

FISCAL POLICY
and
THE BUSINESS CYCLE

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Chapter V

THE PROBLEM OF BUSINESS STABILITY

What is it that we wish to stabilize, and what do we mean by stability?

We wish to stabilize business, and by business we mean the production and distribution of goods and the rendering of services. These are the activities which provide the people of the nation with the things which they wish to use and to enjoy; while the varied occupations which make this provision furnish the wages, salaries, profits, rents, crop returns, dividends, and interest with which the goods and services are purchased by the consumers.

The variety of these necessary occupations is very great. It includes more than the simple manufacture of a radio, for instance. It includes the production of raw materials from the soil and their extraction from the earth and from the sea. It includes transportation of raw materials and of finished goods and the buying, selling and distribution of the same. It includes the mobilization of savings (and a ^{sufficient} ~~fair~~ return to those who save) so that the necessary buildings, machinery, and equipment may be built and assembled into a manufacturing and selling organization. It includes the other necessary financing and banking facilities for the initiation and operation of the enterprise. It includes the necessary engineering and technical training, skill and experience, and the financing of engineering training and research. It includes a proportionate share in the maintenance of an ordered civilization, under which alone our present and prospective scale of living is possible.

All of this and more is included in the term "business" as it will be used in this document. But there are other activities which have at times been considered as belonging to "business"

which we must exclude from that honorable designation.

There is a group of activities which thrives on business without making any important contribution to it. These are activities which it is fair to designate as being parasitical on true business. They are for the most part related to useful operations of the sort which we call "financial"; indeed they are often found to be closely entwined with legitimate and necessary activities. They include such operations as, in general, are directed toward the realizing of future profits in the present, particularly when those profits are fallacious and misrepresented, or when the whole situation has been built up to a general hysteria of optimism. In short, the mechanism of the recurring boom, whether in real estate, commodities or securities, is not "business" in our sense. Similarly the process by which inside officials profit from the buying and selling of securities of their own companies on the basis of inside information is not "business."

It must be admitted that the distinction is not clear and sharp. The border line cases defy classification. It may even be that a certain small percentage of the activities excluded in our definition are unavoidable or even necessary. But the great mass of desirable business activity is so far removed from this border line that identification is not difficult.

~~The~~ ^{Our} definition of business is important because it must in considerable measure determine our policies. While we may properly give short shrift to parasitical growths on business, we will be careful of disturbing business itself, which is the process of providing ourselves with what we want. We will try to improve it, to expand it, but not to cripple it. Business

in our sense is the life blood of every citizen and to choke its flow is to attack his social health and well-being.

Our use of the word "stability" also needs definition. We do not infer that it is possible or even desirable to keep industrial production, or the general price level, or foreign trade, or any other economic factor - even employment - on an absolute dead level.

We could not do this if we would. There are new factors continuously being injected into our social mechanism -- new inventions, crop failures, wars and rumors of wars -- which require readjustment of the whole mechanism of production and distribution. Some of these slow down activity; others speed it up. We are not wise and skillful enough to foresee these disturbances or to compensate for them accurately.

More than this, perhaps we should not attain absolute stability even if we could. There is no analogy in the world around us or within which leads us to believe that an unchanging state is desirable. Day and night, the moon and the tides, the succession of the seasons, the very intake and exhalation of our breath, and the expansion and contraction of our hearts -- all these are immemorial symbols of life, health, and energy. Yet too great alternations bring not life, but death; and in our alternations in business, in employment, and in consumption we have been perilously near the death and destruction of our social order. What we seek is not absolute, but relative stability.

Nor is this all. We are not content with the present standard of living for the mass of our fellow-citizens. Furthermore it is right that we should be discontented, for that standard

is lower than it needs to be in view of our natural resources and present technical development. Current technical progress can raise it still higher. There are no physical obstacles. What the political and economic obstacles may be we will examine in later pages. But it is clear that we are justified in seeking an expanding stability as well as a relative stability.

Whenever, therefore, the word "stability" is used in this section, an expanding, relative stability is to be understood. The phrase is too clumsy for repeated use and the word must be recognized as comprehending the phrase.

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Our concern with financial policy in this part resolves itself into two phases. The first part of our task concerns the banking and monetary system itself. In any objective appraisal of economic instability, the banking system must bear a considerable burden of responsibility. In modern times, a large proportion of our total money supply has been supplied by the banks. In fact, some nine out of every ten dollars employed in the general business of the country originates in the banking system.¹ This supply of bank-made money shows a tendency to wide fluctuations. Thus in 1929, as measured by demand deposits in all banks in the United States, it amounted to somewhere in the neighborhood of twenty-six billion dollars. In 1933, it sank to the low of around seventeen billion dollars.² The causes of this fluctuation may have been the result of

¹ The ratio of currency to bank money or deposits has tended to decrease. James W. Angell, "The Behavior of Money," McGraw-Hill, 1936, Chart II.

² Annual reports, Comptroller of the Currency, 1929 and 1933. These are "unadjusted" figures. "Adjusted" net deposits are shown on Chart IV, page of this book.

business factors quite apart from any actions of the banks; but again the possibility arises that there were strains and pressures from the banking system which brought about, or at least exaggerated, this expansion and contraction in the supply of bank-made money. If this be so, we have a destabilizing factor in our economic system which should be the cause for real concern. It is necessary to consider the ways and means by which such a variation may, if possible, be controlled.

Or, to suggest another aspect of the problem, the boom stages which have preceded all, or nearly all, of the serious depressions in modern times have been periods of intense speculative activity. The peculiar characteristic of speculation is that it must be either building itself up or collapsing; and collapse as we know has a blighting effect on business that may be far removed from the immediate area of speculation. But speculation must be financed if it is to continue. Money must be provided for the speculator if he is to speculate. Is it possible that our banking arrangements have been such that it is a particularly easy matter to finance a speculation? If so, how can it be made less easy? If speculation can be checked by proper financial controls, one is disposed to think that an important element of instability can be removed.³

It would be a mistake to limit any consideration of banking and financial mechanisms to the purely negative sphere of a search for stabilizing elements. A depression can be

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The difficulty of drawing a sharp line between true business and parasitical speculation should again be noted. Security exchange transactions on a large scale are useful. A "market" is needed by the security holder. Future purchases of grain by the miller are not speculative, but the reverse. They actually remove the speculative element from his business. The markets must be kept open. Some harmful activity will occur. But a scale large enough to be harmful can be recognized and can be controlled.

defined in many different ways. One of the most useful ways to state the problem of depressions is in terms of fluctuations in spending -- spending both by producers and consumers. We are concerned with the possibilities which the banks and the banking system may have for contributing a positive stability to this spending. This is a matter which has been much discussed in recent years. It brings us face to face with the armory of federal reserve control -- the interest rate, open-market operations, margin controls, reserve requirements and moral suasion.

The first stage then of our consideration of the problem of financial stability is one of considering the extent to which we can look to Federal Reserve policy for a positive contribution to stabilized business and private spending, and thus minimize the causes of unemployment and the necessity for expanded governmental spending.

As the second phase of our task, we must concern ourselves with the financial aspects and implications of the flexible budget as proposed in Part I. There we have recommended that the government adopt as a permanent policy the taking care of the greater part of the able unemployed in regular useful public work. Over certain periods, we are disposed to think that this expenditure, as well as perhaps a part of normal government expenditure, should be financed by public borrowing.

We recognize that this violates what for many decades, even centuries, has been considered a canon of sound public finance. The laymen, the newspaper editor, and even the economist have been accustomed to think that age-old maxims for the guidance of the individual constitute a wise financial policy for the state. In general, these maxims center around the idea that going

into debt is foolish and dangerous -- as indeed it often is. Yet the whole structure of modern business is based on indebtedness to banks or to security holders; and many an individual has borrowed wisely as, for instance, to gain an education. There are, however, differences between public and private borrowing which put them in different categories, and it is one purpose of these chapters to bring out those differences.

Even those who have paused to consider that there may be some difference between personal finances and the finances of the state have observed that an unbalanced budget has frequently been a prelude to inflation. States, for example, that have been pressed by wartime or reconstruction expenditures have not infrequently found it impossible to keep revenues abreast of expenditures. This has resulted in considerable increase in price levels and, in some notable cases, in runaway inflations.

We do not consider for a moment that the state should adopt the policy of a permanently unbalanced budget. It does appear, however, that it may be wise to operate at times with an unbalanced budget and at other times with an overbalanced budget. So far as the danger of inflation is concerned, it can be shown that there are very important differences between conditions of depression when we recommend that a budget be unbalanced and conditions of high production and employment when we recommend that the budget be overbalanced. Except in the final stages of the runaway variety, inflation and a depression and unemployment do not occur at the same time, nor has runaway inflation occurred when governmental receipts exceeded expenditures.

The second task of this section, therefore, is to

define and explore the foregoing matters more carefully. We recognize that the financial policies which we believe should accompany the flexible budget are ones that are not without danger. We hope to examine with equal care both the policies and the dangers.

Chapter VI

MONEY, BANKS, and BANK CREDIT

It is desirable first of all to sketch in some of the outlines of our money system. This treatment is in no sense factually complete. It presents only those characteristics of the monetary system and the banking processes which are necessary for the subsequent discussion.

The business of the country is done -- purchase of goods and services is made -- with two kinds of money. The first of these we call common currency. It consists of the ordinary bills and coins with which we are all familiar. The second and much more important kind of money is that for the supply of which the banks are responsible. It takes the form of bank deposits and in some sense also ^{of} bank notes. The bank deposits are transferred from one individual to another by bank checks. However, it is rather important to keep in mind that it is the deposit which serves the function of money -- not the check which is actually transferred from one owner to another.

What we have called common currency derives historically from many sources. However, its most important ancestors are the precious metals -- gold and silver. For many centuries individuals have used these metals in the ordinary processes of consumer transactions. At an early stage governments undertook to mint definite weights of these metals into what we call coins.

In the evolution of common currency the gold (and in the main also silver) coin has given way to paper money. At one stage paper was merely a convenient substitute, and an equivalent amount of gold was deposited for safe-keeping by the issuing bank or government. However, as people became accustomed to using paper currency, it was found that everyone did not demand gold at the same time. Thus, it was found possible to issue a larger

amount than could be covered by the gold held in reserve, and still the exchange value of the paper money did not vary from that of the gold coin it represented. The gold equivalents of the various national currencies set a practically constant exchange rate between them so long as governments gave gold freely for the paper when demanded. We have here crude outlines of the unmodified gold standard.

At the present time the government still takes gold and gives paper money in exchange. If the gold is to be exported, it also takes paper money and gives gold at the same rate, at present an ounce of gold for each \$35 in paper money. However, gold has now been withdrawn from domestic circulation and the latter is made up exclusively of paper money together with a smaller volume of subsidiary coins or change. We have, in other words, a modified metallic base currency against which metallic reserves are held but without free domestic convertibility.

The second main element in our monetary system is bank-created money. This is by far the more important of the two classes. In fact, as was stated in the previous chapter, the common currency makes up only about one-tenth of the total under what we are accustomed to consider as normal conditions. Nor, under modern methods of doing business, could it be much more important than this. Currency alone is wholly unadaptable to present methods of making payments and conducting business transactions.

It is with bank money that we are most concerned and we must scrutinize its generation most closely. The fundamental fact about bank money or its largest component, bank deposits, is that it has originated by indebtedness largely generated in the ordinary process of doing business. In fact, if every bank debt --

private, business, and governmental -- were suddenly paid up, most of the money supply in the country would disappear. If, in addition, the banks sold their investments, the rest would go. That is to say, bank deposits would practically disappear and only the metallic and currency reserves would remain. Business, it seems safe to say, would be at a virtual standstill.

The process of generating bank deposits or bank money is somewhat as follows: A manufacturer has an order for goods for the making of which he has not enough money to buy the materials and pay his workers. In anticipation of receiving payment from his customer, he borrows from the bank to cover his payments for materials and pay rolls. The bank as a part of the process of making him the loan sets up a deposit against which he draws checks to pay his workers and those from whom he purchases supplies. The deposit so set up is in every sense money. By the time he receives payment for the order, he has used up his deposit and the payment goes to liquidate his loan. That payment, in turn, the merchant to whom he sold the goods may have borrowed; so that it was a new deposit set up in a bank which he transfers to the manufacturer, and which the manufacturer uses to liquidate his debt. Bank money it will be seen has financed all of these transactions.

It is desirable that a clear-cut description of this process be kept in mind through the succeeding discussion. For this reason we are including at this point a somewhat longer description of the process which has been prepared by Professor Sumner Slichter:¹

"When a bank lends on a promissory note or a bill of exchange, it does not usually advance cash. It is more convenient to both bank and borrower for the bank

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"Modern Economic Society," pp. 234-7.

to give credit on its books in the form of a deposit account against which the borrower can draw checks. From his standpoint, of course, a checking account is equivalent to cash. This custom of giving checking accounts instead of cash for promissory notes and bills of exchange seems a trivial detail and yet probably no practice in the conduct of modern business has more momentous consequences.

"It creates, for example, a peculiar relationship between the deposits of a bank and its loans. The man in the street is accustomed to think that banks lend out their deposits, that they lend money which has been deposited in them for safe-keeping or convenience. To some extent, this is done, but it is more accurate to say that banks lend in their deposits, because deposits are mainly the results instead of the sources of loans. A bank buys a promissory note for \$1,000 payable in four months. It pays \$980 for it, giving the seller a checking account for that amount. On the asset side of the bank's balance sheet, the item 'loans and discounts' is increased by \$1,000 and on the liability side, the item 'deposits' is increased by \$980. The difference between the two is credited to 'profit and loss.' When the balance sheet is drawn up, the profit² balance in this account appears as 'undivided profits.' Because of this dependence of deposits upon loans, it will be found on examining the balance sheets of commercial banks that, as business activity indreases or decreases, loans and deposits rise or fall together. Because too of this relationship between loans and deposits, a law requiring banks to maintain a minimum reserve against deposits limits the amount which banks may lend.

"But far overshadowing all other results of the practice of giving checking accounts in exchange for promissory notes and bills of exchange, is its effect upon the volume of currency. If banks simply lent the money deposited in them by their customers, the extension of credit would not increase the number of dollars in circulation. But when banks grant credit by creating or adding to deposits subject to check, more is involved than a transfer of dollars already in existence. New dollars are created. Suppose, for example, that a number of banks possess a total of \$1,000,000 in cash. If every borrower insisted upon taking with him the money which he borrowed, it would obviously be impossible for the loans of these banks to exceed \$1,000,000. But if borrowers are willing to accept checking accounts instead of cash, the way is paved for the banks to lend more than they possess. Assume that the banks lend \$5,000,000 giving the borrowers checking accounts for that amount and keeping their \$1,000,000 in reserve to

² Present-day bank bookkeeping modifies this process somewhat, but the end result is the same.

meet demands for cash. Evidently there has been a net increase of four million in the number of dollars. It is true that the new dollars are not stamped out of gold. They are credit dollars and they are created by the stroke of the pen rather than by dies and stamping machines, but their purchasing power is not less than that of the dollars coined at the government mint. In other words, the principal way in which dollars are created in modern economic society is by borrowing. This means that the number of dollars in existence at any particular time depends upon the willingness and ability of banks to lend.³ The volume of purchasing power fluctuates with men's state of mind; the growth of pessimism may suddenly throw millions of men out of work or the growth of confidence may create thousands of jobs over night.

