the Reconstruction Finance Corporation to subscribe preferred stock to banks instead of making loans. This procedure would cost the public some money, but it would also have all the advantages, so far as public confidence is concerned, of a guarantee of bank deposits without the futilities of a guaranty. If the Reconstruction Finance Corporation advanced capital to these banks it could manage them, liquidate them, merge them, or deal otherwise with them according to the merits of each individual situation.

February 23, 1933

Mr. Goldenweiser

Mr. Riefler

Segregation and guaranty of deposits

It is clear that the Government has not been able to stop a national run on our banks and that it is time for a reformulation of national policy toward banking institutions. This formulation might take one of two lines; a guaranty of bank deposits so that all deposits were made safe, or a writing down prorata of deposits in each bank to conform to the depreciation in its assets. Either of these policies would restore a condition where cash offered no advantage over bank deposits insofar as safety or usefulness was concerned. The remainder of this memorandum is devoted to an analysis of the various plans for modification of policy that are under consideration at present and offers a combination of some of the features of various plans.

Clearing-house certificates

One plan under general discussion is to restrict currency payments to a certain amount of deposit accounts and permit withdrawal of the remainder only in the form of clearing-house certificates. This plan would not affect silent runs in which depositors withdrew funds in the form of clearing-house certificates and then deposited the funds in stronger banks; nor would it prevent a bank from failing as soon as withdrawals of clearing-house certificates used up all the collateral acceptable at the clearing house. There is nothing in the plan to reassure depositors in a weak bank and to induce them not to withdraw their funds. These withdrawals would cause suspension of the bank just as soon as currency withdrawals. Clearing-house certificates are only useful in a situation where banks are short of currency and long of good assets. At present the reverse is true, the crux of

the whole difficulty being in the scarcity of good assets at the banks. With the Federal reserve system, the Reconstruction Finance Corporation, and the Glass-Steagall Act there is practically no limit to the amount of currency that might be issued except that imposed by the absence of good assets. It would be legally possible to pay off all the deposits of member banks in currency to the extent that the banks had assets acceptable under the Glass-Steagall Act; the Federal reserve system would, of course, have to establish a high rate of discount when its reserves went below 40 per cent during the latter phases of the movement.

Government subscription to bank stocks

A flat government guaranty of bank deposits need not be discussed here since its effects in subsidizing bad banking are too well known to require comment. It would be possible, however, for the Federal government to accomplish the same end by subscribing capital to commercial banks. It would be possible, for example, to enact a law which permitted or required the Reconstruction Finance Corporation to subscribe sufficient capital to each commercial bank to restore any impairment of capital because of depreciation of assets. Such subscription would have to be made on a conservative accounting basis.

The effect of such a procedure would be equivalent to a guaranty of bank deposits insofar as the depositor was concerned, i.e. his bank deposit would be just as safe as currency other than gold. At the same time, there would be no subsidy of bad banking, since the Reconstruction Finance Corporation would control those banks whose assets are most depreciated. It would be in a position, furthermore, to reimburse itself as fully as possible from existing stockholders of these institutions under their double liability clause

and would also be able to merge many of these banks, and to convert their charters to a national basis, thus helping to create a unified banking system, and eventually to sell them to strong local groups.

The advantages of this guaranty through capital ownership procedure would be accompanied, however, by certain definite disadvantages. The plan would eliminate hoarding, but would at the same time create a large Federal banking bureaucracy. It would also saddle heavy additional losses on an already overburdened Treasury, since the Federal Government would be ultimately liable for the difference between the present liabilities of all banks for deposits and borrowed money, and the sum total of their assets plus whatever might be reclaimed from stockholders under double liability. It might, therefore, ultimately increase the government debt considerably. In the immediate future, however, it would not increase the debt since this capital would be subscribed rather than paid in. Funds advanced on capital account to meet runs would have to be raised in the market but these might not require as much immediate borrowing as is now taking place to provide the Reconstruction Finance Corporation with loanable funds to meet runs.

Segregation of deposits

An alternative plan imposing no burden on the Treasury would forbid any bank to pay out to any depositor a proportion of his total deposit in excess of the proportion which its stated liquid unpledged assets bore to its total deposit liabilities. For the remainder of his deposit, he would receive a certificate entitling him either to complete payment as remaining assets were liquidated or to a share of ownership in the bank. In the latter case he would receive in dividends such amounts realized on unliquid assets and stockholders' double liability as was in excess of the amount needed to be

retained as capital in the bank.

This procedure, though it would involve an initial shock, would end all further shocks. Depositors would probably rush at first to withdraw in cash as much of their deposit as remained unfrozen. We have plenty of facilities through the Federal reserve banks and Reconstruction Finance Corporation to advance this cash. After the first shock, the plan would tend toward resumption of operations. Depositors would be acquiring funds constantly as slow assets were liquidated, and the assurance of no more bank suspensions would end hoarding.

This procedure should not be applied piecemeal, that is, simply in acutely affected areas as, for example, at the present time in Michigan, since that makes it more profitable for alert depositors to hoard and insures heavy losses for depositors who do not hoard.

Conclusion

I feel the present situation is sufficiently acute to require that action be taken along one line or the other immediately. I would recommend that action be taken along both lines. Disregarding the legal details, I would suggest that legislation be enacted immediately along the following lines:

1. First, provide for the proclamation of a partial banking holiday in which it will be unlawful for any bank to pay out to any depositor an amount in excess of that portion of his total deposit which is covered prorata by unpledged liquid assets.

2. Second, proceed to examine the banks as quickly as possible on a conservative accounting basis and have the Reconstruction Finance Corporation subscribe capital to those banks whose sound assets were equal to 90 per cent or more of their liabilities for deposits and borrowed money. The amount of

such subscription would be sufficient to restore in each bank unimpaired capital equal to 10 per cent of these liabilities. The stockholders would have the option of redeeming this capital from the bank out of future earnings. As soon as the facts were ascertained and capital subscribed, the partial banking holiday would be lifted for these banks and they would be permitted to resume full and free payment on deposits.

3. Deposits in banks whose assets were less than 90 per cent of liabilities for deposits and borrowed money would be written down to their liquid unpledged assets, and the remaining equity of the depositor would be released to him as unliquid assets were realized upon.

This plan has the following merits: (1) it removes the possibility of anyone profiting by hoarding and creates a banking situation in which all remaining deposits are sound; (2) it preserves the principle of individual treatment and does not penalize the well run bank at the expense of the badly run bank; (3) it preserves the soundest banking institutions intact with no writeoff and only a partial suspension for a few days; (4) it provides for equitable treatment of all depositors in other banks which are probably going to fail eventually anyhow.

File Planning Group

Submitted to
Nat. Economic Planning
Discussion Group of
Washington, D. C.
(Feb.1933)

PLANNED OBSOLESCENCE

Whether we owe our economic distress to overproduction or underconsumption, to dispose of the oversupply in the one case of increase purchasing power in the other would seem essential to correct the situation.

The various efforts of governments and private initiative to remove goods from the market artificially for a period, while they have been effective in other times, have in this depression failed generally in their purpose. Apparently, outright destruction of goods is the expedient necessary.

The most effective agent in the destruction of goods is War. Small diplomatic tinder would be needed today to precipitate war at at least a half dozen points sufficient to embroil a good part of our World. Yet only the most heartless would advocate it even to save the present starving. Nor have we the courage to destroy peacefully large quantities of commodities or foodstuffs in order to create a demand for new ones and the contigent labor and wages going into their manufacture.

