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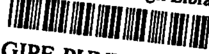

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THE CHANGING STRUCTURE OF AMERICAN BANKING

THE CHANGING STRUCTURE OF AMERICAN BANKING

BY

R. W. GOLDSCHMIDT

Ph.D (Berlin)

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PREFACE

There is no necessity to apologize for devoting a book to recent developments in American commercial banking. The changes that have taken place since 1920 are very startling indeed, and little known outside the United States. How important they are not only for the economic welfare of the United States but for the functioning of international finance as well has been painfully demonstrated during the last two years. In contrast to the importance of the subject and in contrast, too, to the excellent and exhaustive literature on the Federal Reserve System, no attempt has been made hitherto to give a complete and coherent picture of the changing structure of American banking during the last decade. This book does not claim to have filled the gap. Indeed, it is for the way in which this vast and complex subject has been over-boldly attacked here that apology is needed and conscientiously tendered. My best excuse is that books of this type are usually written by foreigners who can never aspire to go into every detail and, therefore, do sometimes not fully apprehend of what temerity they are guilty.

Realizing the unprecedented rapidity with which the American economic scene is shifting in these months it might seem premature to regard the beginning of 1933 as the end of an era, started about 1921, as is done here, and unwise to make any

suggestions for a reform, which might render the banking system better fit for playing its proper role in the next phase of American economic history. But the view underlying the preliminary German draft of this booklet (which appeared before the banking crisis of 1933), that a major epoch of American banking development has really ended, can only have been strengthened by the events of this year, while it seems that the way of reform is more or less clearly mapped out so long as the American economic system remains at all on a basis of individual property and private enterprise.

It has been my endeavour to compass within the space of a short book a description of what has happened in American commercial banking since the war, stressing the main trends and forces which have ultimately led to the crisis of 1932–3. As the literature on the subject is very extensive, but not rich, and curiously centred on a few problems, I have been forced to work in many directions over ground literarily unploughed in an endeavour to leave no major aspect untouched. It goes without saying that many problems are here dealt with in a few lines or pages which really necessitate and deserve special inductive studies.

This book is, first of all, destined for the foreign banker and student of economic affairs, who wants to get an idea of how the American banking system works and has developed in the last few years. The friend of economic theory may feel disappointed that theoretical discussions, which might have been indulged in with profit on some points, have

been heavily curtailed for this reason as well as in order to save space. It is hoped that the book may be found useful as a short résumé for the American reader, too, who knows from his own experience most of the separate facts described.

I am glad to have an opportunity to thank all American friends, practical bankers as well as economists—too numerous to be mentioned individually—who have helped me in my endeavour to understand the American banking system. It is to them that I am in duty bound to dedicate this booklet, though I am apprehensive lest it may not be up to the standard some of them would require of a tract on this subject.

R. W. G.

LONDON, S.W. 5.
September, 1933.

THE CHANGING STRUCTURE OF AMERICAN BANKING

CHAPTER I

THE AMERICAN CREDIT SYSTEM

BEFORE tracing the momentous changes which have altered the American banking and credit structure since the world war, it seems appropriate to take a bird's eye view of the mechanism as it stood and worked during the twenties.[1]

1. The structure of the American credit system, of which the commercial banks chiefly dealt with in this book form but a part, may be visualized as a series of concentric circles or, better, as an inverted step-pyramid with five main layers. They are (beginning at the apex of the pyramid): the currency circle, the bank money circle, the circle of long-term unbonded claims, the bonded debt circle, and the equity circle. The smaller the distance from the apex, the less direct is the relation to a fixed sum of currency: Bank money is equivalent to an equal amount of currency, so long as the issuing bank remains solvent. Long-term claims are so only when they are due and have, therefore, at every

[1] The first part of this chapter (up to p. 29) is primarily intended for the reader not familiar with the fundamentals of the American credit system.

moment a value expressed in currency, which fluctuates with changes in the market rate of interest and the market estimate of risk involved. The money value of equities, i.e. rights to participation in the net earnings of a business, finally, is determined by the level of interest rates, the amount of risk, and by net earnings and is, therefore, subject to much wider fluctuations than the money value of long-term claims, which usually have a fixed redemption date (lying ahead a few years only for the majority) and a fixed redemption value. Commercial banks are most closely associated with the second circle. They do, however, play an important role in the third and fourth circle (unbonded and bonded long-term claims) and are not without connections with the currency and the equity circle.