"But by what sleight of hand is it possible for banks to create dollars by the stroke of the pen? Let it be repeated that it can be done only because borrowers are willing to accept checking accounts instead of cash. But why does this make it possible? Will not the borrowers, by drawing checks against their accounts, quickly exhaust the bank's funds? It is true that the borrowers soon draw against their accounts, but their checks do not necessarily cause the bank to lose cash. For the recipients of the checks, in many cases, prefer a checking account in a bank to cash in their own possession. Hence, instead of cashing the checks, they deposit them in the bank. Every bank, therefore, is constantly having checks drawn against it but is also receiving from its customers checks drawn in their favor. To illustrate how the disbursement of cash is avoided, let us suppose that A borrows \$1,000 from his bank and receives, as a result, a credit for that amount on its books. He draws a check to pay a debt of \$1,000 which he owes B. B happens to have his account at the same bank. He deposits the check which A has given him, the bank debits A on its books for \$1,000 and credits B with the same amount. Simply by entries in the books, A has been able to use his loan to pay his debt, and the bank has not been compelled to advance a cent of cash.

"The process is essentially the same if A and B keep their money in different banks. B deposits the check in his bank which credits him with the amount and presents it to A's bank for payment. But A's bank does not necessarily give B's bank cash for the check. In all probability, it has received from its depositors many checks drawn against B's bank. Each bank presents all the checks which it holds against the other, and the difference, usually a small fraction of the total, is settled in cash."

It will be seen from the foregoing statement that loans and consequently deposits and the volume of the purchasing medium
3 And of safe borrowers to borrow (R.E.F.)

go up and down with the volume of business, and not only with business, as we have defined it, but with speculation as well. The question arises when there is an unlimited demand for loans, is there any limit to the volume of loans that the banks may make, thereby creating new deposits and new purchasing power? In other words, could we have an unlimited expansion of the money supply within the banking mechanism?

The limit is set by the legal requirement that the banks keep a certain percentage of cash or common currency against their deposits. The law now requires that member banks keep the following percentages of reserve against deposits:

	<u>Demand Deposits</u>	<u>Time Deposits</u>
Country banks	14%	6%
Reserve city banks	20%	6%
Central Reserve city banks	26%	6%

This is an increase over the percentages formerly required. In the beginning, these reserve requirements were conceived as a device for forcing the banks to keep enough cash on hand to meet any conceivable demands on their deposits. While this function of the reserve still remains, its importance is overshadowed by another consideration. At the present time, professional students of money and banking regard the reserves almost exclusively in their role as a limitation on the amount of possible expansion of loans and deposits.

For the sake of completeness, it should be pointed out that there is a class of common currency which originates in the banking system. This is the federal reserve note, which constitutes a large fraction of our hand-to-hand currency.⁴ The federal

⁴ The national bank notes, now largely withdrawn from circulation, and the Federal Reserve Bank notes also fall in this general class.

reserve note is issued by federal reserve banks and by law must be secured by gold certificates, warehouse receipts for gold, U.S. Government bonds, and notes rediscounted for the member banks. In precisely the same way as the member banks must keep cash reserves against deposits, the Federal Reserve Banks must keep a 40% reserve of gold certificates against their outstanding federal reserve notes. Owing to our enormous gold supply at the moment of writing (October, 1937), the federal reserve banks have title to \$8,838,000,000 in gold against outstanding notes of \$4,184,000,000.

Bank loans, however, are not the only source of deposits -- that is, of bank money.

Banks may purchase government or private bonds or other types of securities. In so doing, new deposits are created in the amount of the purchase, which normally go to some bank, if not to the purchasing institution, and thus serve to build up the aggregate volume of bank money. Conversely, the selling of investments by the bank lowers deposits and decreases the total of bank money.

When new bond issues are involved, whether governmental or private, their purchase by the bank is of the same nature as the ordinary bank loan previously discussed, except that the loan is for a longer term. If stocks or other equities are involved, the operation diverges further from the typical loan but retains the deposit generating feature. In this respect the purchase and sale of securities by a bank differs from purchase and sale by an individual. If an individual buys securities out of savings or other existing funds, deposits are simply transferred from his account to that of the seller without any increase in the total

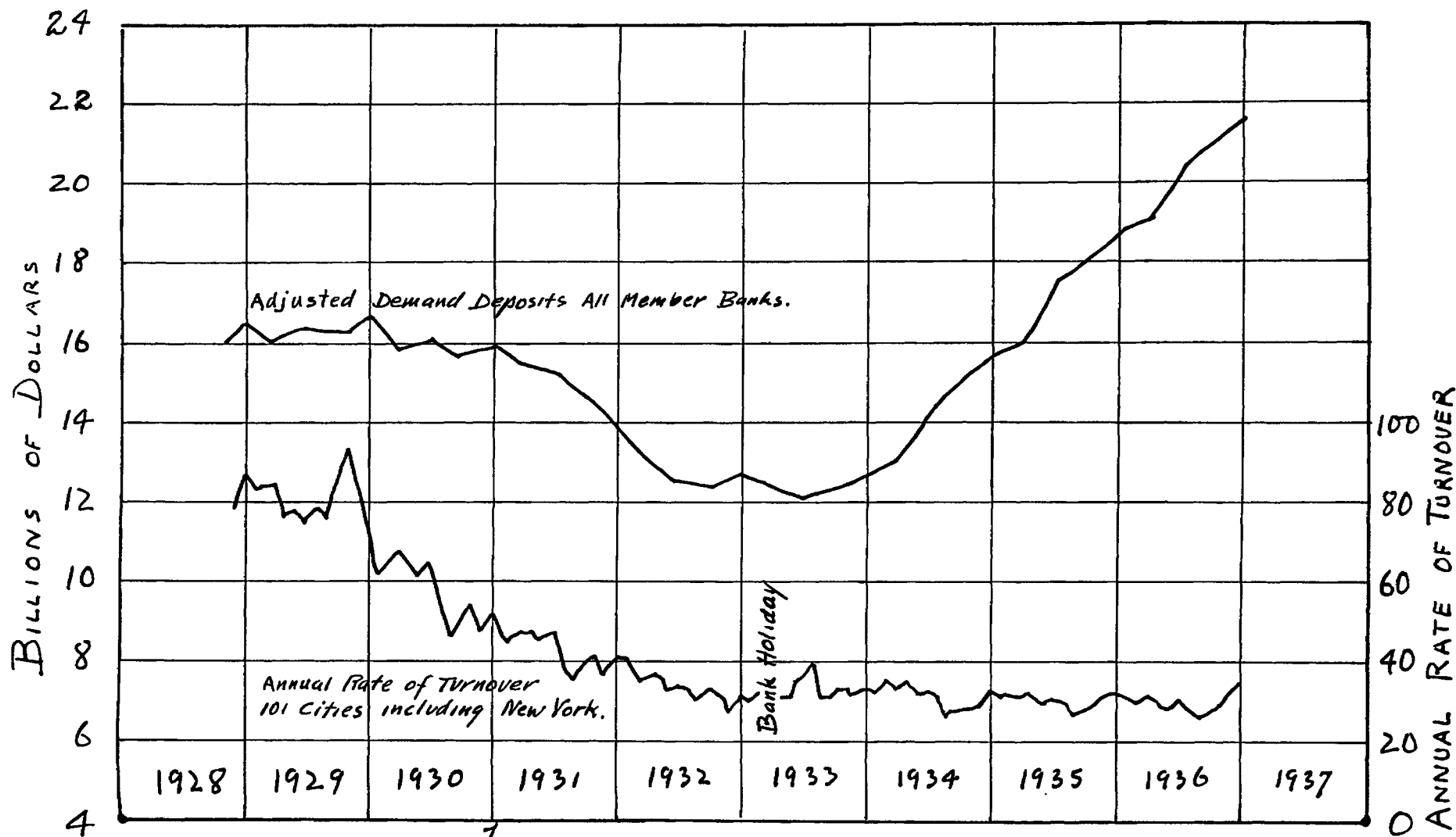


FIG. 1 DEMAND DEPOSITS AND VELOCITY.

SOURCE New York Federal Reserve Bank.

of deposits. If he sells, the transfer is in the other direction and again without change in total deposits. But should he buy on margin, the amount he borrows above his margin is, of course, new money.

Investments tend to increase in importance and loans to decrease as the generating basis of bank deposits. This is particularly evident if investments and loans on securities, real estate, etc., are compared with business loans.⁵

When the processes by which bank deposits are generated are clearly seen, there is no difficulty in understanding why they vary so much, since business varies in its activity and since security prices vary to reflect business ~~earnings~~ expectations. The upper curve in Chart I, Demand Deposits and Velocity, shows this variation for all member banks of the Federal Reserve System. The unprecedented increase in deposits in the last four years has been due to ~~purchases~~ of Government Bonds rather than to loans or other investments, and will have our particular attention a little later.

The lower curve in Chart I shows the rate of turnover of demand deposits, as distinguished from time or savings deposits. It is arrived at by dividing the total amount of money checked out of individual deposits in a year (see Bank Debits, Chart III) by the sum of the net demand deposits of the reporting banks (see Chart IV). The velocity of bank money will be seen to vary fully as much as the amount, being nearly down to one-~~half~~^{third} of its 1929 peak in the period from 1933 on.

⁵James W. Angel, "The Behavior of Money," pp. 170, 171.

Chapter VII

COMPOSITION and QUALITY of the SOURCES of DEPOSITS

As we have seen, the bank deposits with which most of our business is done are generated by the making of loans or the purchase of investments by banks. When loans and investments increase, deposits or bank money increases. When they decrease, bank money decreases. There are a number of types of loans and of investments, each with its own characteristics. The character of the whole structure, which is the aggregate of the characteristics of its components, will depend upon the varying amount of each type in that structure.

In addition to this question of the general composition, there is the question of the quality of each element in the whole structure -- the safety of each individual loan -- the net worth, earning power, and future prospects of each individual investment. While composition and quality are related, they are not quite the same thing, as will be seen from the succeeding analysis.

Among the kinds of loans which compose the supporting structure for bank deposits, the following are the most important.

1. The financing of current production and distribution by short term paper. This is the traditional and orthodox form of bank loan. It involves borrowing for seasonal requirements or for large orders, when these make necessary a temporary expansion in working capital. It may be applied to agriculture, manufacturing, or merchandizing. It is subject to abuse as when used for the financing of unwisely swollen inventories. Some types of business -- as for instance general contracting, and the warehousing and merchandizing of seasonal commodities -- make a large use of credit for this purpose. On the whole,

however, the tendency of late years has been for substantial businesses to increase their working capital from earnings and to carry idle balances in slack seasons instead of borrowing during the busy season. This has diminished the importance of this conventional source of deposits. It still remains an important element in agriculture.

2. The financing of a permanent expansion of working capital. It has usually been considered good financial practice for a firm to provide for its working capital either from operations or from an issue of securities. This principle has been at times more respected in the breach than in the observance, and a certain volume of bank loans outstanding at any time provides long period working capital for business enterprises.

3. The financing of fixed capital. Like the preceding class, this is also frowned upon by orthodox banking theory except where temporary pre-financing of large projects is involved. This sort of loan on an unsecured, short term basis with repeated renewals, is considered unsuitable as an asset for the ordinary commercial bank with its high liquidity requirements. The purchase of marketable bonds as an investment is in a different category.

4. The financing of securities purchased on margin. This involves the loaning of funds against stock market collateral for the purchase of the securities which are posted as collateral. So far as the individual bank is concerned, this is a safe and at times remunerative way of extending credit. As will be noted presently, there are reasons for believing that it seriously impairs the stability of the whole economy. This is a case in which the quality of every individual loan may be safeguarded

while the price and volume of the total collateral of this sort in the whole banking structure may be highly dangerous. This illustrates the difference between composition and quality.

This case has other important aspects as well. If the loan is for the purchase of a newly issued security whose proceeds are applied to capital expenditure, it constitutes an indirect but real application of credit and new deposits to capital, and so is classified under type 2 or 3. As it is bought and sold it so remains until some purchaser, out of savings or existing deposits, retires the amount of the original loan. Any remaining loan, based on an enhanced market value, retains the characteristics of type 4.

5. The financing of consumer purchases. In recent decades a considerable volume of bank credit has been employed in the financing of consumer installment purchases including, besides houses, a considerable volume of other durable consumer's goods. This may be done by loans to the buyer, to the seller, or to specialized finance companies. If our economy can be so stabilized that this component can be kept stable also, if the amount borrowed by the individual does not exceed a reasonable fraction of his income, if the terms do not add unreasonably to the cost of the goods purchased, and if the installments are arranged to liquidate the loan well within the useful life of the goods purchased -- then this component can be a very useful part of the credit structure, perhaps making up for the diminishing volume of short-term paper. Experience has shown its quality to be high.

6. Indirect government financing. In the financing of the World War, the banks of the country made loans on the notes of individuals who were willing to apply the funds thus

generated to the purchase of government securities. By this devious route many billions of dollars of new deposits of purchasing power were placed at the disposal of the government for the conduct of the war. For certain reasons this resulted in inflation and serious attendant ills which will be described later.

7. Direct government financing. This is a process now being carried out on a large scale. The banks purchase bonds or short-term paper from the government and give the government a checking account in return. This is a shorter and more direct process than the one described above and has been used in recent years on a scale comparable to that of war-time financing.

The last two cases are on the border-line between loans and investment. In the case of indirect financing the paper acquired would show as an asset under the item of loans. For direct government financing the paper acquired would be listed under investments. Yet their effects as components of the deposit structure ~~is~~^{are} practically identical. A main purpose of this whole discussion is to examine the usefulness and danger of credit extended to the government, whether directly or indirectly.

While government financing, direct or indirect, constitutes a particular component of the credit structure with characteristics of its own, it may be applied to activities served by other components. It may go into commercial credit for financing agriculture through the Federal Land Bank. It may go into real estate or equipment loans through the Federal Housing Administration. It may appear as a capital loan through the Public Works Administration. There are many ways in which the new deposits are put to work in the fields of other components of the credit structure.

There are still other forms of credit, but of no great importance in their total volume, such as personal, two-name, or secured.

Among the kinds of investments whose purchase expands the volume of deposits are the following:

8. Bonds of federal, state, and local governments. Besides financing governmental expenditures by direct or indirect purchase of new issues, it is possible to expand deposits by the purchase in the open markets of existing issues. In effect, the purchasing bank opens a deposit account for the seller, thus balancing its new asset with a corresponding liability. The deposit may find its way into another bank with which the seller does business, but in either or any event the total volume of deposits is increased. Federal bonds notably, most state bonds, and many local bonds are highly liquid and comparatively stable in value. Their yield is, of course, correspondingly low. When open market purchases are made by the Federal Reserve banks a different and most important result takes place. The resulting deposit by the seller in his bank is in the form of a credit on the Federal Reserve Bank which increases the member bank's reserves, increases the deposits it is entitled to accept or to generate by loans or investments, and thus raises the limit for expanding the volume of bank money.

9. Industrial and railroad bonds, preferred stocks, etc. The purchase of new issued by the banks is a direct application of bank credit to capital expenditure. Similar purchase of old issues in the market is an expansion of bank deposits for whatever purpose the seller may elect. These assets are usually liquid at some figure, but, of course, not always at the purchase price. In a period of severe liquidation they are liable to join the group of frozen assets.