Incidently our very reluctance to destroy is perhaps evidence of a subconscious conviction that underconsumption rather than overproduction is the real cause of our economic grief, and that it is wicked to destroy goods while there is a fragment of hope for their ultimate distribution to those in need of them.

What to do about it, granting wholesale destruction of commodities to be undesirable, but admitting the prompt resumption of industry and agrisultural rehabilitation to be imperative. Why not press into service that infallible agent of destruction "time", give everything that is made or produced an official 'length of life' after which time it must be junked - taken out of circulation_____. Thus equipment would render its best service before being destroyed, and surplus grain, for example, could not be held indefinitely, speculated in, to glut markets and bear down on prices. This would be use of the 'destruction' principle stripped of its most shocking or wanton aspects. After a life schedule were established for commodities (or perhaps for certain leading commodities would suffice). The 'life period' could be moved forward or back, or even eliminated for a time according to the degree of economic recovery attained.

Such a scheme is termed "Ending the Depression through Planned Obsolescence" by Bernard London in a 20 page pamphlet out some months ago. I should like to hear it discussed if only to dispose of it.

J. B. Frisbee

Friebie

January 26, 1933

MEMORANDUM FOR DR DURAND

I have not had an opportunity to compare the several "National Planning" measures before Congress, and others being widely discussed, so will not venture to single out any particular plan as the most appropriate for consideration by our group. The 'Persons Plan' I believe, is certainly worth discussion.

A new development in our country rapidly attaining proportions to which we probably ought to give some thought at least, is this "Buy American" campaign instituted by the Hearst Press. We know from the experience of other countries with such campaigns that they are effective only so long as the propaganda is persisted in, and if the real objective of the movement here might be, possibly, to consolidate national sentiment along some line in order to prime the prosperity pump, well and good. If continued it would be a sure road to national isolation and getting ourselves even more royally hated abroad than now, if that were possible. Should we be willing to ignore the rest of the world and its opinion of us, there are still other vital factors involved in the "Buy American" idea that directly or indirectly touch upon our own economic welfare. I would like to see "Buy American" on the agenda.

J. B. Friebie

COMMENTS ON MEMORANDUM OUTLINING A PROGRAM FOR FORCED EXPANSION OF INDUSTRY

Direct governmental intervention in the economic situation offers promise, but only if it is directed toward well considered ends. The degree of genuine economic improvement stimulated will be much more affected by the object toward which public expenditures are directed than by the actual amount of funds put out.

Large loans to the unemployed, for example, would probably have very small economic effect. They would permit those who contracted the loans to increase their current expenditures somewhat but these expenditures, in the nature of the case, would be directed toward minimum consumption requirements, and thus would stimulate mainly industries which are even now operating at relatively high levels. Personally, I would expect that the effect would be expressed more largely in a rise in prices for immediate consumption goods than in an increase in their output. If the price rise in these goods induced the producers to reequip their plants with more efficient machinery, there would be a secondary effect on the capital goods industries where revival is most needed. Personally, I am skeptical of such effects in this case, where producers knew definitely that the increased orders represented a non-recurrent demand stimulated by consumption loans.

Kent plan for consumption goods

The Kent plan for guaranty of out-of-pocket costs for widespread operations of the consumption goods industries faces objections of a similar character. These are the Industries which least need a stimulus. In addition, a guarantee of out-of-pocket costs in these industries would remove all incentive for them to modernize their capital equipment since continued

use of obsolete equipment would no longer be unprofitable.

Horty plan

The Horty plan is by far the most practical plan advanced. It would undoubtedly stimulate widespread activity quickly and would maintain this activity as long as large subsidies were continued. Because of its effect upon prices, however, this activity would stop as soon as the subsidies were withdrawn.

At the present time, there is a huge oversupply of construction in terms of the present restricted market. Building costs are falling, but are still fairly high in general and much too high to make new building profitable in competition with existing housing. The Horty subsidy would lead to building activity because it would break this price jam since it would reduce the cost commitment of the entrepreneur to a level at which he could afford to build without decreasing the amount paid to the contractor. The subsidy, therefore, would throw on an already oversupplied market continued new supplies of construction which it would be profitable to rent or sell at levels far below the real cost of new construction. Obviously, under these circumstances, all present construction would bid for the subsidy and all new construction would require a subsidy before it could be undertaken. It would make business extremely active, but this activity would reflect subsidized building and the percentage of subsidy would probably have to be increased continually as new construction came on the market. The subsidy could not be withdrawn, furthermore, because to do so would again paralyze our largest single industry.

Stamped scrip

There is no merit in the stamped scrip. It would not circulate at all

without legal tender, because its only value would be derived from the number of stamps already affixed. If it were made legal tender, it would circulate at some discount in the same manner as other depreciated currencies, but with even more attendant confusion. It would not stop hoarding but would put a premium on hoarding, that is, everyone would hoard his good money and attempt to get rid of the stamped scrip as soon as possible. In other words, the stamped scrip would circulate rapidly because of its disadvantages, but the circulation of other currency and checks would be correspondingly slowed down.

Recommendations--Subsidies

If subsidies are to be used in any form either as proposed by Mr. Rorty or Mr. Kent, they should avoid at all hazards the price dislocations which subsidies usually bring. They must be so planned that they will not only stimulate activity but also so that they can be dropped, after they have accomplished their purpose, without thereby causing a decrease in activity. The fields that offer most promise along this line are mass production industries, now operating at low volume, which once they were stimulated through a subsidy would be able to maintain their position without further subventions of public funds.

The automobile industry offers a case in point. In a recent issue of the magazine Steel, an analysis of the costs of the automobile industry showed that a car selling for $550 f.o.b. cost about $115 to build, including in this cost all direct payments for wages and materials. Advertising figured out at about $35 per car, sales commissions at $150 per car, leaving $250 for general supervision, overhead and profits, if any. These prices are figured on the present low volume of automobile business. During the past

year, about 1 million cars in this price class were sold. It is clear from these figures that if the output were doubled and 2 million cars were sold advertising might be reduced to $20 per car, while general supervision, overhead and profits, etc., would be around $125 per car, making a unit cost saving in all of around $140. Clearly under these circumstances it would pay producers to stimulate demand by cutting their prices $100 per car, if by so doing they doubled their sales.

In a situation such as this, an indirect subsidy might be very stimulating. A governmental body, for example, might make an agreement with producers of motor cars in the $500-$600 price range, which established minimum quoto output for this class of, say, 2,500,000 cars in the next twelve months. Under this agreement, the automobile companies, on the one hand, would agree to lower their retail prices immediately by $100 per car and also to make more favorable installment sales terms, while the government, on the other hand, would agree to put into a fund $100 for each car less than the quoto which the producers failed to sell, the fund thus established being divided among the producers pro rata according to their actual sales. Such a subsidy would never have to be paid if it actually stimulated activity and would leave a price situation which would need no subsidy on the basis of activity. It would also stimulate each producer to go after as much of the market as he could get, and any subsidy which was actually paid would be more than offset by savings to the consumers of automobiles who were able to get their product at lower cost.

A similar subsidy could be arranged with the steel house industry to stimulate low cost housing for workers. The steel house foreshadows an infant industry which appears to promise great social returns in low cost

housing. This low cost will depend on mass production. At the present time, without mass production, a five-room bungalow is offered around $3,500. While this price is claimed to be cheap in view of the modern features included and the durability of the house, it does not offer sufficient attraction in competition with wooden bungalows to attract much business. On a volume basis, the price could be lowered to $2,500 or less where it would be definitely stimulating to new building. A subsidy along the general lines outlined above, which made it possible to offer a volume price of $2,500 or less now, would encourage an infant industry of great promise without establishing conditions where the subsidy would have to be maintained after the industry grew up.