The following very rough estimates may give an idea of the relative size of the five layers around the year 1929: Currency (including Federal Reserve Bank money), the bottom layer, averaged a little over 7 billion $ with a substantial gold core of somewhat over 4 billion; about 3 billion of currency were held by banks, while around 4 billion were in the hands of the "public". Bank money, i.e. demand deposits in commercial banks subject to cheque, amounted to about 24 billion $. Unbonded long-term claims (including savings deposits with commercial banks, shares in and deposits with building and loan associations, reserves of life insurance companies, and urban and rural mortgages) exceeded 90 billion $. Bonds and debentures

outstanding (including foreign securities held) totalled nearly another 90 billion $.[1,2] The money value of all equities, finally, is extremely unstable and not precisely ascertainable; the total value of stocks listed on the New York Stock Exchange amounted to 36 billion $ on July 1, 1933, after having reached 90 billion $ in September, 1929.[3]

2a. The currency layer is much less homogeneous in the United States than in nearly every country in the world. There are still twelve different forms of currency—defining currency as the usual ultimate medium of payments—in circulation, which bear testimony to almost every phase of American finance since the civil war and differ as to issuing authority, cover, elasticity, redeemability and legal tender quality: gold coin, gold certificates, standard silver dollars, silver certificates, subsidiary silver, minor coin, Treasury Notes of 1890, United States Notes, National Bank Notes, Federal Reserve Notes, Federal Reserve Bank Notes, and deposits with the Federal Reserve Banks. All these types of currency were, however, one and alike to the man in the street as well as to the banker, and correctly so, since any form of currency could up to March, 1933, always be freely exchanged as a matter

[1] Part of these totals—about 30 billion $ of long-term claims and about 25 billion $ of bonds held by banks, building and loans associations, and insurance companies—ought not to be taken into account when adding the layers, as they represent duplications. Moreover, there are appreciable duplications amongst the rest, too (particularly on account of holding companies), the size of which is not known even in an approximative way.

[2] All these estimates are based on a multitude of scattered data, which it would be tedious to enumerate here, the more so since the figures are given as illustrations only.

[3] In 1925 the total value had been but 27 billion $.

of fact if not of law into any other at the ratio of 1 : 1.

American currency is issued by three authorities; the Treasury (metallic money, gold and silver certificates, United States Notes, Treasury Notes of 1890), the National banks (National Bank Notes) and the Federal Reserve Banks (Federal Reserve Notes, Federal Reserve Bank Notes, Federal Reserve deposits). National Bank Notes do not constitute more than about 10 per cent of the total and are rather inelastic since they are issued against certain types of Government securities very limited in amount outstanding. Most Treasury currency —in fact all types except gold certificates—is in small denominations and very inelastic too and therefore not of great importance from the bankers' point of view, although constituting about 30 per cent of the total currency in circulation. Gold certificates, representing simple warrants for certain quantities of metal and equivalent for practical purposes to gold coin in circulation, have fluctuated between 170 and 1,100 million $, i.e. between as little as 3 per cent and as much as 25 per cent of total currency, while gold coin in circulation has shown a very slow but regular downward movement with an average of about 400 million $. The great importance gold certificates have for the whole monetary mechanism lies in their use as a cushion lessening the repercussions of international gold movements. If gold is leaving the United States because the balance of payments becomes momentarily unfavourable, gold certificates may be

retired from circulation and other forms of currency substituted (this sifting process is performed by the Federal Reserve Banks). Then the metal kept against the certificates can be used for export without drawing on the central gold reserve of the country held by the Reserve Banks. On the other hand, gold certificates can be pushed into circulation, superseding other forms of currency having a smaller gold cover, to prevent an inflow of gold from abroad from causing an increase in the central gold reserve. The currency sphere has been ruled since the war by the Federal Reserve Banks [1] issuing the only

[1] For those wholly unacquainted with the Federal Reserve system a few data are given in this note.

The twelve Federal Reserve Banks are independent corporations owned by private commercial banks—the shareholding institutions being known as member banks—but regulated and supervised to a very large extent by the National Government. Membership in the Federal Reserve system is open to every commercial bank in the United States, which submits to the conditions laid down by the Federal Reserve Act; the most important of these are the acquisition of shares in the Federal Reserve Bank equal to 3 per cent of capital and surplus and the keeping of a balance with the Federal Reserve Bank varying between 3 per cent and 13 per cent of the member bank's deposits. At the end of 1932 6,800 banks, with assets of 36 billion $ were members of the Federal Reserve system, equal to 37 per cent of the number and 61 per cent of deposits of all commercial banks.