10. Real Estate mortgages. Under prudent management this is a safe, but not necessarily liquid, investment. After periods of inflation the market for real estate, even at reasonable prices, becomes stagnant, and the underlying mortgages depreciate. The inflation of real estate values in a speculative market is financed in part by mortgages based on unjustified values, and in part on loans made on other collateral. In states and institutions

where it is not illegal, there is even a large volume of second and third mortgages taken by banks. In a period of general liquidation this type of security becomes a principal component of the body of frozen assets.

11. Foreign Bonds. A proper extension of credit where assurance of repayment is given. The funds realized are not ordinarily transferred to the borrowing country. Instead, the resulting deposits are applied to the production of goods for export abroad. Unless provision is made for a counterbalancing import of goods, services, or gold, the bonds depreciate in value and become frozen assets.

There are many other types of investment on which deposits are based, but these are the most important. Their purchase by banks expands deposits; their sale to private holders decreases deposits.

We now have at hand most of the important elements of the problem of progressively stable production and distribution of goods and rendering of services, and of the provision of deposits or purchasing power for maintaining that flow of business. We must, however, add at least one more item -- the general price level.

The general price level is an abstraction, but it is a useful one. Price levels are usually expressed as "price indexes" which may roughly be described as an average price for the commodities and services for which they are calculated. Chart II shows two examples. One is a price index of the average cost of living, including all the usual necessary family expenses. The other is an average by statistical processes of the prices of the principal commodities entering into the wholesale

trade. This includes such divergent elements as sugar, iron, leather, and cotton. Attempts have been made to devise an inclusive price index, which would combine rents, security prices, and other financial factors, as well as goods and services.

The volume of goods made and distributed and the volume of services rendered is the thing which we wish to increase and stabilize. Indexes for this volume are also made by statisticians, and one of them (the index of General Trade and Production of the New York Federal Reserve Bank) is also shown in Chart II. If properly devised and constructed such an index should show the general state of prosperity of the people of the country, allowing for variations of distribution between localities, classes, and individuals.

Furthermore, an inclusive price index, multiplied by an inclusive index of volume of business activity ought to be an index of the rate of spending, and should, therefore, follow the variations in the rate at which checks are drawn on bank deposits. Since check transactions constitute the most important method of payment, with the much smaller cash payments roughly following them in volume, the curves for bank debits in Chart III indicate the current rate of spending.

All this may be put in the following form:

The volume of trade activity times the inclusive price index equals the rate of spending of which bank debits is a reliable indicator. If P is the price index, and T the volume of trade, we may put this in the concise form, $PT = \text{rate of spending as indicated by bank debits}$.

Now the rate of spending can also be described in money terms, as well as in terms of volume of trade and prices. The

rate of spending is also the amount of money multiplied by its rate of turnover, the latter being the average number of times that each dollar is used in the course of a year. Using net demand deposits as a measure of the volume of money, this may be stated as follows:

The volume of deposits times its rate of turnover or velocity equals the volume of bank debits, which is an indication of the rate of spending. If M is the amount of deposit money, and V is its velocity, then MV = bank debits and indicates rate of spending.

If M includes currency as well as deposits, and V is the average velocity of both combined, then MV is the rate of spending. But so was PT . Therefore:

$$MV = PT$$

This is an elementary formula in monetary theory, which we will find to be valuable if not used too mechanically. Such use we will try to avoid. One aspect of this formula is that it reveals the intimate connection between business and money.

Volume of trade and the price level are then the important elements on the business side; and amount and velocity of money on the financial side. But something more than the mere physical volume of business transactions needs to be considered before we can accept T as a measure of the well-being of the nation. Of what kind are these transactions? Do they consist in the useful production and distribution of desired goods and the rendering of desired services, or do they consist merely in the rapid passing from hand to hand of titles to securities, commodities, and real estate in ways which do not

contribute to the flow of goods and services into consumption. In a word, we are interested in the composition of trade at any given moment.

We have an indicator of the composition of trade aside from detailed trade statistics. As might be expected from the intimate relationship between business and money, it is found in the composition of the sources of bank deposits, which was examined earlier in this chapter. When the speculative and other purely financial components of loans and investments are high, the non-consumable elements in the total volume of spending are also high, and bank debits -- or the rate of spending -- is not a reliable index of the general welfare.

Likewise, as we shall see, when the quality of loans and investments is low, the maintenance of the volume of deposits and therefore of the rate of spending is threatened with collapse.

To sum up these matters, we may say that the desideratum is large and increasing flow of goods and services to consumers. The necessary business elements in this flow are volume and composition of trade and the general price level. The necessary elements in deposits or purchasing power are the volume, composition, quality and velocity of money, which for most practical purposes means of bank deposits.

We will next proceed to see how these various elements are affected by the business cycle.

Chapter VIII

THE BUSINESS CYCLE

The term "business cycle" is an inclusive one which covers many kinds of fluctuations in business activity and, consequently, in the volume of spending which is made for producers' and consumers' goods. In our view there is no one reason why business oscillates from good times to bad. It is quite possible that the reasons for two successive oscillations may be very different. In fact, it seems likely that they will be. Therefore, we have no intention of setting forth here a conclusive theory of the business cycle. It is beyond the scope of this work to attempt to bring together all of the different explanations of business fluctuations, much less assign to each a specific weight as causes of variations in activity.

However, the problems with which we are dealing are problems which are given point by the existence of business fluctuations. We cannot discuss the problem of financial stability, for example, without knowing the points of contact between monetary or banking policy and the consequences of boom and depression in business. Therefore, it is the purpose of this chapter to canvass some of the factors which combine to produce fluctuations in business spending so that we can relate to them the changes and improvement in financial mechanism which we are suggesting.

We will consider in turn some of the business, governmental, and speculative elements which initiate or aggravate the fluctuations in production, spending, consumption, and enjoyment which we call the "business cycle." At the same time we will examine the attending monetary phenomena. The business element is itself subdivided into agriculture on the one hand and in-

dustry and trade on the other.

As the great basis of business, agriculture is a major factor in general business prosperity. When farmers are prosperous they are good purchasers so that industry and trade tend to flourish also. When farmers are impoverished the market for industrial goods diminishes and trade slows down. But the relationship between the two great branches of business is a reciprocal one; for if influences outside agriculture increase or diminish the activity of industry and trade, the farmers' markets are expanded or diminished thereby.

Agriculture is nevertheless one initiator of business instability, and the weather is the great unstabilizer. When weather is favorable, there may be such a surplus of crops that the market price for the farmer is below the cost of production. At the other extreme, severe drought may destroy his crops and leave him without income. The happier conditions of ample crops and profitable prices also occurs.

With crops whose prices are made in world markets it may happen that crop failures and high prices abroad may accompany a bumper crop here. The business recession in 1924 in the United States apparently was checked by just such a coincidence.

Agricultural prosperity depends less on man-made conditions-- such as the amount of working capital invested in the season's operations -- and more on conditions beyond human control -- such as the weather. There is, therefore, less primary correspondence with loans, investments, and deposits than is the case with other human activities. A large secondary effect results, of course, from the importance of farmers as consumers -- a point which already has been mentioned.

Industry, transportation, and trade represent the other branch of productive business. Here are found certain other instabilities, not due to natural phenomena like the weather, but due to certain enduring traits of human nature. Examples are to be found in housing, the automobile industry, the size of inventories carried by businesses under different conditions, and in the demand for capital goods.

For instance, the construction of residences does not normally proceed at an even pace. If we grant the existence of some cyclical variation to begin with, the individual who is experiencing an improving income will first take care of any pressing personal needs of himself and his family. He will provide more expensive food and will replenish his depleted wardrobe. He will replace a shabby automobile and will begin buying new household furniture. If his favorable income situation continues and if the foregoing needs are fairly well satisfied, he will begin to think about better housing. He will either start looking for a larger apartment, in which case his requirements added to those of his fellow-beings will lead to a rising level of rents and a consequent revival of apartment-house building; or, if otherwise situated, he will start planning for a house of his own. Since much of this house building is brought about because a considerable proportion of the population is similarly circumstanced, the period of large-scale house construction will tend to be compressed within one particular range of time.

If, by the time this body of construction is well along, there chances to be a business recession in other areas, there will be a check to new contracts. Upon the completion of existing contracts, the housing industry will also recede and will add force to the recession elsewhere in progress. But much the same thing would be true even if general business

activity did continue. The first period of revival in residential construction is concerned with making up an accumulated deficiency. After that deficiency is made up, the matter of normal requirements for obsolescence and population growth causes building to proceed at the lower rate. The total volume of building activity thus tends to decrease absolutely. This tendency to waves we may call a "natural instability," and we must not expect that it will be easily counterbalanced.

Another factor to which it seems possible to assign a position of ~~some~~^{great} importance is the movement in inventories. Again granting that some initial disturbance forces businesses to decrease inventories, this decrease must be conceded to have an important influence in decreasing production. Thus, an effort by wholesalers and retailers, for example, to cut inventories by 10% may be reflected back to the manufacturer in the form of a vastly greater percentage cut in orders. Likewise, on the upswing, efforts to replace depleted inventories may be magnified several times before reaching the manufacturer. The business income paid out by the manufacturer is subject to a like magnification. It is of importance to our problem that both the unavoidable pressure to decrease inventories and the financial provision for increase in inventories may come from the banking system. *[Signature]*

The production of capital goods in general -- such as factories, machinery and equipment -- is subject to large natural fluctuations. Capital goods do not have to be made and installed at an even rate year in and year out. As depreciation grows and obsolescence appears, buildings, machinery, and equipment are replaced if "times are good." If times are not good, we wait until they are. Thus periods of business depression are accentuated

[Signature]

by the near-stoppage of the capital goods industries, while periods of business activity are accentuated by the feverish attempt to make up for lost time in replacing buildings, machinery, and equipment, *and in adding to them.*

Much the same condition of feast and famine occurs in the durable consumer goods industries, such as automobiles and furniture. Anything whose purchase can be deferred adds its unbalance to the swing of the business pendulum. Only the goods currently consumed, like food, clothing, and fuel, add to the stability of the business mechanism.

A number of these points are well summed up in a letter recently received by the author from Dr. J. Frederic Dewhurst of the Twentieth Century Fund. He says:

"It seems to me that capital goods and inventory together, explain the sensitivity of our capitalistic system. It is the entrepreneur rather than the consumer who is unstable in his buying habits. He is essentially a speculative buyer in the sense that the volume of his buying is affected very largely by his expectation of the future trend of prices. If, as during the past year, he foresees a substantial rise in the prices for raw materials, he buys far in advance of current needs and if he gets panicky after accumulating large stocks, he uses what he has without replenishing them."

"Thus, we have an economic system in which agricultural producers at one end go on producing whether prices are high or low since they are constantly under the pressure of overhead cost represented by their own time and idle acres. At the other end, the consumer goes along buying pretty steadily, unthinking of future price changes until his own income has been affected. In between are the producers and fabricators whose buying policies reflect not a steady purchase fabrication, and resale in accordance with consumer demand, but a sort of reservoir which is constantly being filled up at a more rapid rate than it is being emptied, or is being emptied more rapidly than it is being filled. Consequently, it has a far more drastic effect on the functioning of the rest of the system than any other part."

This passage well describes the sensitive elements in

I This seems to have taken place in the fall of this year, 1937.

business.

The variations of international trade have wide-spread effects. A development of particular importance was the attempt in the 1920's continuously to export more than we received in goods and services. Such a permanent excess of exports could only be bought on credit, and in consequence we loaned hundreds of millions to foreign countries to support our export trade. Since we were unwilling to accept imports and there was not gold or international services enough to settle the balance, there was no way provided to pay these debts. In consequence the bond values collapsed, thus helping on the general debacle in 1929 and 1930. Of course, we did not actually export money under these conditions. We shipped goods without assuring ourselves of the means of payment.

These variations and maladjustments in business are reflected in the corresponding loan and investment operations by which they are financed. The composition of business is reflected in the composition of deposits. In the following summary the various monetary components are numbered to agree with the list given on pages VII - 1 to - 6.

Housing variations are reflected in construction loans (1) and mortgages (2). Automobile sales and consumer credit (5) tend to rise and fall together. An undue expansion of inventories is reflected in short-term loans (1 and 2) made for the purpose. The purchase of capital goods is financed by short-term loans (3) stock margin loans for new issues (4) and the purchase of securities by the banks (9), where the funds are not provided in

the normal way out of the savings of firms and individuals. An international trade overbalanced on the export side is financed for a creditor country by the sale of foreign bonds and other securities (11).

Besides the maladjustments in business, there are others due to the operations of government which have most serious effects on business stability and the personal well-being of its citizens. Perhaps the most disastrous is war, with its attendant financing. When a nation resolutely sets out to wage war, it is not long before the whole structure of agriculture, industry, and trade is reorganized to this end. The demand for some crops becomes limitless; other crops can scarcely find a market. Some industries are expanded to the limit of available labor, material, and equipment; others are closed down or changed to furnish new products. Millions of men are withdrawn from agriculture and industry for service in the army, and other millions of boys, old men, women, and "unemployables" are set to work producing the materials of war.

The resources of government finance (6, 7, and 8) provide unlimited funds. The needs of the army provide an unlimited market. Workers and equipment are limited. These are the conditions under which a price inflation is bound to develop, and develop it does. The price rise occurs not merely in war materials, but in consumer goods as well; for the workers on war materials are well paid, while the volume of consumer goods they wish to purchase has been decreased by diversion of productive activity toward war. This condition of large earnings and small supply of goods to be bought starts the pyramiding of prices which continues so long as war financing and war production continue.

When the war ends, the conditions disappear. There is no flood of new deposits from war financing; there is an ample labor and equipment supply, and prices tumble. The war boom is over.

A similar maladjustment can occur from large peace-time expenditures by the government. Should limitless funds be provided by governmental financing (6, 7, and 8) for peace-time governmental work, and should the funds and work be ample enough to absorb available labor and bid up wages, there would be the same application of expanded purchasing power to a market whose supply of goods and services was kept at a low level by the maintenance of business activity in governmental operations of the type we are proposing for the Flexible Budget. This is a fair description of the mechanism of the German inflation, for instance, except that fiat money instead of fiat credit was the financing means. ~~We~~ It should not be difficult for us ~~to take care~~ to avoid a similar catastrophe.

On top of these business and governmental activities, wise and unwise, there always exists the possibility of speculation. In times past speculation has become rife whenever other maladjustments operate to furnish a foundation for optimism, however flimsy. Indeed speculation sometimes seems to need no cause or foundation whatever, appearing to spring full-fledged from the ashes of its most recent holocaust.

In practically no recorded instance has there been an extended boom period without serious speculative activity of some sort. The speculation may occur at different times in different places -- sometimes in commodities, sometimes in real estate, sometimes in securities, and sometimes in all three. It

is true, of course, that there are localized examples of speculation to be found at almost all times. Some of these, such as the Florida land boom in 1926, do not coincide with a major boom movement generally; but whenever we have had a major boom followed by a major collapse, a major speculative movement of some sort has always been involved. In 1920 the speculation occurred in inventories and commodities generally. In the period ending in 1929, the securities market and urban real estate were the important areas of speculation.

Speculation is in many respects a logical result of the march of events which leads a recovery period into a boom period. Gains are being taken in inventories with advancing prices, shortages are developing, and a class of buyers enters to take advantage of the price increases. It is a fair generalization that any speculative increase in prices must be followed by a collapse.