Recommendations--Public works

The public works program should be pointed definitely toward the decentralization of industry, i.e. toward facilitating a transition from industrial congestion to the decentralization made inevitable by the automobile and cheap power. If our building industry comes back into widespread activity, it will not do so in general by new construction in cities and areas which are already oversupplied, but by building roads, schools, factories, houses, and commercial buildings in areas which are not at present developed, but which at the same time are ripe for development because lower costs which they offer for industrial and residential purposes as compared with our present congested and overbuilt areas. Decentralization of industry to avoid the high costs of congestion is clearly coming and offers the only real hope for a quick revival of construction.

The public works program set up to revive activity should be directed toward hastening this development. It should not provide public works in

general, but should concentrate its operations on eliminating congestion through facilitating decentralization. If it does this, the funds spent on the program will be matched many times over by private construction because the public funds will provide those minimum conditions which will make renewed private construction profitable.

March 6, 1933

Mr. Goldenweiser

Mr. Riefler

The first requirement is to open up the banks as far as possible during the moratorium, in order that some business may go on. Insofar as member banks are concerned, the machinery is all set to open the banks immediately up to the limit of their eligible unpledged assets. I would recommend, therefore, that the Secretary of the Treasury issue regulations under the holiday as follows:

1. Maintain a full embargo on gold payments by the Federal reserve for the length of the holiday except:

(a) Release of gold now earmarked

(b) Release of gold against deposits of foreign banks in the Federal reserve banks

2. Open the Federal reserve banks immediately to discount eligible assets and permit these assets to be used to obtain Federal reserve notes by member banks which observe the following procedure:

A. Let the member bank deliver to its Federal reserve bank all its eligible unpledged assets together with a statement of its liabilities for deposits and borrowed money.

B. As soon as these assets have been verified by the Federal reserve bank as both eligible and acceptable, let the member bank open on a limited withdrawal basis, both cash and checks, the percentage of withdrawal being fixed by the ratio of its eligible and acceptable assets plus its reserve balance and vault cash to its deposit liabilities.

3. Let the Federal Reserve Board decree that for the period of the holiday, Federal reserve banks shall discount for nonmember banks on the

same basis.

(4) Let new deposits be accepted on a 100% basis

Advantages

This plan has the advantage (1) that it can be put into effect immediately, (2) that it will permit a considerable part of normal business to go on, (3) that it does not dissipate our gold reserve, (4) that it gives prestige to the reserve banks in that they continue to stand willing to convert all of the eligible assets of their members into cash. I estimate that for the country as a whole this would release about 30 per cent of deposits. Since payroll accounts are kept in general in the banks with the larger proportion of eligible assets, it would permit payrolls to be met to a considerable extent.

To Mr. Douglas April 11, 1933

From Mr. Riefler Subject: Slum Clearance

Progress in slum clearance through organized social effort has been immeasurably impeded by confusion of purpose among its advocates. On the one hand, advocates of slum clearance are really city planners interested primarily in demolishing actual physical slums, i.e. the unsightly, unsanitary sections of our cities where construction has become obsolete, while other advocates of slum clearance are in reality not half so much interested in the demolition of slums as in the provision of adequate, decent housing accommodations for those lower income groups of the population which now inhabit slums. At the present time, both of these groups have joined hands to push a common program which envisages the demolition of existing slum areas and the construction of modern homes at cheap rentals on the same sites.

Both constituents of this program are economically feasible, but the economics of urban land values are usually such in this country that the two cannot be combined on the same site on a self-supporting basis. Slum properties rent at very low levels but they do not sell at correspondingly low levels for the reason that the land which they occupy is usually favorably situated with respect to commercial uses and commands accordingly a speculative price. This makes it practically impossible to acquire such land by condemnation at a price sufficiently low to make the construction of new low rent housing economically self-supporting.

I propose, therefore, to deal separately with the problems (1) of

slum clearance, and (2) of construction of new low rental homes, accord- to their economic limitations. Under this procedure the problem of slum clearance would be regarded purely and simply as a problem in city planning, as a problem of converting property now occupied by slums to its most economic use. It will usually be found that this use is not low rental housing but some other form of construction which will be self-supporting in spite of the price of the land. Construction of low rental housing, on the other hand, should be stimulated in those portions of the city where land values are lowest.

Slum elimination in New York City

In view of the present over-built character of New York City, and the rapidly declining level of rents there, slum clearance has more possibilities of becoming self-supporting than new low rental construction, and the following concrete suggestion is offered with this point in mind:

New York City, especially Manhattan Island, is at present suffering tremendously from the high cost of congestion, resulting from the lack of city planning. The business life in general centers around two foci, one, the financial Wall Street district on lower Manhattan, and the other, the general business theatrical district ranging from 14th Street to Central Park, with its core at 42nd Street. The area between these two definite commercial foci, that is, the area from 14th Street to Chambers Street roughly, should, under any rational scheme of city planning, be devoted to residential purposes and should house a large proportion of the population whose business life carried them south to the financial district or north to the 42nd Street business region. That is, the area should

be a fairly high-class residential area, feeding out in two directions. This would help tremendously to solve the subway problem, substituting a short haul for a long haul, and also help to mitigate the costs of congestion in other ways. A considerable portion of this area is devoted to residential development of this character, but in addition it contains one of the worst slum areas in New York as well as a welter of miscellaneous manufacturing and commercial developments--many of a sweat-shop character--which add to the general congestion, but are economically profitable because the buildings which they occupy are obsolete and available temporarily on a low rental basis, while the land is being held for subsequent improvement.

As a measure of stimulating construction in New York City, I would definitely hasten this development by creating conditions which would make it possible to replace the existing slums in this area, not with workingmen's homes but rather with developments similar to Tudor City. In this way a maximum amount of private construction could be started with a minimum amount of government funds. Specifically, the problem might be attacked as follows:

1. Let New York City zone for residential purposes the area roughly delimited by the green line on the accompanying map of lower Manhattan. This would not disturb the district immediately but would insure that future construction in this area would be for residential purposes or for purposes consistent with a residential area.

2. Project a series of main boulevards through and surrounding this area to insure its attractiveness and accessibility for residential purposes. The green lines on the map indicate the approximate

location of these boulevards, two of which would be cross-town--one near 13th Street and one near Chambers Street--and three longitudinal boulevards, one along each river and one down the center. In all, this would constitute about 5 miles of boulevard.

3. Let the City of New York, possibly with state aid, divert part of its road funds to inaugurating this boulevard construction, thus definitely establishing preferred residential sites for new construction.

4. Let the Reconstruction Finance Corporation grant self-liquidating loans to builders desiring to take advantage of the situation thus created for new construction along the boulevards. At present building costs, it is possible to construct much higher-class residential properties under the New York State Housing Act than were contemplated when that act was drawn. This means that it may be profitable even without a change in the law to construct high-class properties that would be self-liquidating within the terms of the Housing Act instead of workingmen's dwellings in this area.

Advantages of plan

This plan not only provides for some immediate construction, but also, establishes conditions under which a large and continuing volume of private construction will be profitable until the area has been entirely rebuilt. It also provides for the ultimate elimination of a bad slum area and a decrease in congestion. It does not specifically construct houses for workingmen, but it will improve their housing conditions nevertheless, first, by removing the slums where they now live, and, second, by creating vacancies in better areas at present occupied by the higher income groups. This will tend to depreciate the

value of this existing property somewhat, but not nearly so much as it is now depreciated by the inactivity of the building industry in New York City. In other words, property owners of existing housing outside this area stand to gain more by renting them eventually to a lower income group with jobs than by renting them at present to middle class tenants whose income is disappearing.

Washington, D. C.
May 5, 1933

Mr. Jerome Frank
U. S. Department of Agriculture
Washington, D. C.

Dear Mr. Frank:

I hope this memo fills the bill for you. Please remember that these are my own individual ideas and not in any sense a reflection of my official connection.

Very truly yours,

Winfield W. Riefler

WWRgcw

STIMULATION OF INDUSTRY

No proposal for forced government intervention to revive business offers promise of success that does not take into account the devastating extent of the depression in our durable goods industries, i.e. in industries engaged in construction, and in turning out products such as steel and automobiles. Consumption goods industries, such as textile, leather, food, and clothing industries, are now running at higher capacity than any others, and the extent to which they are depressed reflects chiefly the effects of the lack of buying power of workers in the durable industries; carpenters, steel workers, and others. Most of the unemployed were formerly employed in the durable goods industries, and it is to the reemployment of these workers that one must look for creating an appreciable increase in the amount of consumption goods that can be sold; increased sales of these goods will in turn result in a growth in the number of workers in these industries. The following comments on various proposals that are now under consideration are made with this background in mind.

1. Doles and loans to unemployed

Doles and loans to the unemployed will alleviate suffering, but will not stimulate industrial revival. The recipients of funds put out by these measures will not buy houses or automobiles but will employ them in purchasing consumption goods of the cheapest character, which industry is already equipped to provide without enlarging its plant capacity. The most that can be expected from such loans, therefore, aside from their direct effect in diminishing distress, is slightly higher prices for consumption goods.

2. Agreements by producers to start operations simultaneously

Various plans for agreements by producers to start operations simultaneously would have much the same result. The theory back of these

agreements seems to be that if all manufacturers would agree to reemploy workers at the same time, the added wages created thereby would buy the products which these workers produced. This would probably be the result if all employers could be induced to make such a move simultaneously, but it certainly will not be the result if manufacturers merely agree to the plan. The efficacy of such a plan would depend entirely on the distribution of employers who entered into it. Under existing conditions it is almost bound to fail, if tried on a purely voluntary basis, for the reason that the employers whose cooperation would be most essential are also those employers least able to join. The building contractor cannot agree in general to start building at a given rate because he does not build a standardized product that can be shipped here, there, or anywhere, where laborers reemployed under the same scheme happen to desire a house. Before the building contractor can make an agreement about employment he must have a definite order for a definite property, on a definite site. Almost of necessity, therefore, the employers who are in a position to enter into a voluntary scheme of mutual and simultaneous reemployment will be manufacturers with fixed plants, engaged in turning out standardized articles. These products, moreover, will consist largely of consumption goods. An estimate of the additional supply of consumption goods which would be thrown on the market by the simultaneous reemployment of a given number of workers, say, three million, would show that the three million workers would be able to absorb only a small proportion of the additional clothes, food, furniture, etc., turned out; as a consequence, surplus stocks would be built up which would soon demoralize the market.

3. Revival of War Industries Board

The revival of a national council like the war industries board might be a valuable weapon to deal with substandard competitive conditions, such

as the sweatshop conditions which now characterize a large portion of the clothing industry. It would not, however, offer a direct stimulus to the durable goods industries where stimulus is most needed.

4. Kent plan for guaranteeing out-of-pocket costs

The Kent plan for guaranteeing out-of-pocket costs to manufacturers who resume operations simultaneously fails at the same point. It would provide for the production of more consumption goods than could be marketed under the plan and would have the further disadvantage that guaranteed costs would remove any inducement for manufacturers to reequip their plants with modern equipment.

5. Other financial maneuvers

Most other financial maneuvers also fail to promise positive results at the points where revival is most urgently needed. There are many plans for creating fuller credit facilities in the hope that more credit would stimulate industry. The fact is that credit for all good commercial risks has been generally abundant and cheap throughout the depression, except during periods of panic, and additional government credit for agriculture and industry has already been made available by Congress without appreciable results. It may still be possible to cite numerous instances where particular producers were unable to fill an order because they could not get the credit to do so, but it would be hard to find many instances of orders that were not filled because none of the competing producers in the industry could obtain credit. In other words, in a situation like the present, when production facilities in every line are in excess of demand, any orders which actually appear in the market can be quickly filled and the effect of more widespread commercial credit facilities where they are needed is not to increase the total volume of business

so much as its distribution among existing firms. When the so-called need for commercial credit is really traced down, it is usually found to be a need for capital.

6. Direct stimulation of durable goods

This brief analysis shows that some of the above plans offer many social advantages, but none of them promises to revive industry, because none of them provides stimulus at the one essential point, namely in the output of durable goods. The prospect of industrial revival, therefore, rests either on the continued operation of natural factors or else on a direct governmental stimulus to the durable industries.

At the present time there is little likelihood of quick revival without stimulus either in the construction industry or in the capital equipment industries. If business were running at top speed we might need more construction and would certainly soon need new capital equipment, but for the present restricted demand the existing supply of these commodities is still sufficient. The automobile industry, on the other hand, may revive without stimulus since it has reached a point where revival in output will be necessary to maintain even a moderate number of cars on the road. Passenger car registrations have already fallen from around 23,000,000 in 1929 to probably 19,000,000 at the present time. The average age of cars in use at the same time is much greater than normal. From four to five million cars will be worn out during 1933 and an additional 3,000,000 cars will be ready for the scrap heap in 1934. Within two years, therefore, there must either take place a large revival in automobile output or else a great reduction in the number of cars in use. Under these circumstances, it is clear that the automobile industry is in better position for revival than the other durable goods industries. It is questionable, however, how much of this revival will come this year, and, also how rapidly it

would stimulate the remaining durable goods industries without the direct use of government funds either as a guaranty for industry or in the form of direct public works.

7. Guaranties or subsidies

If subsidies are to be used in any form, they should avoid at all hazards the price dislocations which subsidies usually bring. They must be so planned as not only to stimulate activity but also to envisage their discontinuance after they have accomplished their purpose, without thereby causing a decrease in activity. The fields that offer most promise along this line are mass production industries, now operating at low volume, which would be able to maintain their position without subventions of public funds when general activity is resumed.

The automobile industry offers an exceptionally promising field for some form of guaranty, both on account of the large deferred demand now beginning to press on the market, and, also, on account of the relation between its present costs and prices. In a recent issue of the magazine Steel, an analysis of the costs of the automobile industry showed that a car selling for $550 f.o.b. cost about $115 to build, including in this cost all direct payments for wages and materials. Advertising figures out at about $35 per car, sales commissions at $150 per car, leaving $250 for general supervision, overhead, and profits. These prices, figured on the present low volume of automobile business, leave small profits despite the low unit cost per car. During the past year, about 1 million cars in this price class were sold. It is clear from these figures that if the output were doubled and 2 million cars were sold, advertising might be reduced to $20 per car, while general supervision, overhead, profits, etc. would be around $125 per car, making a unit cost saving in all of around $140. Clearly under these circumstances it would pay

producers to stimulate demand by cutting their prices $100 per car, if by so doing they could double their sales.