However, we are not so much concerned with the mechanics of the speculative movement as we are with the fact that speculation must be financed. Speculations are financed with particular ease under our economic system because of the possibility of creating bank deposits from which the funds are provided. Under the spell of optimism which drives forward a speculative market, thousands of individuals borrow money to purchase commodities, real estate, securities or the other subjects of speculation. The security and commodity markets being organized for quick sale, the security from the bank's point of view is excellent and banks are as willing to loan as borrowers are to borrow. Something of the same sort of thing is true of real estate while

the market is active, although a conservative banker is likely to be somewhat more cautious in this area. This same borrowing is accompanied by the setting up of the bank deposits which are the means by which the speculation is financed. In other words, we have a banking system which operates to facilitate speculative movements.

A vicious circle is here in operation. First stock prices go up and provide a larger base for borrowing so that more money can be spent for securities, which forces their prices still higher. Thus the boom is self-generating.

A study of the collapse of the boom and of the speculation which accompanies it is almost equally instructive. Thus, when it became evident in 1929 that baseless optimism had driven prices and real estate development higher than could be justified by earnings prospects over a long period of years, the collapse of the market forced the banks to protect their loans by selling the underlying collateral. The very act of selling securities or real estate to protect underlying loans depresses the market. This requires that still more holdings be liquidated, that there be further sales and a further collapse in prices. Thus, in the same way that the banks provide the facilities for an expansion for the promotion of a speculative flurry, so they also are forced to apply the pressure for its contraction; and all past history teaches that a broad speculative collapse shortly contaminates productive business. The two are too closely intertwined to be separated, both in the monetary field and in personal relationships.

The point which this presentation seeks to make is this -- that in the mechanism for the generation and retirement of bank deposits as at present operating, we have a mechanism which tremendously intensifies the variations in speculative expansion and contraction. What might be normal and healthy

business variations are magnified into waves of such violence that they endanger the fabric of society. As Professor Slichter has said, "Indeed, if we were living in a cash economy and desired for some strange reason to make that economy highly susceptible to violent fluctuations, we could scarcely do better than to invent the present credit system."¹

Examine
Commodity speculation cannot be carried on without collateral and general loans (1 and 2). Real estate speculation cannot be carried on without mortgages (10). Security speculation requires margin loans (4) and other collateral notes. The initiation and progress of a speculative market can be observed directly if we wish, or it can be followed by a study of the composition and quality of the banking operations which support it.

Such a study of the supporting credit for speculation, and for other maladjustments as well, should do more than keep us informed of current conditions. If we can develop the technique for the purpose, this study should furnish a clue to control as well, for control of credit is a powerful means of control of the activities for whose sake the credit was generated.

But before we proceed to the subject of credit control, and intervening point should be cleared up. In our list of natural business instabilities which are elements in the business cycle, prominence was given to the wide fluctuations in the capital goods industries. We must make clear that this prominence is not necessarily an endorsement of the theory that depressions are caused by over-saving or over-investment.

¹

See "Towards Stability," pp. 23.

A wide variety of explanations both of cyclical movements and of the intensification of the cycle hinges on the view that there is an improper distribution of income. It is believed by many, for instance, that a period of prosperity is brought to a destructive crisis by the condition of an undue volume of profits as compared to wage and minor salary distributions. The arguments here vary. One is that while the total volume of wages, salaries, rents, interest, dividends, and undistributed profits is admittedly great enough to purchase the goods produced, yet too large a part goes in the form of profits and salaries into the hands of those who have sufficient consumable goods and are only interested in investing in the hope of further profits. This presumably results in an excessive production of new factories and capital equipment, and an increasing difficulty in selling the goods which are produced by these factories. A consequent cessation of capital construction may choke off payments which are flowing through to consumers by this route and lead to a destructive collapse. A variant of this argument is that not all of the income going to the higher bracket recipients is invested or spent for goods or services in any form, and that consequently payments to consumers are insufficient to buy back the volume of consumables produced. This would seem to be true where income is hoarded, or is kept in idle bank balances, or is applied to security inflation.

But this leaves out a most important consideration. The expanded investment of the boom period is by no means derived exclusively from achieved income or existing deposits in the first instance. The facilities of bank credit make available for investment sums enormously greater under boom conditions than those

immediately available from existing deposits. To these sums must be added the immense deposits generated by direct bank investments (see component 9). Until we have some better measure and understanding of these processes it will be difficult to say whether present rates of profit from normal business operations are or are not sufficient for the optimum rate of investment.

There is quite evidently some theoretical optimum in the division of the returns from industry between the stream which goes on the one hand to consumers and that stream which, on the other hand, goes to savers and investors. The consumer stream cannot be too great in proportion to the total or the demand for goods will tend to exceed the productive capacity. Prices will rise and production will be expanded only against the pressure of interest rates. On the other hand, the funds seeking investment may be so large as to produce some variant of the conditions described above.

But if oversaving is to be held responsible for some part of business fluctuations, it is none the less important to *now, and will require for some decades to come,* recognize that our economic system does require a large and growing volume of savings. The volume of savings must be great enough to equip society for a growing population. While the rate of growth is decreasing, the population is still growing and will continue to grow for some decades to come. This in itself calls for some expansion in equipment. Furthermore, there must be enough saving to equip a rising standard of living; that is to say, there must be new and increased facilities for a larger volume of goods and services made and distributed to people; an increase in consumer buying requires an increase in investment also. As part of this rising standard of living, provision must be made

for shorter hours, if shorter hours are to be an element in our social objective. This requires increased provision of improved labor-saving equipment as well as simply adding new equipment. Likewise the day shift must be provided for, unless night work is to be considered a desirable element of the more abundant life. To reduce working hours to the day shift will make necessary a larger supply of machinery, equipment, and facilities than is required by two- or three-shift operation. Finally there must be enough saving to finance the research and experimentation which will insure progress toward new products, better products, higher efficiency and shorter hours.

In view of the impressive requirements for saving in our society it appears clear that we must not risk too sharp a curtailment of the supply. There are indeed some evidences that the profit from true "business" in our sense is no more than sufficient for the needs outlined above. The Census of Manufactures of the Department of Commerce indicates that in the manufacturing industries as a whole the profits on invested capital scarcely exceed 5 percent, year in and year out. Some years they are much less, some years much more. Some individual companies have much greater returns; others suffer losses for many successive years. But this is the average profit from which the needs for capital must largely be satisfied. On the face of it the amount does not seem unduly large. These figures, of course, exclude the winnings of speculation and other parasitical elements in the social order. It is the profits of true business which do not seem unduly large for the needs of society, and until some conclusive evidence to the contrary is presented,

the writer of this section cannot recommend policies directly or indirectly based on the oversaving and overinvestment theories.

In calling attention to the fact that a large proportion of the sums available for investment are not provided in the first instance by savings from profits or other existing deposits, we are not saying that investments in capital goods can ultimately be made without savings. Modern economic theory is much concerned with the relation between saving and investment, *(which we will not attempt to follow here)* and by a somewhat abstruse course of reasoning, tends to the belief that saving and investment are simultaneous; and this saving under many conditions becomes a "forced saving," made necessary by the investment, especially when financed on bank credit under boom conditions.

May it not be that voluntary saving of receipts from true business is no greater than is needed to serve society? May it not be that the winnings of business parasites and the forced saving drawn from us by the application of credit to investment are the real evils in the whole situation? If so, credit control is our first duty, rather than experimentation with the detailed control of business or the radical reduction of true business profits.

Chapter IX

OBJECTIVES AND CRITERIA OF CREDIT CONTROL

The objectives which we seek in the arrangement of the financial side of our economic system are fairly clear and there is also a good deal of agreement as to what they are. As in the case of the other measures suggested in this document, our aim is toward a condition of stable employment, production, consumption, and enjoyment, with provision for expansion. The controversy in financial policy arises not over the ultimate objectives but over the criteria by which we judge whether or not these objectives are being served. It is the task of this chapter to examine some of these criteria and to see whether or not they are satisfactory as guides in financial policy.

In recent times at least, the most common criterion set up for financial policy, is the maintenance of a stable price level which, for most champions of this policy, means the whole-sale price level. A considerable group, no doubt, has looked upon the stable price level as an end in itself. But even many who have not, have argued that if prices generally could be stabilized, then production and employment would likewise be stabilized. In consequence, they conclude that it is the task of the government and of the Federal Reserve system to concentrate its attention on keeping prices stable.

Taking a long view of the course of prices and of business activity over the last century, it is true that periods of stable or rising prices have been periods of good employment, a high level of production, and of general prosperity. It is likewise true that depressions have usually accompanied periods of falling prices. It is this broad, statistically observed,

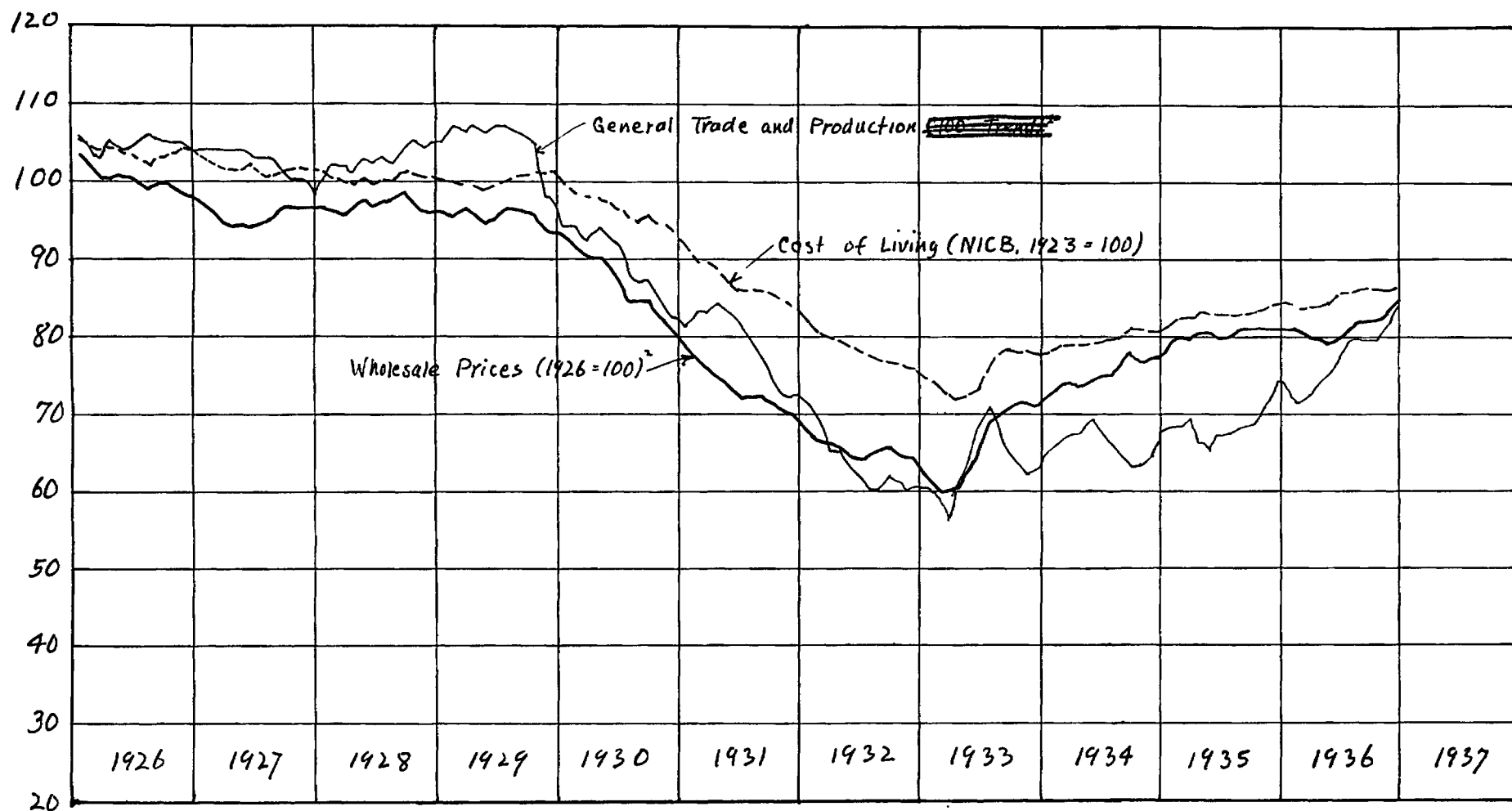


FIG II GENERAL TRADE, WHOLESALE PRICES, COST OF LIVING.

¹ Federal Reserve Bank of New York.

² U.S. Dept of Labor.

relation which has given most support to those who argue that if prices are stabilized, then other things will be stable as well.

However, stable prices as a criterion of financial policy do not stand close examination. In the first place, it appears that falling prices on a wide front are in their first appearance a symptom rather than a cause of instability, and that the symptom appears after the instability is well established. A recent example of this is the collapse of 1929. Industrial production had begun to slow down some months before prices broke into a rapid decline.¹ Any policy which awaited the falling prices would have been too late.

Moreover price movements are illusory. For example, there was a long slow drop in the general commodity price level from 1925 on. This on the simple quantity theory of money would have indicated the necessity for a continuous expansion of credit and deposits during that period to counterbalance the drop. But a large-scale expansion of the velocity of deposits was in fact getting under way. This expansion was of sufficient magnitude and occurred in such kinds of credit that it ultimately contributed to disaster. The wholesale price level gave little indication of this. These points are brought out by Chart II where the slow decline in the price level from 1926 on is compared with the New York Federal Reserve Bank's index of the physical volume of production and trade.

It may be urged that if the index employed for the period from 1925 on had included prices of real estate and securities, it would have given warning in time to bring desirable action. But this actually leads to another reason for

¹This is not to be sought for in Index of General Trade and Production in Chart II, where retail and wholesale trade, transportation and many other elements are included in addition to production.

distrusting the price level as a criterion of financial policy. The price level is not a single uniform homogeneous thing. It is made up of the prices of many different things which respond differently to different conditions. Some elements respond quickly and violently and others more sluggishly. Some may even move in a direction opposite to the general course. Consequently, to watch a general index of prices may be to neglect important dislocations which may be occurring in the component parts of that index. But when attention is given to movements in all of the component parts, then, of course, the idea of general stability in price level is abandoned. As an indication of the varied behavior of price indexes of varied construction, the cost of living index in Chart II may be compared with that for wholesale prices.

We are disposed to think that if financial policy is successful, the result will be a considerable degree of stability in various classes of prices; or, as a long-time result, perhaps an imperceptibly rising price level may be desirable, which would exert a constant mild stimulation on business. But it is worth emphasizing that we look upon a stable or gently rising price level largely as a long-time result and not as an immediately operable cause of stability.

Another, and in some respects an even simpler criterion of financial policy, is the variation in foreign exchange rates. To say almost the same thing, to be controlled by this criterion means so arranging monetary and banking policy as to maintain the gold standard. From the point of view of the orderly development of international trade and a stable and secure environment for international lending and borrowing, no one would deny

the advantages of stable exchanges. In a generally peaceful world, the gold standard has operated as the most effective mechanism of international exchange which has yet been devised and put into practice.