In a situation such as this, a guaranty might achieve real results. A governmental body, for example, might make an agreement with producers of motor cars in the $500-$600 price range, which established a minimum quota output for this class of, say, 2,500,000 cars in the next twelve months. Under this agreement, the automobile companies, on the one hand, would agree to lower their retail prices immediately by $100 per car and also to make more favorable instalment sales terms, while the government, on the other hand, would agree to put into a fund $100 for each car less than the quota which the producers failed to sell, the fund thus established being divided among the producers pro rata according to their actual sales. Such a subsidy would never have to be paid if it actually stimulated activity and would leave a price situation which would need no subsidy on the basis of activity. It would also stimulate each producer to go after as much of the market as he could get, and any subsidy which was actually paid would be more than offset by savings to the consumers of automobiles who would be able to get their product at lower cost.

A similar subsidy could be arranged with the steel house industry to stimulate low cost housing for workers. The steel house foreshadows an infant industry which appears to promise great social returns in low cost housing. This low cost will depend on mass production. At the present time, without mass production, a five-room bungalow is offered around $3,500. While this price is claimed to be cheap in view of the modern features included and the durability of the house, it does not offer sufficient attraction in competition with wooden bungalows to result in many sales. On a volume basis, the price could be lowered to $2,500 or less where it would be definitely stimulating to new building.

A subsidy along the general lines outlined above, which would make it possible to offer these houses at a volume price of $2,500 or less now, would encourage an infant industry of great promise without establishing conditions where the subsidy would have to be maintained after the industry grew up.

8. Rorty plan

A general subsidy for construction along the lines of the Rorty plan would also undoubtedly stimulate activity so long as it could be maintained, but would at the same time tend to create a price situation where building construction would slump as soon as the subsidy were withdrawn.

At the present time, there is a huge oversupply of construction in terms of the present restricted market. Building costs are falling, but are still much too high to make new building profitable in competition with existing housing. The Rorty subsidy, if applied in general, would break this price jam by reducing the cost to the entrepreneur without decreasing the amount paid to the contractor. It would create building activity, therefore, but would also throw on an overbuilt market continued new supplies of housing which could be sold or rented at levels far below the real cost of new construction. Obviously, under these circumstances, all construction contracts now being awarded would bid for the subsidy and backers of all future projects would insist on a subsidy. The business activity which resulted, therefore, would reflect subsidized building and the percentage of subsidy would have to be increased continually as new construction came on the market and forced rents to lower and lower levels.

9. Public works

There remains the possibility of inaugurating a large public works program financed directly on government credit. If such a program is undertaken, it will probably not be successful in stimulating a general revival unless it conforms to

certain principles.

In any such program, the type of work undertaken is much more important than the amount spent. An expenditure of $100,000 for a school, for example, in itself adds simply $100,000 to the purchasing power of consumers, and if the school is so located that no one will use it, provides no greater stimulus to general business activity than a grant of the same amount to unemployment relief. An expenditure of $75,000 for a school in a location favorably situated in all other respects for suburban growth, on the other hand, will stimulate a much larger amount of business activity because it will provide the final essential link for a community and thus will create a situation favorable for private construction. Any public works program that is undertaken, therefore, should not only be rapid but also selected with a view toward the effects of the expenditure in creating collateral opportunities for private construction. The Tennessee Valley project is a perfect illustration of this point.

The most promising public works program at present, from this point of view, would be one that was directed consciously toward a planned decentralization of industry, i.e. toward facilitating a transition from industrial congestion to the decentralization made inevitable by the automobile and cheap power. If the building industry comes back into widespread activity, it will not do so in general by new construction in cities and areas which are already oversupplied, but by building roads, schools, factories, houses, and commercial buildings in areas which are not at present developed, but are ripe for development because of the lower costs which they offer for industrial and residential purposes as compared with congested and overbuilt areas. Decentralization of industry to avoid the high costs of congestion is clearly coming and offers the only real hope for a quick revival of construction.

This field offers an excellent opportunity for the exercise of national planning and a public works program set up to revive activity should be directed toward hastening the movement. It should concentrate its operations on eliminating congestion through facilitating decentralization. If it could do this successfully, the funds spent on the program would be matched many times over by private construction because the public funds would provide those minimum conditions which would make renewed private construction profitable.

May 17, 1933

Mr. Goldenweiser

Mr. Riefler

The Movement of Excess Reserves

February 1 to May 1, 1933

The regular reporting service on excess reserves of member banks has been so disorganized as a result of the bank holiday that it is still impossible to state where excess reserves were held after March 1, without attempting to interpret the effect on these reserves of the huge withdrawals of currency and gold which took place during the same period.

During the week ending February 3, total excess reserves amounted to around $500,000,000, while in the week ending February 24 (the latest for which segregated data are available) they amounted to about $372,000,000, a decrease in all of $135,000,000. The relative distribution of these excess reserves in the two periods is indicated in the following table:

EXCESS RESERVES OF MEMBER BANKS
(Millions of dollars)

	Week ending		Change
	Feb. 3	Feb. 24	Feb. 3 to Feb. 24
New York City	174	37	- 137
Chicago	190	170	- 20
Total central reserve city banks	364	207	- 157
Reserve city banks by districts			
Boston	43	36	- 7
New York	0	1	+ 1
Philadelphia	21	4	- 17
Cleveland	2	1	- 1
Richmond	9	7	- 2
Atlanta	..	1	+ 1
Chicago	7	9	+ 2
St. Louis	3	8	+ 5
Minneapolis	1	7	+ 6
Kansas City	11	20	+ 9
Dallas	3	7	+ 4
San Francisco	7	23	+ 16
Total reserve city banks	107	124	+ 17
Country banks	31	41	+ 10
TOTAL ALL MEMBER BANKS	502	372	- 130

These figures show that by the third week in February New York City banks were losing reserves heavily, and there were also material losses in the Boston, Philadelphia, and Chicago Districts. In the Richmond and Atlanta Districts, there was little change in excess reserves, while in the five Western districts excess reserves increased. Judging from the figures of total member bank reserves held, these divergent movements apparently continued up to the bank holiday on March 6. The eastern districts lost excess reserves and the western districts gained reserves, except in the San Francisco district where excess reserves decreased after February 24. The largest single increase was in the Dallas district where average excess reserves increased by $15,000,000 between the week ending February 24 and the week ending March 3. At reserve city banks in the four districts of St. Louis, Minneapolis, Kansas City, and Dallas combined excess reserves apparently increased from an average of about $18,000,000 in the week ending February 3 to around $64,000,000 in the week ending March 3. These same four districts experienced the smallest increase in currency demand of any districts in the system. Up to February 24, in fact, the increase in excess reserves in each of these districts, with the possible exception of Minneapolis, was larger than the total increase in currency withdrawals. After the banking holiday, movements of excess reserves were again in the general direction of the distribution as of February 1.

Significance

These movements emphasize the point that the recent banking crisis reflected fully as much a panic among the bankers as among the public. It has frequently been pointed out that panics prior to the establishment of the Federal reserve system were due more to hoarding of currency by interior banks

than to actual withdrawals by the public. Under the correspondent banking system then prevailing, New York City banks were forced to close when interior banks sought to withdraw their deposited reserves in cash. In many ways these same developments were repeated during the recent banking holiday. It is clear that interior banks, even those experiencing no large direct demand for currency from the public, sought to protect themselves against possible withdrawals by building up their excess reserves. An analysis of vault cash holdings, furthermore, indicates that half of the $2,000,000,000 increase in currency demand between February 1 and March 4 went into increased holdings of vault cash; in other words, that banks withdrew two dollars from the reserve banks for every one dollar which the public withdrew from the banks. We shall never know how much of the $317,000,000 of gold coin and certificates withdrawn during this period, or how much of the $306,000,000 gold earmarked and exported, also reflected efforts of bankers to protect themselves rather than the payment of gold to meet public demands, but the known facts concerning demands for excess reserves and vault cash lend a strong presumption to the theory that in the case of gold also, the closing of the reserve banks was in part at least a measure of protection against the demands of its members rather than the demands of the public. We do know that on the night of March 3 some member banks were seeking to convert their reserve balances into gold.

Taking all these factors into consideration, it is certain that those demands of the public alone, which were manifest up to March, were not nearly so heavy as the decline in the reserve ratio of the reserve banks would imply.

Probability of National Bank Note Retirement

I have no knowledge whatever as to whether the Treasury intends to allow the National Bank note issue to disappear through the maturity and redemption of bonds bearing the circulation pribilege or not. I doubt in fact whether the question has been finally decided in the Treasury. There are several straws, however, which indicate that it is the policy of the Treasury to retire this element in the currency provided the opposition on the part of the smaller national banks is not too severe.

In the first place, the ultimate retirement of national bank notes from circulation is visualized in those original sections of the Federal Reserve Act which relate to Federal reserve bank notes. These provide that the Federal reserve banks may purchase or be required by the Federal Reserve Board to purchase United States securities bearing the circulation privilege up to a maximum of $25,000,000, to be used in one of two ways; either as security for the issue of Federal reserve bank notes under essentially the same provisions as govern the issue of National Bank notes, or to be converted into long-term Treasury bonds without the circulation privilege. Both of these alternatives visualize the gradual exclusion of National Bank notes from the currency, through purchase of the bonds bearing the circulation privilege. In the first case, they would have been replaced by Federal reserve bank notes which do not figure in the reserve ratio of the reserve banks, while in the second case, they would have been replaced by Federal reserve notes against which 40 per cent in gold must be held as reserve.

The fact that the 4 per cent United States bonds of 1925 were permitted to mature in 1925 and thus reduce the collateral available for national bank note

circulation was also generally construed to mean that the Treasury intended to permit the retirement of the national bank note issue.

Serious opposition on the part of National banks to the withdrawal of the circulation privilege might cause a reversal in this policy. Such opposition is likely to be lessened, however, by the substitution next January of smaller notes for the large notes now in circulation. As the desire for retention of national bank notes arises largely from their advertising value and not from any particular profit to the issuing bank it is unlikely that a great many national banks will care to incur the expense of engraving new plates while the continued existence of the entire issue remains undecided. Under these circumstances, the inconvenience of handling the two sizes of notes both for themselves and for the public may well be such as to remove opposition to the retirement of the issue. On the whole, therefore, the probabilities are that the national bank note currency will be retired as the bonds securing it mature.

Effect of National Bank Note Retirement on Federal Reserve Banks and the Money Markets

(a) Effect on Member Bank Borrowing

If the 2 per cent consols of 1930 are paid off on April 30, 1930 without conversion into other bonds bearing the circulation privilege, approximately $600,000,000 of national bank notes will be retired from circulation. The retirement will not take place immediately on the maturing of the bonds, but as the notes are presented for redemption on their return from circulation. As the demand of the public for currency is not in the least affected by an operation of this kind, the Federal reserve banks will be called upon to furnish $600,000,000additional currency to take the place of the national bank notes which are retired. This demand can be met either by the payment of cash re-

serves of the reserve banks into circulation or by increased issue of Federal reserve notes, presumably the latter in the present state of the reserves of the reserve banks. In either case, reserve bank credit outstanding will be increased by $600,000,000

The first effect of the retirement of national bank notes that will be felt by the reserve banks, therefore, will be an increase in the dependence of the member banks on the reserve banks. If this increase is not offset by open market operations, borrowing on the part of member banks will increase by $600,000,000 over and above what it would otherwise have been, not because of any change in domestic or international credit conditions or business developments but simply as a result of the maturing of certain bonds bearing the circulation privilege. Such an increase would more than double the average volume of indebtedness of member banks during the last six years, and bring total borrowings of member banks to higher levels than any that have prevailed since 1921. The effect upon ~~the~~ member bank borrowing would be equivalent to sales of United States securities amounting to $600,000,000. This would undoubtedly be followed by heavy liquidation on the part of member banks in their endeavor to repay this indebtedness, rising money rates, and falling prices for high grade bonds. In other words, unless the retirement of nationla bank notes is offset by open market purchases ~~of~~ in United States securities by the reserve banks we can look forward to a major deflation in 1930. ~~if the national bank note issue is retired.~~ There is no question, however, but that the reserve banks would wish to offset such effects. I will assume, therefore, that the retirement of the national bank note issue is accompanied by open market purchases of $600,000,000 in United States securities on the part of the reserve banks in order to prevent deflation, and trace the effect of such offsetting

on the future liberty of action of the reserve banks.

(b) Effect upon the Reserve Ratio

If the reserve banks are called upon to increase their issues of Federal reserve notes by $600,000,000, their required gold reserves will be increased by 40 per cent of this amount or $240,000,000. I will illustrate the effect of this increase in reserve requirement from the latest condition statement of the Federal reserve banks, that for April 4, 1928. On that date the reserve ratio was 72.1 computed as follows:

Cash reserves	$2,907,971,000
Federal reserve note cir.	1,601,000,000
Total deposits	2,434,987,000
Total note and deposit liabilities	4,035,997,000

Ratio of total reserves to deposit and note liabilities combined 72.1 per cent

If at the present time Federal reserve notes were increased $600,000,000 to replace National Bank notes in circulation, the ratio would be as follows:

Cash reserves	$2,907,971,000
Federal reserve note cir.	2,201,010,000
Total deposits	2,434,987,000
Total note and deposit liabilities	4,635,997,000

Ratio of total reserves to deposit and note liability combined 62.7 per cent

In other words, the substitution of Federal reserve notes for $600,000,000 of National Bank notes ~~for $600,000,000 of National Bank notes~~ now in circulation would reduce the present reserve ratio from 72.1 to 62.7 per cent. By 1930, however, the underlying situation will be changed merely through the passage of time. We may not have at that time gold reserves as large as we have now. The present tendency is certainly toward some further loss of gold this year. We will most certainly, on the other hand, have larger note and deposit lia-

bilities merely because of normal growth of the country. I will assume as a conservative estimate that note and deposit liabilities each increase about $100,000,000 during the next two years on account of normal growth in the demand of the country for circulation and member banks for reserves. The probabilities are that the increase will be materially larger than this. Such an increase due to growth even with no decrease in cash reserves would reduce the reserve ratio to 60 per cent. It is certain, therefore, that the substitution of Federal reserve notes for National Bank notes now in circulation will seriously affect the reserve ratios unless it were offset by the substitution of Federal reserve notes for gold certificates in circulation. The reserve banks have paid out about $900,000,000 of gold into circulation since 1921 and could undoubtedly add this gold to their reserves by paying out Federal reserve notes to that extent. This would raise their ratio to around 66 per cent.