However, we do not endorse the gold standard or stable foreign exchanges as the central purpose of financial policy. Successfully to achieve this objective, there are times when we must be willing to sacrifice internal stability to this end. In particular, if a rigid gold standard is to be maintained, its very maintenance requires that there be fluctuation in domestic prices and incomes to keep the various countries in the gold standard community in equilibrium. During the late 1920's England was unwilling to undergo the deflation necessary to maintain the gold standard. During the same period, we in the United States were unwilling to have the increase in prices which our huge gold stock implied and which maintenance of the international gold standard demanded. It seems doubtful if in the future we will be more willing to sacrifice domestic policy for the gold standard; and considering the relative importance of internal and external trade, it is even more doubtful if we would be wise to do so.

All this does not deny the usefulness of the gold standard. It can be left and returned to, and any realistic conception of it recognizes this fact. Its good qualities are two. When economic conditions are healthy, it is the best system we know of for handling foreign exchange. When conditions are such that continued adherence to it would produce social hardship, this is a sure indication of internal or external disorders which need to be remedied.

Within recent years international trade has shown some ability to accommodate itself to considerable exchange movements. Or, to put the matter in a slightly different way, it seems likely that a sufficient measure of stability of the international exchanges can be obtained to permit international trade to be pursued on a practical basis while at the same time there is little sacrifice of domestic objectives. Within the last year some progress has been made along the lines of just such a policy as this.

At certain times, it has been suggested that the rate of interest is a desirable criterion for Federal Reserve and national monetary policy, with a stable rate as the objective. It is difficult, however, to see how the interest rate could be anything but a means to some further end. As we shall see in the next chapter, the ends which we would consider desirable seem to be best achieved through positive movements in the interest rate, as well as by other means.

Within recent times a number of students have suggested the volume of money as a criterion of financial policy, and a stable volume as an immediate but not ultimate objective. By a stable volume of money is meant a stable volume of both hand-to-hand or common currency and bank deposits combined, as measured on a per capita basis. The view that a very slowly growing volume of money would be a useful objective arises from the view that the changes which now occur in the money supply through the mechanism of bank credit expansion and contraction have much to do with intensifying business fluctuation. While not agreeing completely with all the proposals of this sort which

have been set forth, we are inclined to concur in this as a broad principle, though with important reservations relating to the importance of velocity, as will later be set forth.

Of the various aspects of the monetary problem central banking policy is most effective in controlling the volume of currency and bank credit in circulation. It is not a new idea as a primary criterion for Federal Reserve control. It was substantially that followed by Governor Strong and Dr. Carl Snyder during the period when Governor Strong was very influential in the Federal Reserve System -- that is, roughly, between 1924 and the first half of 1928. Had the net demand deposit curve in Fig. 2 been carried back four or five years earlier, it would have shown that this was a period of nearly stationary volume of money. It was also a period of stable commodity price level although a stationary price level was not the end directly sought. We thus have evidence tending to substantiate the statements previously made as to the price level being a possible result of effective central bank management, even if it is not the immediate aim.

Another proponent of the volume-of-credit criterion is Dr. Lionel Edie, who has explained the idea at length.² Another writer who has recently called attention to volume as a criterion, though not the sole criterion, is Dr. Laughlin Currie³ now in a responsible position on the staff of the Board of Governors of the Federal Reserve System in Washington.

These three authorities do not necessarily agree in

²"The Banks and Prosperity." This book unfortunately is out of print.

³"The Supply and Control of Money in the United States," Harvard Press.

other respects or in all the details of this particular subject. They differ, among other things, with respect to the method by which they would measure the volume of credit outstanding.

The conclusion from this brief survey of possible criteria of financial policy is that there is no one simple criterion which is a serviceable operating formula. We cannot take prices or foreign exchanges or the interest rate and assume that if one or another is kept stable, all will be well. The criterion which most nearly fits our needs is that of the volume of money. Even this, as we shall see, requires attention to the velocity of its circulation. The facts are that we have no substitute for our ultimate objective of more stable employment, more stable spending to maintain that employment and the provision for such expansion as will be consistent with greater stability in employment and spending. It is apparent that the financial policy must look all the way through to the requirements of stable employment and spending or what we may call a better ultimate stability. It is the task of the next chapter to see what weapons there are in the armory to promote this ultimate stability on an expanding basis.

THE MEANS OF CONTROL

Having reached the decision that there is no single simplifying formula to guide us in financial policy, the question arises as to what means we have for achieving our ultimate objective of stable employment, production, and consumption. To do this we must first of all see what the relation is between what the banks and the government can do on the one hand and how business behaves in response to these actions on the other.

Some idea of this relationship can be gained by reference to the monetary formula $MV = PT$, which has already been described. In this formula M is the amount of money (currency and bank deposits) in circulation; V is the velocity of circulation of dollars or the turnover; P is the level of prices; and T is the physical volume of transactions. Each of these terms may be subject to extended analysis by anyone writing a definitive treatise. For our purposes they represent an obvious truism, since each side of the equation is equal to the current rate of spending and, therefore, the two sides of the equation are equal to each other.

It is plain first of all that it is T in which we are ultimately interested. T is the physical volume of business and upon T depends the volume of employment and consumption. Our general objective could be described as a stable T with provision for its increase in accordance with an increased population and an increasing standard of living. We must not be afraid of setting this value of T at a fairly high level. Its volume for 1929 was well within our physical possibilities and these have increased since then. But it is equally important that we do not attempt to reach a high level too suddenly, lest we set up maladjustments which may foil the endeavor.

It is also apparent that M is a primary point of contact with this equation through action of the Federal Reserve System or the government. But whatever the Reserve System and the government do through changing the amount of M , or money, must, if possible, be done so as to prevent offsetting changes in V , or the rate at which money is spent, and in P , or the amount of money which it takes to complete any given transaction.

Let us first consider what the Federal Reserve System can do and secondly what it is possible for the government to do. We will in each case direct our attention first to what can be done during a depression period to keep T or the volume of trade from declining unduly and in the second place we will consider what can be done during the prosperity period to keep it under a proper degree of control.

The Federal Reserve System has five particular tools for monetary control:

1. Rediscount rate control
2. Open market operations
3. Examination, moral suasion, removal of officials, etc.
4. Variable legal reserve requirements
5. Control of margin requirements for security speculation.

The presumption behind the use of rediscount rate control during a depression is that by decreasing the rate at which the banks borrow from the reserve banks, the banks themselves will lower their rates. At these low rates there will be additional borrowing, or any tendency to decrease borrowing will be checked. Bank deposits will consequently be maintained, likewise the rate

of spending and the level of transactions.

Plainly the importance of changes in interest rates may be attacked on both theoretical and practical grounds. In particular if the outlook for business is poor, low interest rates may be insufficient to give a stimulus to expansion. At such times perhaps not even an interest rate of 0% would attract borrowers. If the business outlook is such that there is no prospect of earning any return in investment, then there will be no incentive to borrow even if it costs nothing to do so; or, if there is borrowing, say by the builder, it will be for some future employment of the funds, and while the amount of money in the form of bank deposits will be increased, this increase will be offset completely by the fact that it has zero velocity. Consequently there will be no effect on T, our ultimate objective.

In general, it may be said that in periods of swiftly falling prices the interest rate would have to be negative to stimulate borrowers to borrow and spend at once. A negative rate is out of the question unless banks could charge their depositors for the privilege of holding deposits and pay borrowers a subsidy; and if this were done, people would withdraw their balances as long as the banks' cash lasted and keep them at home or in safe deposit boxes.

The interest rate does have some importance, however, for long term loans and bonds for businesses which, unlike manufacturing or general merchandising, can forecast more or less accurately their profit possibilities and, as a result, operate on a closer margin. Where the margin is close and calculable the interest rate is important. Perhaps the best example of this in the past has been the case of operating companies among

the public utilities which were able to forecast demand and estimate cost and in consequence were accustomed to build with reference to favorable borrowing conditions. It has been charged that this situation has been altered by the present uncertainty of governmental policy. Apartment-house and residential construction is another area in which interest rates have been a determining factor of some importance. In any event the long-term interest rate is not directly or immediately affected by the controlled short-term rate.

It is, therefore, fairly clear that the interest rate is a slender reed. While low interest rates may create a favorable situation for other classes of action, it is not considered that they are of any great importance as a measure of control during depression.

The second tool of federal reserve control is open market operations.¹ These are often regarded as being a mere adjunct to interest rate control; that is to say, if the reserve system wishes to raise interest rates, the rediscount rate is put up. But if the member banks have surplus reserves and are not borrowing from the reserve banks, they may be under no pressure to raise interest rates. But if the reserve banks then sell bonds which are purchased by depositors of the member banks, then cash is transferred from the member banks to the reserve banks. Member banks' reserves are in this fashion decreased, and if enough bonds are sold, the member banks will be forced to borrow from the reserve banks at the higher rediscount rate.

¹This and the following paragraph are paraphrased from J. P. Wernette, "Money, Business & Prices," page 85.

This is supposed to induce the member banks to increase their own lending rate. Such in brief is what might be called the original theory of open market operations.

It is becoming increasingly clear, however, that open market operations constitute an important central bank tool wholly apart from and indeed without changes in the rediscount rate. Member banks in the United States have aimed to keep out of debt to the Federal Reserve banks. Hence if the Federal Reserve banks sell bonds, the member banks tend to contract their loans in order to avoid borrowing. The reserve position of the member bank in other words affects its general lending policy more than does the rate at which it can borrow from the Federal Reserve Bank.

During the period of depression, the obvious policy for the Federal Reserve banks to follow is to buy securities. This increases the cash and deposits at the disposal of the member banks and puts them in the position where they are able to accommodate borrowers. Again, however, the increase in borrowing and the consequent increase in deposits and spending depends on the willingness of borrowers to borrow. Even if the banks stand willing to lend, if the prospects of return to borrowers are poor, then there will be little or no borrowing. So again in the case of open market operations as in the case of interest rate control, the action of the banking system to increase spending and the volume of transactions is only permissive and requires that other things be favorable.

The third tool, moral suasion, consists in the Reserve System cajoling, persuading, or threatening mildly the member banks, in order to get them to execute a credit policy desired

by the reserve authorities. This method was tried in 1929, for example, in the effort to reduce stock market loans. Likewise, during the depression the banks were encouraged to increase their loans to private business. Until recently the weapon of moral suasion has been comparatively ineffective. Of late years, however, moral suasion and the power of removal has become a very effective means of credit control in its qualitative aspect. But here again we meet with limitations so far as concerns quantity. For example, even if the banks can be persuaded to loan during a depression, it is still another matter to get safe borrowers to borrow. And, unless there is borrowing, there is no favorable effect from the banks' action. In suggesting policies for the future, much greater emphasis will be placed on this weapon.

The fourth weapon in the armory of the Federal Reserve controls was added in 1935 when the Board of Governors was given authority to raise or lower within limits the legal minimum reserve ratios of the member banks -- in other words, the amount of cash they are required by law to hold against their deposit money. Variation of reserve requirements accomplishes directly what open market operations accomplish indirectly -- the determination of the amount of excess reserves or excess loaning power in the banking system. Plainly, excess reserves can be decreased and increased as readily by raising and lowering the legal minimum reserve requirement as by selling and buying government bonds.

So far as depression conditions are concerned, the
of decreasing reserves or buying bonds
result/would only be to create a favorable possibility of

borrowing rather than borrowing itself.

The fifth and final tool of control rests in the power to alter the margin required of individuals borrowing for securities purchases. Of the several tools for control, this probably has the least application to depression conditions. Obviously, if borrowers do not regard the stock market outlook as favorable, they will not increase their borrowings in order to buy securities on margin, no matter how favorable the margin requirements may be.

Referring particularly ~~Turning now~~ to the use of these several tools during periods of prosperity we have a somewhat different picture. It is fair to suppose that all of the measures suggested have a more potent effect when used to check undue borrowing and deposit creation. Thus, the reserve banks by putting up the rediscount rate and draining away member banks' cash by selling securities can cause the member banks to choose among the would-be borrowers and restrict the total amount of lending. To the aid of such a policy can be brought increases in the reserve requirements, and specific control of securities speculation can be affected to some degree by sharp increases in margin requirements.

There are, of course, situations in which Federal Reserve action might be ineffective or possibly thwarted. One case would be if excess reserves were very large and the reserve banks held few bonds and had already raised reserve requirements as far as permitted. However, this could be corrected by legislation permitting further or perhaps even unlimited increase in

reserve requirements. Another situation where control is difficult comes when a speculative furore is well started and borrowers may insist on borrowing no matter how high the interest rate. At such times, private and corporation funds may come into a speculative market to supplement bank borrowings. Control would be difficult if the speculation were primarily in commodities, margin control of brokers would seem to be an effective resource in a security boom.

The foregoing suggests an important point which applied both to prosperity and depression action on the part of the Federal Reserve System. In both prosperity and depression periods, early action may be far more effective than delayed action. Prompt and vigorous action to lower interest rates and ease borrowing conditions may have an altogether different effect in maintaining spending than action which is delayed until a depression situation is well established. Stringent borrowing conditions and increases in interest rates that may serve to check a speculative boom that is just beginning may be entirely ineffective once it is well along. And if the preceding boom has not been allowed to go too far, prompt and vigorous action at the beginning of a depression to lower interest rates and ease borrowing conditions may have an altogether different effect in maintaining spending than action which is delayed until a depression situation is well established.

All of the tools of Federal Reserve action as we have discussed them are pointed at the control of the total volume of money and through that at the total volume of spending. As suggested in Chapter VI, we are disposed to think that there is

some reason to differentiate between different classes of bank borrowing as they contribute to the supply of money. In particular it would appear that bank loans for financing securities speculation and for the financing of fixed capital requirements are more conducive to instability than bank loans for the provision of, for example, seasonal working capital requirements. Moral suasion is the only resource for controlling this situation. It may be here remarked that the effectiveness of this tool has been greatly increased by the inspections of the Federal Deposit Insurance Corporation, and a correlation of effort with the Federal Reserve Bank would extend its range and usefulness.

We may conclude at this point that the Federal Reserve System has an armory of weapons which are fairly effective in meeting boom conditions, but which are not in themselves capable of taking care of conditions met with during a depression. In a sense, the Federal Reserve System in relation to the supply of money, the volume of spending and of business, may be likened to a rope tied to a balloon. During recovery and boom, the balloon has a tendency to go up and the rope serves very well to restrain it, provided at least it is restrained in time. During depression, the balloon has a tendency to come down. The rope, no matter how much it is slackened, will not hold the balloon up in the air. However, the slackening is of some importance, for if something else can be found to keep the balloon up, then the slack in the rope at least permits it to stay there.

Keeping in mind the possibilities, and above all the limitations, of federal reserve measures for control of business fluctuations, let us now turn to see what the government can do.

borrowing from the banks be maintained and that the deposits created in this process take up the slack in spending created by the decline in private borrowing and spending. In other words, if the government sells bonds which are purchased by the banks and the proceeds are credited to the government, and if the government spends these proceeds, we will have an increase in M from the borrowing and in T from the spending which will compensate for the decrease resulting from the curtailing of private borrowing and spending.

It is our view that if the flexible budget, as discussed in Part I, is financed by public borrowing, it will have this effect. The supply of money and the current rate of spending will be maintained. This spending, or at least a major part of it, will be for different things than were the borrowing and spending by private individuals. But we have satisfied ourselves that this public spending will serve a useful purpose; and so far as the maintenance of the supply of money is concerned, the results should be about the same as if private borrowing were responsible for the activity. In terms of the metaphor we have just used, we have provided a supply of helium to keep the balloon in the air.

If, after a boom which has not gotten out of hand, government spending is begun promptly enough when private spending is ebbing, we are disposed to think that the private spending will decrease much less than otherwise might be expected. At the same time through lowered rediscount rates, open market operations and lowered reserve requirements the permissive controls of the Federal Reserve System should give business full latitude to continue or maintain its own borrowing.

In short, we see the flexible budget properly financed and applied as a well-synchronized part of a program for maintaining financial stability.

During the recent depression the public works program and the large public deficits were in a very real sense the first test of the sort of program we have just been outlining. However, in subsequent depressions, we are disposed to think that the plan will work more effectively than it has during the recent one. Aside from such obvious matters as the need for preplanning of the works program and the need for starting it promptly when a recession is under way, there is a great advantage in having a program such as this regarded as a familiar line of policy. Should this new departure become a regular organized feature of public business controls, we may expect that its deterrent effect on people's willingness to spend will be greatly diminished.

We have been talking so far about the effect of public borrowing as a stabilizing factor during depression. Does this policy have any counterpart during periods of prosperity? We consider that this policy has a most important counterpart during the prosperity period. It is that public expenditures be diminished, public revenues increased, and public indebtedness retired. This, if properly carried on, should be an important supplement of federal reserve action in controlling undue boom-time expansion. During a boom, private enterprise is borrowing extravagantly from the banks with consequent expansion of loans and deposit money. If, at such times, the government is repaying its loans and canceling a similar amount of deposits, we have an influence working against a dangerous trend in private industry. How important this repayment of indebtedness

will be as a factor in controlling the boom it is, of course, impossible to say. Unfortunately, we did not have the courage to continue and increase it in the late twenties. It is important, however, that it does work with, rather than against, the course of Federal Reserve policy during the boom period.

So much for the discussion of combined Federal Reserve and governmental efforts to smooth out business fluctuations. The role that we have suggested for the government in this is not an easy one. Moreover it is one that is widely recognized as involving certain dangers, some of them serious. We turn now to a consideration of these dangers.

Chapter XI

THE DANGERS OF INFLATION AND DEBT

In endorsing policies which have been described on the preceding pages, we wish particularly to avoid blinding ourselves to the dangers which may be involved. It is fair to suppose that it is the danger of certain unfortunate results which would be most likely to deter people from accepting such proposals as the flexible budget financed by public borrowing during depression, with repayment during good times.

There are dangers in the policies which we are suggesting. These, so far as they can be seen in advance, are of two classes. In the first place, there is the danger of inflation. This may come about as a fairly direct consequence of the operation of the flexible budget supported by public borrowing, provided that certain highly important safeguards are not recognized. The second danger is that of a permanent disproportion or unbalance between government debt on the one hand and government revenues on the other. The result of this would be a weakened economic tax-paying morale and eventually also inflation. Let us examine these two dangers in some detail.

To understand and appraise the danger of inflation, we must first of all undertake to define the term. Perhaps no other word has such a variety of conflicting uses. In common usage the term "inflation" applies to any monetary expansion which in the mind of the observer seems to carry possibilities of getting out of control. This is too vague a distinction to be used in serious discussion. It seems wise to apply two terms -- "inflation" and "expansion" -- for purposes of estimating the degree of danger involved in any particular policy or

condition.

To define what we have in mind by inflation and expansion, let us refer again to our formula, $MV = PT$. MV is obviously the rate at which money is spent, and this rate may increase as the result of either an increase in M or an increase in V or both; it may even occur as a matter of fact when either M or V is decreasing, provided that the other is increasing rapidly enough to increase the product of the two. Any increase in MV has its counterpart on the other side of the equation. There may be an increase in T the volume of transactions, or in P the general level of prices. We are now ready for our definitions. When an increase in MV shows only in an increase in T and leaves P undisturbed, we have pure production expansion. When an increase in MV , or spending, raises P without increasing the volume of transactions T , we have pure price inflation. When both P and T increase with an increase in MV , which is the usual condition, we have mixed expansion and inflation. The corresponding terms for a decreased rate of spending are contraction and deflation, pure or mixed.

From 1929 to 1932-33 the process of depression was accompanied by a general mixed contraction and deflation. After such a period, the road to recovery lies normally along the route of a general mixed expansion and inflation. To inveigh against inflation, meaning by the term as many do, any rise in the price level, is to inveigh against recovery itself; for the natural means by which the volume of production and of goods distributed is increased is by a stimulation of an increase in prices,

or P, resulting from increased demand.¹

We must not lose sight of the fact that it is the expansion of T, the production and distribution of goods and services, with which we are concerned. Inflation is helpful or harmful to the extent that it hinders or assists a continuous and stable expansion of T. As suggested in our discussion of criteria of financial policy, it is not an evil or good in itself.

We have said that the normal process of business recovery is a mixed price inflation and expansion. It may be said as a broad generalization that the larger the element of inflation relative to expansion, the more likely is the situation to be an unstable one. Such a price increase breeds speculation, unjustified optimism, and in general a subsequent collapse.

It is apparent that inflation as we have defined it can come about in two ways. In the first place, it may be preceded by expanded bank loans with the accompanying creation of deposits and a speed-up of the velocity of the circulation of money. This may happen apart from and independent of any action of the government.

In the second place, it may come from government action. For this, the first requirement is usually an unbalanced budget with the accompanying deficit financed by some form or other of created money. There are four important ways in which this money may be created. The first and crudest method is to run the printing presses and turn out what is usually called fiat money. The second method, which has been regarded as somewhat more reputable,

¹The definition and analysis of inflation presented in the three foregoing paragraphs is adapted from J. P. Wernette, "Business Cycles," in "Essays in Honor of T. N. Carver," N.E. Hines, Editor.

is to create the money by borrowing directly from the central bank.² The third method of creating money is through government borrowing from the commercial banks. This method has been extensively used during the present recovery. The fourth method, which was widely employed during the World War, is to sell bonds to private individuals who in turn borrow the money to pay for them from the commercial banks. The last three methods have already been discussed as means of increasing deposits or bank money.

All of the last three methods must be distinguished from the case where the government sells its bonds to the private investor. In this case the individual turns his savings or existing deposits over to the government to spend rather than to a private concern. There is no net increase in spending unless it is at a time when the alternative for the individual would be the hoarding of his deposits. During a depression, of course, this is not an unlikely situation and while it does not increase the total amount of money in existence, it does have the same effect through increasing the amount of money which is actually in use. This effect would show as an increase in velocity.

For many the fear of inflation arises primarily from the fear that the government will directly create paper money. As far as its purely monetary aspect goes, this method of creating money differs little from the allegedly more reputable method of borrowing from the banks, although it may be considered to imply a

²For example, the Federal Reserve banks. This method is illegal in the United States but it is accomplished in practice nevertheless. When the government sells bonds to the member banks and these are in turn purchased by the Federal Reserve System, the results of the process are identical with those described, whatever the psychological differences may be.

state of mind, an infirmity of purpose, which invites disaster. It should be said also that most of those who think of this class of money creation think of the creation of a great deal of money. They assume that this process means that the printing presses will be run day and night, as, for example, in post-war Germany.

So much for the idea of inflation. It is plain first of all that we may rule out the danger of a wild orgy of paper-money inflation. As a practical matter, these are rather rare. While almost every country, certainly every one that has entered into a major war, has increased its supply of money by the printing-press method, there have been only three runaway inflations before 1914. These were the continental currency of the American Revolution, assignats of the French Revolution, and the currency of the Confederacy. In each case the currency was issued by a revolutionary government new to fiscal administration and engaged in desperate warfare. Even during the World War, there was no runaway inflation. There were, of course, several following the War. The currency issued ran to astronomical amounts and the very word inflation was a frightening one. The countries affected were Germany, Austria, Russia, Poland, Roumania, Bulgaria, and Czechoslovakia. Several of these countries were the remnants of or the successors to the defeated central powers. Each had a new government or a new form of government. No parallel can be drawn between the conditions obtaining in these countries in the immediate post-war period and the economic problem with which we are here faced.

Let us turn now to consider the more subtle ways of increasing the supply of money which are part of our present proposals.

Do they hold a danger of inflation? Let us confine our attention to price increases not of the runaway variety, but of the more moderate yet still dangerous varieties, which are likely to involve a certain amount of suffering in themselves and portend a subsequent collapse.³

So far as a depression period is concerned, we can say categorically that there is at that time no immediate danger of inflation. The creation of new money during this period by the government does not in itself affect the creation of money by the banks for private use, which would be part of a general process of recovery. Moreover, in a depression situation the effect of increased spending through increase in the money supplied will usually be on T rather than on P. This is for the simple reason that a manufacturer running at 50% capacity does not boost his prices proportionately to every increase in orders. He only begins to think of price increase when business begins to approach more or less closely to full levels of production. To put the matter in general terms, rapid price rises occur normally only when output is approaching the limit of the available labor supply, or of the available raw material supply, or of the available production equipment.⁴

Dangerous price increases may appear as the depression stage nears its end or as recovery begins. There are two reasons for this. First of all, as we have just noted, the tendency is

³e.g. The war inflation whose first collapse in this country occurred in 1920, and from whose effects agriculture has suffered until recently.

⁴A broad upward price movement may likewise occur as a result of extensive artificial or subsidized price controls, or of wage advances greater than the profit margins of the industries involved; but these factors fall outside our discussion.

to increase prices instead of output as plants or labor supply near their capacity, and in the second place, capacity is not approached evenly in all lines of production.

It is when bottle necks appear that the danger of inflation arises, particularly when we reach the stage where we have fairly full employment or where bottle necks in the labor supply or perhaps in certain raw materials begin to be numerous and restrictive in their effects. Unless these bottle necks are relieved by population shifts, vocational training, and other remedies, we may run into inflation in the face of considerable remaining unemployment. Professor Slichter has proposed in this connection a division of "bottle-neck research" in the federal government.⁵

We may insert here the observation that there is a need for meeting this problem of persisting unemployment that goes beyond any mere counting of the unemployed. The requirements are (1) current figures continually revised by the United States Employment Service to show the amount, location, and kind of unemployment; (2) a periodic census of employment and unemployment to act as a baseline and check on current compilations; (3) a corresponding analysis of current industrial development and developing labor shortages; and (4) the establishment of policies of information, vocational training, and population shift which will so far as possible fit the pattern of unemployment to the pattern of expanding opportunity.

It is here that a critical question arises in connection with our proposal. Unless government expenditures are

⁵See his article, "Must We Have Another Boom". Atlantic Monthly, April, 1937, page 605.

decreased at mid-stage we have the spending engendered by the public policy added to the increase in private spending attendant upon recovery conditions. If the two continue side by side, we have an expanded demand for consumer goods and an inadequate supply of those goods, due to the continued diversion of labor and funds towards governmental work, and to the accumulating bottle necks. We thus risk a boiling up of prices; and while we do not run any serious danger of runaway inflation, there is the possibility of a more moderate forward movement which is still large enough to be self-destructive.

As a safeguard, when production approaches capacity or as the bottle necks become more numerous, government expenditures must decrease in favor of private expenditures. This is in fact a vital part of the program we are here proposing. It is partly for this reason that we suggest conservatism in setting the index figure of unemployment by which the flexible budget

is consulted.

We suggested at the beginning of this chapter that the second main danger in those proposals is that governmental expenditures and public debt might get permanently out of line. This danger cannot be focussed so easily and sharply as the danger of inflation. Consequently we must deal with it in somewhat more general terms.

The question is -- how great is the danger that the government may gradually accumulate a volume of indebtedness which is beyond the powers of a workable tax system to service. Should this condition occur, inability to levy further taxes and the inability to get people to pay taxes that have been levied may force the government into an unrestrained sale of its securities, perhaps to the central bank; or it may even force it to resort to paper money.

The policies which we are suggesting are not ones which a government carrying a heavy burden of debt could easily undertake. The security of credit advanced to the government rests on the peculiar power of the government to tax the whole productive resources of the nation. However, there are limits to this taxation, as to all things; and if a limit is being approached where even in good times taxpayers and tax-paying morals are beginning to weaken, or the tax burden is beginning to strangle production and private employment, then the policy would be unwise.

It does not appear that in the United States we need of necessity face a situation such as that just described. In Table I we present figures of the national debt, carrying charges per capita, etc., for the United States, England, and

TABLE I

COMPARATIVE FINANCIAL STATISTICS - 1936

	<u>U.S.A.</u>	<u>ENGLAND</u>	<u>FRANCE</u>
National Government Debt	\$34,000,000,000	\$35,000,000,000	15,600,000,000
Annual Interest Charges on Nat'l. Government Debt	\$ 825,000,000	\$ 1,050,000,000	\$ 485,000,000
Per Capita Nat'l. Gov't. Debt	\$ 266	\$ 761	\$ 366
Per Capita Annual Int. Charges on Nat'l. Gov't. Debt	\$ 6.45	\$ 22.83	\$ 11.55
Total Income of People	\$60,000,000,000	\$20,000,000,000	\$8,400,000,000
Percentage, Nat'l. Gov't. Debt, to Total Annual Income of People	57%	178%	185%
Ratio, Nat'l. Gov't. Tax Receipts to Annual Int. Charges	6.9 times interest charges	3.6 times int. charges	3.9 times int. charges
Percentage, Nat'l. Gov't. Tax Receipts, to Total Annual Income of People	9.5%	19.5%	22.7%
Total Public Debt (Including states, cities, etc.)	\$49,800,000,000	\$42,200,000,000	\$19,147,000,000
Per Capita Total Public Debt	\$ 394	\$ 904	\$ 456
Percentage, Total Public Debt, to Total Annual Income of people	83%	224%	230%
Percentage, Total Public Debt to Total Nat'l. Wealth	17%	48%	41%

Sources: A. M. Lamport and Co., New York Times, September 23, 1936. Twentieth Century Fund, The National Debt and Government Credit, Chapters 3, 4, and 5. Sterling figures have been converted at \$4.90; franc figures at \$0.0466.

France. We also show the ratio between the government debt and the annual national income of the three countries. However, comparisons of national debt alone are by no means precise, since the debt of states, departments, cities, etc., are larger in proportion in this country than they are abroad. We have, therefore, included data as to the total public debt of the three countries. In the United States it is probably the federal debt which arouses the greatest concern in the public mind.

Despite the difficulties in comparison, the relative figures for the three national governments are of some significance. Not only is the per capita national debt of the United States well below that of England and France, but our national debt is a much smaller percentage of our total national income. Likewise where our total federal tax receipts in 1930 were seven times the amount of the federal interest charges, they were only 3.6 times interest charges in England and approximately four times interest charges in France. Comparing our position, for example, with Great Britain and considering the notable stability of the British governmental finance, it appears that we would have little cause to worry, if our budget has comparably careful management. The qualification is, however, a serious one.

We may conclude from the foregoing that the United States need not be a danger-line country, where policies of the sort we are recommending must be foresworn. On the contrary, it would appear that we have sufficient margin or leeway so that the financial resources of the government can be used, if used wisely, to stabilize the national income, or, more fundamentally,

national production and expenditure. We have more to fear so far as financial stability is concerned from another drop in national income from eighty billions to half that amount than we have from the much smaller public expenditures which, if wisely applied, may be made to sustain a volume of business which will maintain our national income in the neighborhood of eighty billions.