(c) Effect upon Open Market Operations

Much more serious than the effect of the retirement of national bank notes upon the reserve ratio would be the limitations it would impose upon open market operations on the part of the reserve banks. During the past six years the reserve system has come to rely more and more upon open-market operations to make its policy effective. These operations are not limited directly by the reserve ratio which is affected largely by changes in gold holdings and the demand for currency and reserves. They are very directly ~~affected~~ limited, however, by the collateral requirements against Federal reserve notes. Every Federal reserve note delivered by a Federal reserve agent to a Federal reserve bank either to be paid into circulation or to be kept on hand must be exchanged dollar for dollar for gold, notes representing member bank borrowing, or acceptances. Federal reserve banks also can extinguish liability on Federal reserve notes received by deliver-

ing to the agent gold or lawful money. In no case, however, can the United States securities in which the reserve banks deal when they conduct open-market operations be used as collateral against Federal reserve notes. This leads to the result, ~~therefore,~~ that open market operations can be used by the reserve system to make its policy effective, only so long as it has ~~suffered~~ sufficient gold, lawful money, and discounts, rediscounts and acceptances, sufficient to provide 100 per cent collateral against Federal reserve notes delivered by the agents to the Federal reserve banks without using the United States securities in which it deals in its open market operations. Substitution of Federal reserve notes for gold certificates in circulation cannot in the slightest relieve the limitation imposed by these collateral requirements on reserve bank open market operations. Only forty cents of every dollar in gold so retired is needed as reserve by the reserve banks, but one hundred cents in gold are needed as collateral against the Federal reserve notes so issued if open market operations are involved. If the reserve banks accordingly wish to offset the effect of the retirement of $600,000,000 national bank notes on the money market in 1930, through purchases of United States securities of that amount they must tie up $600,000,000 of their free gold in the Federal reserve note collateral account, for $600,000,000 additional Federal reserve notes will have to be issued to the reserve banks, and if these notes are offset, the only collateral available to be delivered for the notes will be free gold. The reserve banks will be able to do this but it will leave them only a slim margin for future operations in the open market. Just how ~~great~~ slender this margin is, is shown in the following estimated reserve bank statement for April, 1931, one year after the United States consols of 1930 mature. The date is made one year later in order to give time for all of the national bank notes now secured by this issue to mature.

Mr. Parry, - #8

Estimated Cash Reserves in April, 1930

For the sake of the estimate it is assumed that the redistribution of gold which is going on at present will not reduce the gold stock of the country by more than $100,000,000 further in the next three years. It is also assumed that the reserve banks substitute $900,000,000 of Federal reserve notes for gold certificates now in circulation in order to build up their reserves. Under these assumptions total cash reserves of the system in April, 1931 will be $800,000,000 greater than they now are, or $3,700,000,000.

Estimated Note and Deposit Liabilities in April, 1930

Federal reserve note liabilities will, of course, grow tremendously. New Federal reserve notes to the extent of $600,000,000 will be needed to replace National bank notes in circulation and a further amount to the extent of $900,000,000 will be needed to substitute for gold certificates. This is in addition to the notes now in circulation to the sum of $1,600,000,000, or $3,100,000,000 in all. The volume of currency in circulation at the present time, however, is from $100,000,000 to $200,000,000 below what is usually to be expected in April because of the recent slump in business activity. There is also to be expected during the next three years a normal growth in the amount of currency required to handle the growing transactions of the community. Allowing only $200,000,000 to cover both the increase from the present low point in the circulation and the expected year to year growth in the next three years, the volume of Federal reserve notes in circulation in April, 1931 can be conservatively estimated at $3,300,000,000. Deposit liabilities of the reserve banks can also be expected to increase with the growth of the country. These have recently fluctuated between $2,400,000,000 and $2,500,000,000. They have also shown an average growth in recent years of about $100,000,000 a year. Total deposit liabilities in April, 1931, therefore,

can be conservatively estimated at $2,600,000,000.

This gives total cash reserves in April, 1931 of $3,700,000,000 against total deposit and note liabilities of $5,900,000,000, or 62.7 per cent.

Gold Available for Federal Reserve Agents' Collateral against Federal Reserve Notes

Of the total cash reserves of $3,700,000,000 at least $1,000,000,000 in gold and lawful money will be needed by the Federal reserve banks, $910,000,000 as minimum reserves of 35 per cent against deposit liabilities, $60,000,000 in the banks' gold redemption fund at the Treasury against Federal reserve notes and $30,000,000 to cover day-to-day fluctuations in reserves required against deposit liabilities. This leaves not more than $2,700,000,000 available to serve as collateral against notes issued by the Federal reserve agent to the Federal reserve banks. The total volume of collateral needed varies both with the demand for circulation and the volume of Federal reserve notes which the Federal reserve banks and branches wish to keep on hand in their tills. The former has been estimated at $3,300,000,000. The latter at the present time varies between $300,000,000 and $500,000,000. Taking the smaller amount, the total collateral which would have to be in the agents hands would be $3,600,000,000 as against only $2,700,000,000 in available gold. Under these circumstances the reserve banks would have to keep at least $900,000,000 in discounts and acceptances deposited as collateral with the agents and would not be able, even if they should wish, to ~~keep~~ the money market through open market operations, to buy United States securities, in sufficient volume to reduce member bank indebtedness and acceptance holdings below this amount. ~~beyond this point.~~

It is obvious, therefore, that the retirement of the national bank note issue under present circumstances would seriously hamper the ability of the reserve banks to ease the money market through purchases of United States securities and might prevent them entirely from conducting such operations.

A portfolio of $900,000,000 in discounts and acceptances according to the experience of the system does not mean easy money but relatively tight money such as prevailed in 1923, the fall of 1925 and 1926 and ~~at the present time~~ in recent weeks. It would be most unfortunate if such periods of relatively tight money became general and could not be relieved through open market action.

This estimate, moreover, applies to April conditions and not those which ordinarily prevail during the fall of the year when conditions would be further tightened. It ~~also~~ visualizes, of course, a further loss of gold of $100,000,000, which may not take place, and a slight growth in the demand for currency and reserve balances which also may not take place. I am inclined to believe, however, that all of these estimates are relatively conservative and that greater rather than smaller demands from these sources are to be expected. It is always possible, of course, to decrease the gold requirements as collateral for Federal reserve notes if the Federal reserve banks could operate with a smaller volume of Federal reserve notes issued and kept on hand. In the above estimate this amount was placed at $300,000,000, around the minimum of holdings in recent years. A material reduction, perhaps as much as $250,000,000, might be made in ~~the~~ this item. It should be remembered in this connection, however, that the reserve banks now carry usually about $50,000,000 in National bank notes as till money in addition to $300,000,000 in Federal reserve notes which will not be available in 1931.

Possible Solution of the Problem of National Bank Note Retirement

There are several possible methods of handling the problem presented by the retirement of the National bank note issue, any of which would be preferable to the simple retirement of the issue.

First; new bonds bearing the circulation privilege could be issued to replace those which mature. This is the most obvious solution of the problem and is undoubtedly to be preferred to a simple retirement of the issue without taking any of the measures outlined below. It would perpetuate, however, an element in our currency system that is an anachronism and would prevent us from using the opportunity presented by the maturing of the bonds bearing the circulation privilege to achieve a more simplified and unified currency system.

Second; the reserve act might be amended so as to permit United States securities to serve as collateral for Federal reserve notes. This device would limit the possible expansion of reserve bank credit to the extent of adding $240,000,000 to the minimum reserves which the system would be required to hold against the Federal reserve notes issued to replace national bank notes in circulation, but would at the same time give the reserve banks greater freedom in their open market operations. With this provision, the collateral requirements against Federal reserve notes would cease to be a limiting factor on open market operations and the reserve system would be free to follow such policies as seemed most desirable within the general limitations of the reserve ratio.

There would undoubtedly be strong opposition to any such amendment from the group who wish to hamper the freedom of action of the reserve banks, as well as those who still hold to the new generally discredited idea that commercial paper is the only desirable collateral for Federal reserve notes. ~~are the only proper collateral~~

Third; a variant of this measure permitting the reserve banks to use United States securities to the amount of the present national bank note circulation as collateral for Federal reserve notes would probably have a better chance of passing. This would not be particularly desirable from the point of view of the reserve banks as it would increase their reserve requirements by $240,000,000

and leave the present limitations on open market activities exactly where they ~~were~~ are. In other words, the fact that the national bank notes are retired would add to the burden imposed on the existing reserves of the reserve banks without freeing them from any of their existing disabilities.

Fourth; the most desirable solution in my opinion would be a revival of the Federal reserve bank note. If the Act were amended so as to permit the Federal reserve banks to issue Federal reserve bank notes against United States securities to the extent of $675,000,000 or the amount of United States bonds now outstanding bearing the circulation privilage, the retirement of the national bank notes could be effected without changing the present position of the reserve system or the guarantee of the currency. If the Act were further amended to permit Federal reserve banks to issue Federal reserve bank notes ~~to be issued~~ not only against United States securities up to $675,000,000, but also against gold and lawful money both the limitations on open market operations which now lurk as a future deterrent to effective reserve bank action andthe miscellaneous character of our currency structure would be in a large measure removed, if this were adopted it should be provided that gold and lawful money ~~securing~~ Federal reserve bank notes outstanding could be counted as reserves against deposit liabilities of the reserve banks, and that the reserve banks, ~~of course, would~~ be required to maintain a reserve of 40 per cent in gold against Federal reserve bank notes in circulation. Federal reserve bank notes in this case would be similar to Federal reserve notes in that those issued were subject to one hundred per cent collateral requirements and those in circulation to a 40 per cent gold reserve. They would be dissimilar in that they would possess no real elasticity for every dollar of Federal reserve bank notes issued would be collateralled by a dollar of non-Federal reserve currency now in circulation. They would also

differ from Federal reserve notes in that gold and lawful money securing them could be counted as reserve either against Federal reserve bank notes or against deposits at the reserve banks. This provision would allow the reserve banks to operate freely in their open market policy as well as in their discount rate policy subject to a 40 per cent gold reserve requirement against the total note circulation of the country.

In addition to this important advantage, this provision would permit a change in reserve bank practice that would, I believe, make for more efficient operation of the reserve banks. At the present time, governors and directors of individual reserve banks have no way of measuring local changes in currency demand, in spite of the fact that these changes constitute the most important single factor affecting the position of the reserve banks. Mr. Stark is working very hard to produce a set of figures that will show these changes by districts. While these figures will be most valuable for use by the Board, it is a question whether the individual directors and governors of the individual banks will ever become accustomed to using them as they should be used. Under the proposed amendment, however, the separate reserve banks would be able, if they chose, to substitute either Federal reserve notes or Federal reserve bank notes for the entire note circulation of their districts. The statement of each Federal reserve bank would then automatically reveal the extent of currency demand in each district and would inevitably become an important operating tool in the hands of the reserve banks.

Conclusion

The retirement of the national bank note issue is usually discussed, it seems to me, in somewhat irrelevant terms. From an ideal point of view, the currency is an historical relic in our national system and should be abolished

if only for purposes of simplicity of the currency system. The abolition of any device which has built itself into a monetary system, however, usually requires forethought lest it do more harm than good. Such is the question that is presented by the maturing of the national bank note circulation. I have demonstrated, I think, that the simple retirement of this circulation would paralyze the use of open market operations by the reserve banks. That is the sort of consequence which should be foreseen and avoided. The usual discussion of the question, however, revolves around two rather irrelevant issues, the first of which is that the national banks desire to retain the currency for advertising purposes. This is the sort of objection which always arises against any change of current practice. The circulation in fact is probably more trouble to the national banks than it is worth, as they will probably find out when the size of the currency is changed next year. In addition to this, the composition of a national currency system is much too grave and important an issue to be decided upon the advertising value which accrues from it for individual banks. The second consideration that is usually urged is that it saves money to the Treasury by giving them a low rate on part of the public debt. This also smacks of irrelevancy and comes close to an argument for the unrestricted issue of paper money. It does not apply to the case in point at all, however, as the surplus earnings of the reserve banks are paid into the Treasury as a franchise tax. If the Treasury has to pay higher interest on the bonds which it floats to redeem the issues bearing the circulation privilege, it will receive more in franchise taxes from the reserve banks and its net position will not differ appreciably from that which obtains at present. The more relative considerations are given above.

Mr. Parry, #15

Any of the suggested solutions of the problem presented by the retirement of the national bank note issue is preferable to an automatic retirement of the issue similar to the practice followed in 1925. To adopt any one of them, however, requires legislative action. The matter is, therefore, quite urgent as only one full session of Congress intervenes before the decision as to how this retirement is to be handled must be made.

Suggestions for Banking Legislation

(These suggestions are directed toward the ends to be sought rather than to the specific legal devices used to accomplish these ends.)

I. Unification, - centralization vs. decentralization

Prohibit state-chartered institutions from accepting checking deposits and provide that all banks accepting such deposits (including the big private bankers) take out Federal charter, abolish the office of comptroller of the currency and organise the supervisory and examining functions under this charter around the twelve Federal Reserve Banks. This will give a unified national system with sufficient decentralised supervision to keep banking in touch with local needs. If the recommendations listed below segregating savings banking, commercial banking, trust departments and investment banking are adopted, the Federal Government would assume jurisdiction over commercial banking and investment banking while the states would continue to exercise supervision over savings banking and trust function.

II. Size of banks

Try to make banks large enough to attract capable management, but also small enough to be capable of being managed. To this end, prohibit group banking and permit branch banking within Federal reserve districts with the added provisions:

(1) that no bank have a capital of less than, say $5000,000 or possibly $1,000,000, and

(2) that no bank may grow to a size, when it holds assets larger than, say 10 per cent of the total assets of all banks in its Federal Reserve District.

III. Banking Structure

The depression has shown quite clearly that it is unsound to merge commercial banking, savings banking and trust department in one institution on a large scale. It should be the aim of legislation to accomplish this end either directly by legislative fiat or indirectly by imposing conditions which will tend to make it more profitably for financial institutions to specialize along one of these three lines. One of the considerations to be held in mind is that small communities cannot

support all three of these distinct types of institutions, and that merging of the three functions in these very small institutions does not hold the same degree of danger as it does in large city banks. The type of program developed under banking structure, consequently would depend somewhat on the extent to which an attempt is also made to adopt recommendations under II , increasing the size of smaller banking institutions by adopting branch banking.

IV. Guaranty of Deposits

The guaranty plan can probably be worked out constructively if the present law is changed to provide (1) that the guaranty corporation assumed full guaranty and not a partial guaranty (this is to prevent shifting of funds in a panic situation, and (2) that intervention by the guaranty corporation does not await evidences of insolvency on the part of a guaranteed bank, but becomes effective as soon as the capital, surplus, and undivided profits of an institution on a conservation valuation represent less than 10 per cent of its liabilities. When this condition develops the guaranty corporation should be required to restore the capital of the bank through

subscription of preferred stock and such subscription should carry with it full management control until such time as the bank's capital is restored. Under these conditions, most banks would never become insolvent and they would be few losses for the insurance fund to absorb. The examiners have usually been able to detect deterioration in a bank years before it became actually insolvent. If the guaranty plan provides for intervention when deterioration starts, it should be possible to avert eventual insolvency in most instances. In as much as such losses as occur are to be assessed upon the solvent banks, I would suggest that the management of the insurance corporation be modified to include more direct representation for the banks themselves.

V Security Issue Institutions

It is not sufficient to stop with the division of security affiliates of commercial banks. It is much more important to regulate directly the security markets themselves. Here I would provide for Federal charter and examination of house of issue and major distribution outlets; also Federal charter and examination of the stock exchange. I would insist on regularly published