With respect to the security of the governmental financial structure, as with inflation it is important that the policy we are suggesting be adhered to in prosperity as well as in depression. Insecurity in public finance would appear, and doubtless within a relatively short span of years, if we have not the self-restraint to relate taxes and expenditures in such a way as to balance the budget at some midway point between depression and prosperity, and retire debt during prosperity periods. If we are right in assuming that we have a certain working margin of revenues in relation to public debt at the present time, it is none the less important that we protect that margin by appropriate policies during the prosperity period. So far as we have followed measures during the present recovery similar to ones we have outlined here, there is cause for concern at the present time (November, 1937) that the federal deficit is still as large as it is.

There is another aspect of the twin dangers of debt and inflation which cannot safely be ignored. This is the possibility that conditions may be unfavorable to the transfer of workers from governmental to private employment, so that large governmental expenditure remains as a continuing condition.

This condition might be expected to occur if the expectation of business profit is too severely limited by excessive or unwise taxation, by unwise and unpredictable governmental

restraints on business, by unreasonable labor demands which too greatly narrow the profit margin in important industries, by destructive industry competition, or from other causes now existing, or which may be brought into existence by unwise policies in the future.

The phrase "better business sentiment" is often used to define a prime essential for business recovery. The idea needs a more precise definition. What is needed is a "reasonable expectation of profit" in the business world in general. Only a reasonable expectation is needed, not assurance; for the profit system is really a profit and loss system and losses are an essential element in its mechanism.

There are great advantages in governmental expenditure as a balancing element in an unstable economy. Not the least advantage is that new purchasing power is immediately put to work in wages and in the purchase of materials made for wages. It might be expected that the consumer demand created by government borrowing would act as an imperative force for business expansion. As we shall see in the next chapter, however, this has not happened in fact so completely as was hoped for. Funds tend to come to rest in idle bank balances. And these idle funds are those from the lower incomes as well as from the rich, for savings banks and insurance companies have as much difficulty in finding profitable investment as does private capital.

It is, then, an essential element of the hopeful group of policies we are discussing that governmental policies toward business should be purposefully directed toward the maintenance of that reasonable hope of sufficient profit to assure the maintenance and expansion of private employment, and the continual flow of purchasing power through the hands of the great mass of

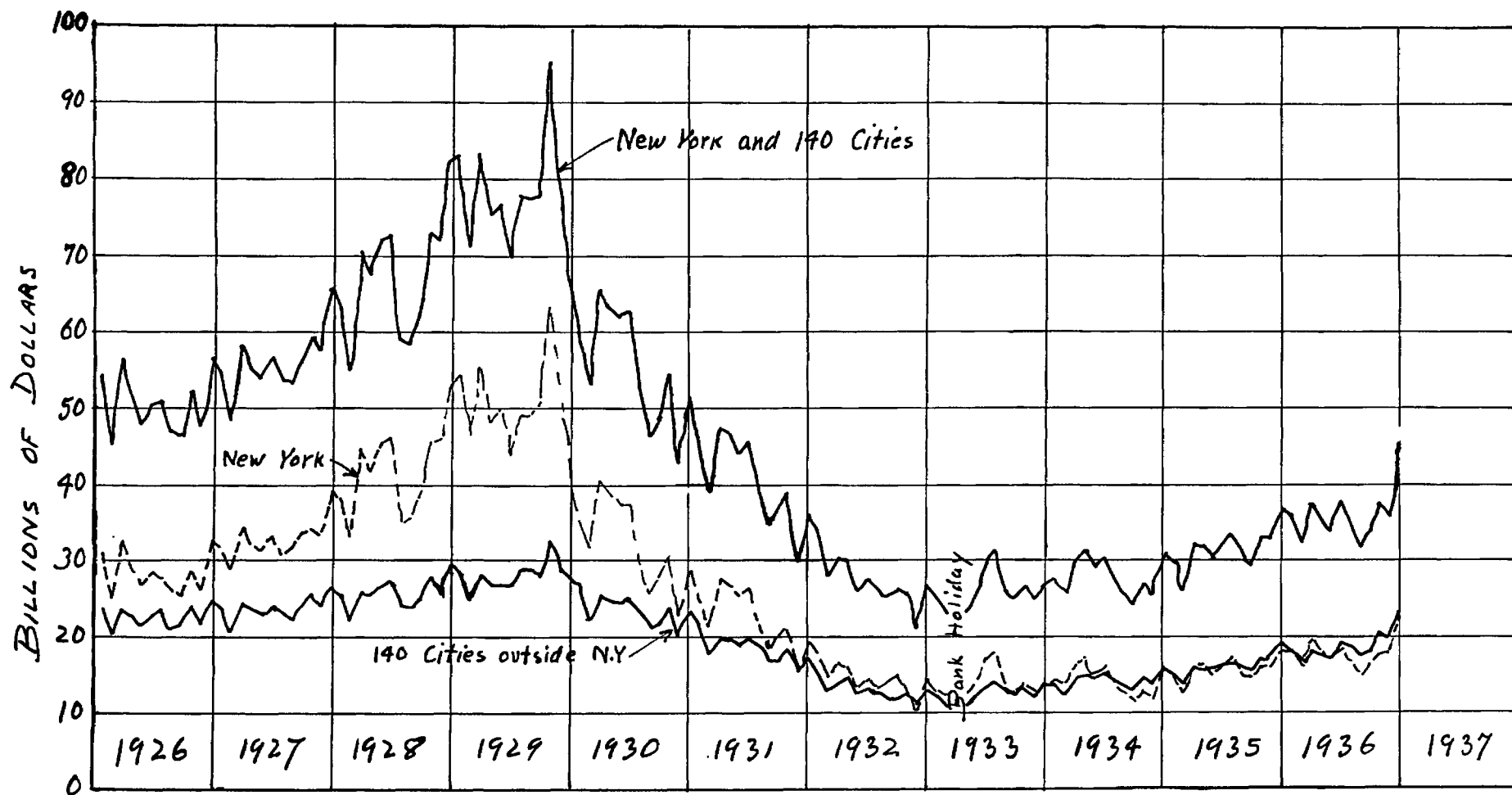


FIG ~~III~~ III BANK DEBITS

A Measure of the Rate of Spending

Source - Federal Reserve Bank of New York.

Chapter XII

SURVEY and SUMMARY

As we have observed a number of times, the policies we are recommending have already been put in force in several important details. The unbalanced budget and governmental borrowing and spending have been vigorously pursued, and there is hope that the second period of overbalancing, reduced expenditures, and repayment is close at hand. It, therefore, seems opportune to survey our progress to date, particularly with reference to monetary policy with which this part is concerned. We shall begin our survey with the predepression years. In making criticisms and suggestions on control, particular emphasis will be given to the newer types in actual use, or to those suggested herein as desirable.

Our social aim is stability in employment, production, distribution, and consumption on a rising scale. This finds its statistical counterpart in the Index in General Trade and Production in Chart II. When this is low, there is unemployment and distress. When this is as high as in the predepression years there is relatively high employment and consumption.

The monetary counterpart of General Trade is to be found in Bank Debits as shown in Chart III. These curves show the total ~~number~~^{amount} of checks drawn monthly on the principal banks of the country, and are, therefore, a good index of business^{and speculative} activity of all sorts. It is a record of our rate of spending of bank money or deposits for all purposes. If the Index of General Trade and Production included all transactions including such items as the purchase of securities and the payment of rents and taxes, and if an inclusive price level for all these

transactions were stable, then the Index of Trade would correlate perfectly with the sum of bank debits and cash payments. The one would represent PT in the money equation and the other, MV; and both are the rate of spending.

We are not seeking mathematical accuracy in this correlation, but useful guides for action. Within the limits of error of the most skillful analysis, no serious difficulty will be found in eliminating the cash transactions which are difficult to estimate. The price level, as shown by the two indexes in Chart II, very evidently does vary and must be considered. Let us for the moment, however, examine the remaining element of non-conformity, the fact that all business operations are not included in the Index of General Trade; while most of them are in the curve for bank debits.

It is an evidence of the close relation between monetary phenomena and business that these differences are clearly seen in the monetary data. Chart III gives bank debits or the rate of spending for New York, for the 140 principal cities outside New York, and for all combined. The difference between the curves for New York and the outside cities is immediately visible. Where the rate of spending in New York has varied nearly 6 to 1, that for the outside cities has been scarcely 3 to 1. The greater volume of New York transactions in the pre-depression period gave its character to the whole. During the depression and since that time, our financial capital has meekly followed the rest of the nation.

What was New York doing in those years from 1926 to 1929, inclusive, that resulted in that inflation of activity?

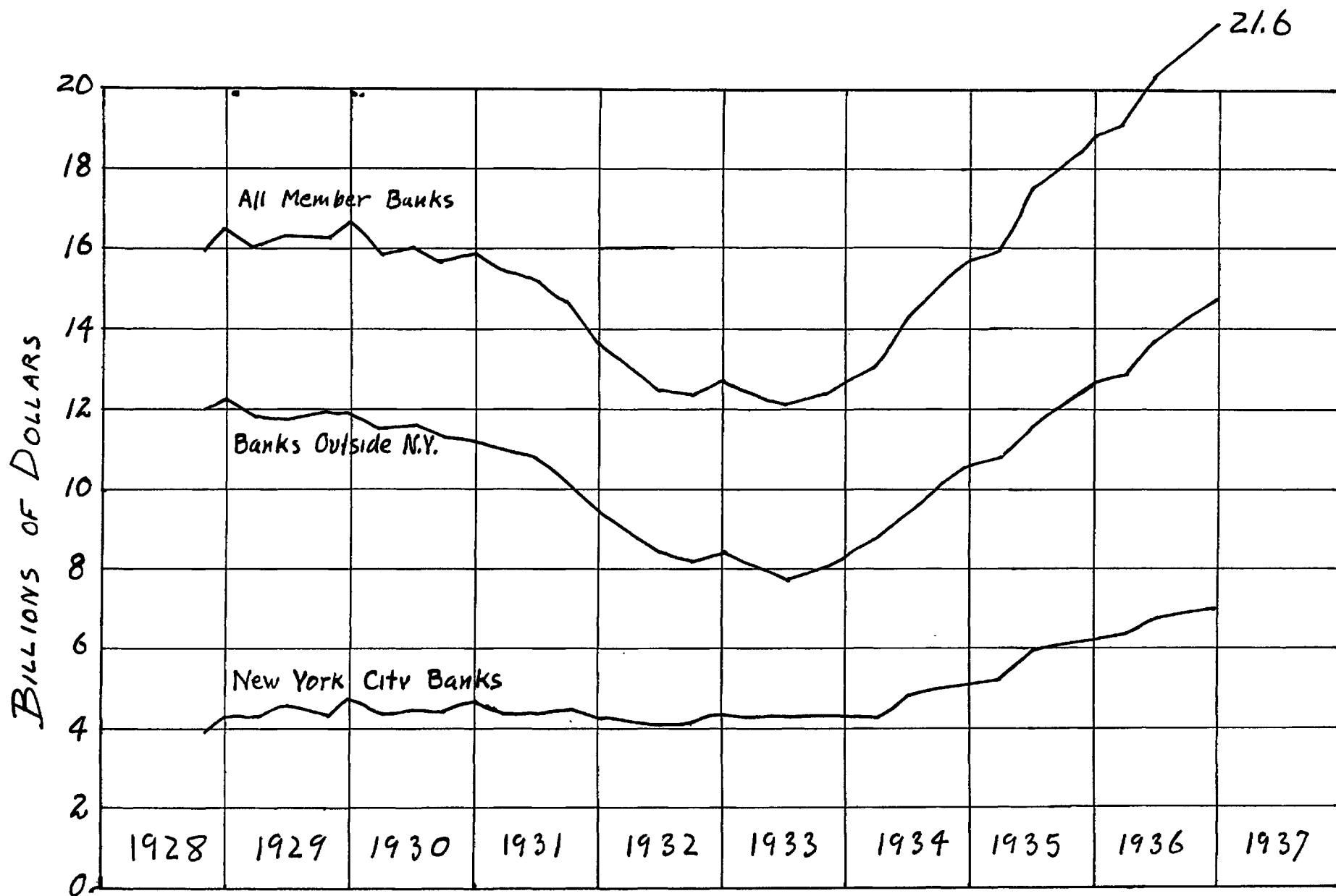


FIG. IV ADJUSTED DEMAND DEPOSITS (M)

Source: Fed. Res. Bulletin.

The answer is not far to seek. It was engaged in real estate and security operations on an increasingly furious scale, and it is the monetary transactions connected with this activity and centered there which set the city apart from the rest of the country. It is the more recent dampening of these activities which has kept New York in line.

This rudimentary analysis of Chart III shows two things. The first is that an inclusive curve or set of data may conceal important facts which are revealed when the material is examined in detail; the preponderant effect of New York's speculative activity is not revealed in the combined curve (shown also on Chart I). The second is that monetary activity is not a good index of business in the sense in which we have defined the word and are using it. The curve of general trade and production in Chart II is a far better one; it does show a fair correlation with bank debits for the outside cities, indicating that monetary transactions outside New York have been a better index of productive business.¹

In Chapter IX we gave a qualified approval to the idea that observed changes in the quantity of money is one criterion of financial control, and that an objective might be sought in a stable volume of deposits. Certain dangers in this as a sole objective are clearly shown in Chart IV. (The combined curve has already appeared in Chart I.) The figures given for "adjusted

¹Bank debits show the rate of spending in dollars. Ultimately we are interested in the rate of purchase of goods and services and should, therefore, divide bank debits in Chart III by some inclusive price index. The result would be that the depression of spending (or purchasing) would not appear quite so low in 1933 nor would the recovery with its rising price level appear quite so great.

demand deposits" are not available before the latter part of 1928.

The total of deposits kept approximately constant until the end of 1930, when it started a long decline to a point more than 25% lower in the middle of 1933. Since then, under the impulse of governmental borrowing and spending (~~crudely~~^{roughly} along the lines we have been recommending) it has risen to unprecedented heights -- far beyond amounts previously needed to finance even boom time conditions. What is the significance of this phenomenon? First let us break down this curve also into two components, one for New York banks and the other for outside banks. Again we find significant differences between conditions in the metropolis and the country at large.

Throughout the boom and to the bottom of the depression the banks of New York City are remarkable for the steadiness in the volume of their deposits. Its great speculative activity in the boom was evidently financed by velocity of turnover rather than by greatly increased funds. Evidence of this will be seen later in Chart V. Its maintenance of this volume nearly unimpaired throughout the depression is by most observers accounted for on the supposition that outside depositors withdrew their accounts from home banks and transferred them to the stronger New York institutions as bank difficulties increased. The drop in total deposits is almost entirely a drop in deposits in outside banks. Since the summer of 1933 New York and the cities outside have risen in about the same proportion, indicating, as in Chart III, that whether for good or for ill, the Metropolis is now in step with the rest of the country.

One cannot, however, examine Chart IV and feel sure

ANNUAL RATE
200

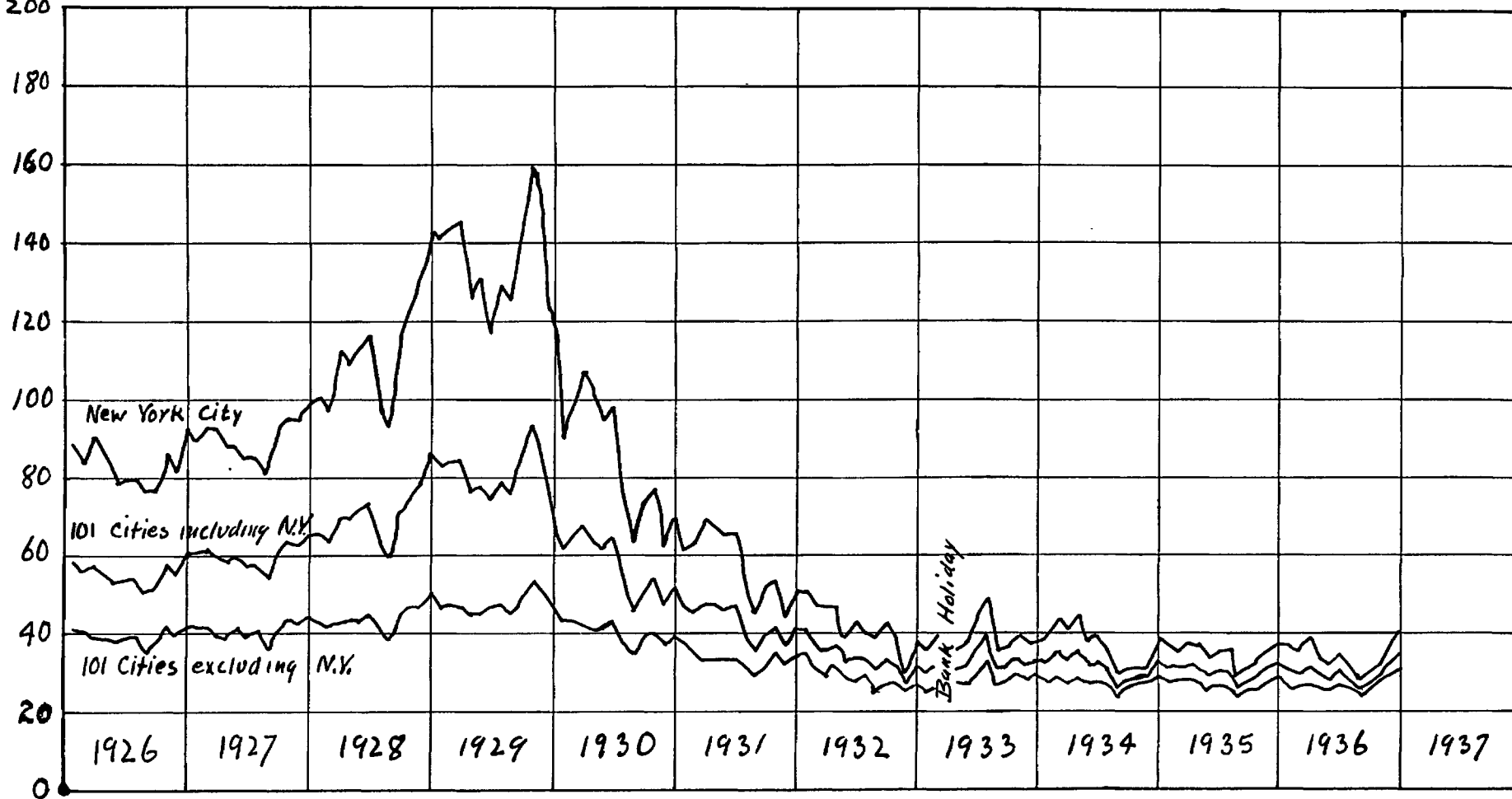


FIG #1 RATE OF TURNOVER OF DEMAND DEPOSITS

Not Adjusted for Seasonal Variation

Source: Federal Reserve Bank of N.Y.

that all is well and nothing is ill. The volume of deposits has risen to unprecedented heights without corresponding effect on the rate of spending of all sorts, speculative included, as shown in Chart III. It has not financed a corresponding volume of general business and employment as represented by the index of trade in Chart I, as it might be expected to do if not short-circuited in speculation. These discrepancies will, of course, be more plainly revealed in an examination of the corresponding curves for velocity, which are shown in Chart V.

All cities show some rise to 1929 and a subsequent drop to the bottom in 1933. That speculation is primarily a matter of rapid turnover of funds is shown not only by New York's rise culminating in 1929, but also by the rise in all cities, which supported the short-lived speculation early in the summer of 1933. New York's variations are more in velocity than in volume. Outside cities vary more in volume than velocity. But all cities show failure to recover anything that might be considered normal velocity in the face of enormous increases in the volume of deposits.

There is nothing new in having velocity of circulation go down during a depression. What seems to be new is the depth of its drop and the ^{corresponding} slowness of its recovery in this depression. The writer has been furnished, by courtesy of the staff of the Board of Governors of the Federal Reserve Bank, with figures for velocity calculated on a somewhat different basis from that used in Fig. 4, which show the difference in the case of two cycles.

TABLE II - AVERAGE VELOCITY OF BANK DEPOSITS

Boom	1919	22.3	1929	26.5
Depression	1921	18.8	1932	13.8
Recovery	1926	20.0	1936	14.8

The contrast is evident. In 1926, after five years, we had regained one-third of our velocity; in 1936, after four years, we had regained scarcely 8% of our velocity. We cannot make so definite a comparison with earlier and more severe depressions, such as that following the Civil War, because the corresponding data are not available.

Of course, we must bear in mind that we do not wish to return to the peak velocity of 1929, since we are determined to control the speculative fever on which this high velocity was based. Perhaps 60 rather than 160 is our new normal. Even so our bank deposits are too large and their rate of turnover is too low for the business we are doing.

One cannot be sure of the causes of this situation, but a number of suggestions may be made.

For one thing, the whole recovery emphasis, whether for employers or employees, has been placed on security rather than on enterprise. Play safe, don't risk! That is the business atmosphere of the day, reflecting current political doctrines. In practical application these doctrines have sought to destroy speculation. With the thought that uncurbed speculation is the most dangerous disease to which the business of the nation is exposed, this document is in complete sympathy. The question now raised is as to whether restraints and controls have not gone beyond the border line of speculation and encroached on productive enterprise. Among the many elements involved are difficulties in the way of floating new security issues, interest rates and profit margins so low that hoarding seems preferable to the risk of investment, and the difficulties

put in the way of business expansion, added employment and consumption by the undistributed profits tax.

Another factor producing the current stagnation in deposits is the premium put on liquidity of funds by estate taxes and the undistributed profits tax. The preparation for these taxes tends temporarily to draw funds away from use in active business and employment into inactive liquid deposits, so that they may be realized on at a moment's notice. At any given moment the funds thus withdrawn must be sizable in the aggregate.

As a last consideration which by no means exhausts the list, we have to reckon with the lack of understanding and cooperation between business and government -- the responsibility for which the present writer feels constrained to lay for the moment at the door of government, in view of the complete power over business destinies which now lies in the hands of the federal administration.

In brief, the unfortunate possibilities described in the concluding paragraphs of the preceding chapter are, perhaps, the actualities of the current situation. This whole document as presented by the writer and his associates is an endeavor to remove misunderstanding and promote cooperation in one large area of the relationship between government and business. The business man must be lead to see that the multitudinous and unorganized recovery policies of the government can be unified and organized into a mechanism which will again propel the nation forward, in more steady fashion, on its course of economic and social progress. On its part the government must resolutely organize its policies to that end -- and the next step is the fostering and encouragement of private employment, production,

and distribution.

Perhaps the writer may be permitted to elaborate a homely figure. It is as if a farmer had two horses hitched to the plow, of which one was named Business and the other Speculation. Speculation bolted, dragged Business with it, lamed his mate, and wrecked the plow. Speculation was caught, hobbled fore and aft and tied to a tree with a short rope. The farmer then put a curb bit in the mouth of Business, cut himself a tingling switch, and by rapidly alternating and sometimes simultaneous application of whip and curb attempted to proceed with his plowing.

The plowing is being badly done, the crop will be short, and the family will suffer.

With the data of the charts in mind, we now undertake the difficult task of suggesting the policies which might have been followed in the boom and through the depression, and which now should be followed in the current recovery, giving particular emphasis to the new controls, some of which did not exist prior to 1933.

The objective is stable employment, production, distribution, and consumption.

The criteria are the unemployment index, various wage and pay roll indexes, price indexes, trade indexes including general indexes like that in Chart II, current market reports, monetary data as in Charts III, IV, and V, and detailed information from the banking system as to the composition of the credit structure which is the basis for deposits.

The tools of control are the older ones of rediscount rate and open market operations, and the newer ones of variable reserve ratios, variable stock margin requirements, and moral suasion. The latter should be applied both to the composition and to the quality of a bank's loans and investments; and it should be reinforced and unified by putting under the jurisdiction of the Board of Governors of the Federal Reserve Bank both the Federal Deposit Insurance Corporation and the powers of examination and control for National Banks now vested in the Comptroller.

An additional requirement is the intelligent cooperation of business and of government.

Supposing these conditions, when the rapid rise in velocity and bank debits in New York and the slower rise outside became evident, an examination of the composition and quality of the assets of the banks would be called for. Quality alone would not tell the story, for the safety of a margin loan on securities is high under ordinary circumstances. A large increase in such loans, whether directly or through "others", is a danger signal and calls for the raising of margin requirements.

Similarly, real estate or commodity speculation can be identified in the bank portfolio and kept within limits. The Florida boom and collapse could not have occurred under FDIC controls now available if wisely applied, nor would the less intense

but larger and more wide-spread boom in urban real estate, which spread over the country later, have taken place. Questions of quality are more important in the real estate portfolio, where second and third mortgages are liable to make their appearance toward the peak, as well as first mortgage loans at inflated values.

It is not argued that these controls should have been applied in an endeavor to keep the situation on an even keel without expansion or contraction. There is no human possibility -- no desirability even -- of such close control. But there was in fact no control of obvious excesses, and it is only such control that is suggested. The control of obvious excesses would still have permitted a mild boom and the beginnings of a recession. That is to be expected.

As trade indexes fall and specifically as unemployment appears to approach the critical point established for action, the flexible budget should be put into effect, at such points and in such operations as will best meet the emerging unemployment. If this policy is known and understood beforehand, this move will be accepted with confidence by the business world; the new funds put into circulation will be kept in use; and it may be expected that normal velocity will be maintained.

This matter of business temper is all-important. A community which has worked itself up into a hysteria of speculation will not calm down into an assurance of normalcy as the positive controls are applied. Nor will the experience of seeing its government on a preceding occasion unwilling or unable to decrease its expenditures and balance its budget as prosperity returned, permit the business community to view without justifiable

alarm the initiation of a new period of spending.

It is for this reason that we gave as essentials the cooperation of government and business. If business does not cooperate willingly, on the upswing at least it can be forced into line by banking control. If government does not cooperate, no force can be applied to it except the voting strength of an intelligent electorate.

Under normal conditions the banking system will willingly be absorbing the new governmental loans at low rates. When productive business falls off and commercial credit declines, such a means of generating new deposits has the great advantage, as we have seen, of making deposits and putting them to work in the selfsame process. The older expedients, such as open market buying and lowered rediscount rates made borrowing easier and generated new deposits, but did not insure the primary turnover of new money, as does government borrowing and expenditure.

As government borrowing and spending increases in accordance with the increasing unemployment, the Board of Governors will be watching its total of deposits, its debits, the price level and the rate of turnover -- particularly the latter. If the new deposits become stagnant, they will search for the cause and bring it to public attention, if it can be located. It may be undue business pessimism as a reaction to undue optimism. It may be governmental restrictions or tax policies which hinder the expansion of private enterprise and employment. It may be labor policies which prevent profitable operation and employment. If there are no maladjustments discoverable which account for the stagnation, it will be in order to consider taxation policies

directed specifically to this problem of idle balances, taking care that these policies do not lead toward the hoarding of cash.

If the corner is turned and the unemployment figures decrease, it will then be the duty of the government to decrease its expenditures, in such places and in such work as will release men of the kind needed where a shortage of workers is imminent.

This involves a decrease of borrowing. Should unwise governmental policies gain control and spending and borrowing continue, it will be in order for the banking system to leave government financing to the open investment market; and should private borrowing re-appear in large volume and the beginnings of a boom return, the Reserve Banks would take the further step of selling their government paper in the open market.

Roughly, this is the type of control which we foresee. It is general and not specific, except as to evident errors in quality of loans and investments. It does not try to control too closely or for too immediate results. It allows ample margin for elasticity and automatic controls.

It does not seek direct management of business details, but sets monetary limits to business excesses, and furnishes actual orders for business to work on in depression by means of the expanded budget. This distinction between direct control and indirect monetary control within generous limits is important. Some businesses must be controlled because they are natural monopolies, or for other reasons. In our judgment they can be controlled only because the mass of business remains relatively free. Were more direct and detailed controls to be applied to the majority of business activity the undertaking would become impossible. The design and manipulation of a rigid business structure in a nation of unregimented consumers we believe to be beyond the limits of human ingenuity, or of the most arbitrary and unrestrained political power.

It may easily be argued -- it has been argued -- that such authority as we propose to confer on the Board of Governors is

also beyond human will and capacity. This criticism cannot be lightly dismissed. There will be required, we believe, some re-organization of the present system.

No powers are needed beyond those now existing. But there need to be transferred to the Board of Governors the powers of banking control now residing in the Comptroller of the Currency and in the Federal Deposit Insurance Corporation. This will insure unity of control and of policy. It will also give some of the advantages of chain banking without destroying our individual system.

We must expect that the Board of Governors will have in great measure to learn its job by doing it, no matter how experienced its members may be. The job is a new one. Careful selection and secure tenure are both needed.

As a part of the mutual self-education of business, the banking system, government and the Board itself, they should explain and justify their acts publicly and in detail. It might be wholesome ^{to have} ~~it~~ dissenting members make public statements of their reason for dissent. This will be a condition for the most effective cooperation of the banks themselves in building up the technique of control and in applying it to themselves without compulsion.

The Board of Governors should be independent of government, banks, and business in the execution of the duties assigned to them -- independent of everything except enlightened public opinion and the results of their own acts. This general statement is subject to the following obvious qualifications: They must act under laws passed by Congress; they must be appointed by the President by and with the consent of the Senate; they must be impeachable by established and orderly process for malfeasance in office.

These conditions would seem to be met by a Board of seven men, varied in experience, but combining the fields of banking, business, agriculture, labor and economics and drawn from diverse regions. Rotating in fourteen-year terms with a new appointment every two years, each presidential term would permit two appointments. On the scale of governmental salaries, they should be highly paid for the fourteen years' service and should be pensioned on retirement. It should not be necessary for them to look beyond their term for success, for power, or for profit.

It is natural for us when strain is released to grow lax in our thought and preparation for the next emergency. As the depression recedes into the distance, what is more natural than to live in the business problems and achievements of the present? What is more natural, and what is more dangerous?

It was by a very narrow margin that we escaped social and political disintegration in the early 30's. The results of that experience still burden us. Indeed the issue is not yet decided as to whether a democratic government can continue to exist and maintain an economic mechanism which will continuously transform useful labor into high living standards for its people. It is our belief that another severe depression would make this impossible. It is our further belief that we have not done all within our power to prevent such a recurrence of depression -- and that some of our policies are a hindrance rather than a help to the desired end.

Holding these beliefs we offer no apologies for presenting the best proposals we are able to offer. If there are better

ones, we will gladly turn to them. For ourselves, the attitude we cannot accept is that of thoughtlessness and inaction.