Every Federal Reserve Bank has a part of the territory of the United States allotted as exclusive domain, which is served by its main office and usually one to three branches. The Federal Reserve districts are very unequal in size, population, and economic structure. The Boston, New York, Philadelphia, and Cleveland districts, all predominantly industrial, have an average size of 55,000 square miles—equal to England and Wales—and a population of 8 to 16 million; their combined territory is not unlike Great Britain in population and structure. The other districts, all predominantly agricultural (except the Chicago district, which is of a mixed character), cover from 150,000 (Richmond) to 680,000 square miles (San Francisco), with an average population of 10 million.

Each Federal Reserve Bank is independent so far as personnel, routine business, and accounting go. The guiding lines of policy—including the fixing of rediscount rates, the timing and extent of open market operations, and the promulgation of rules and regulations—however, are laid down by

forms of currency which can quickly respond to changes in demand and which can on the other hand be forced into circulation without necessitating previous gold imports or an initiative on the part of the public or the banks.

Federal Reserve Notes are issued by each of the twelve Federal Reserve Banks. Their cover consists of at least 40 per cent in gold, while the remainder had to be made up exclusively of eligible bills rediscounted by member banks or bankers acceptances or commercial paper bought in the open market up to February, 1932. The Glass-Steagall Bill now permits the use of United States Government securities as cover up to the 60 per cent not backed by gold until February, 1934. The circulation of Federal Reserve Notes has been as low as 1,350 million $ in August, 1930, and as high as 3,600 million $ in March, 1933. Their elasticity will be better shown, however, by another comparison: Total money in circulation increased from 4·7 billion $ in June, 1929, to 6·3 in March, 1933, i.e. by 1·6 billion $. During this period Federal Reserve Notes alone expanded from 1·7 to 3·6 billion $, while gold certificates decreased from 0·9 to 0·4 billion and all other forms of currency remained practically stationary at around 2 billion $.

The volume of member banks deposits with the

the Federal Reserve Board in Washington or by a conference of the Governors of the Reserve Banks. The Federal Reserve Board consists of seven members; the Secretary of the Treasury (chairman) and the Comptroller of the Currency are *ex officio* members, while the other five members (one of whom must be a farmer) are chosen by the President, with the advice and consent of the Senate, for a period of ten years.

Federal Reserve Banks is potentially more elastic still. These deposits have to be covered to 35 per cent by lawful money, but the Reserve Banks are free with respect to the remaining 65 per cent. Federal Reserve deposits can, therefore, be created by the process of buying Government securities in the open market, while Federal Reserve Notes can be issued (correctly, could be, up to 1932) only when the Reserve Banks acquire gold or eligible bills. An increase or decrease of Federal Reserve deposits has, moreover, a more direct effect on the banking system than the issue or retirement of Federal Reserve Notes.

Demand for currency as well from the public as from the banks has been very steady from 1920 to 1930. Currency in the hands of the public has kept regularly just under 4 billion $. Since National income expanded by about 30 per cent during the decade and the volume of transactions settled by means of currency—amounting to but 10 to 15 per cent of the total [1]—grew in a ratio probably not much smaller, the velocity of circulation of currency, estimated at 21 in 1909,[2] must have increased appreciably. The absence of a trend is coupled with relatively small seasonal and cyclical fluctuations of currency in circulation, a marked contrast to developments before the war, when the trend of currency in circulation was

[1] Professor Fisher (*The Purchasing Power of Money*, 1911, pp. 317 and 491) estimates the ratio at 9 per cent in 1909. Professor Mitchell seems to incline to about 15 per cent for 1926 (see *Business Cycles*, p. 118).

[2] Fisher, loc. cit.

strongly upwards, seasonal swings were wide and cyclical movements very important. The significance of this relative stability of the public's demand for currency during the last decade (not including, of course, the crisis of 1931–3, which witnessed an increase of currency in circulation of about 2½ billion $) for the whole financial machinery is mainly this: American banks were thus able to expand credit without encountering the drain of currency into circulation, which usually acts as a very powerful brake on the process of expansion.

The volume and distribution of currency held by the banks has been radically affected by the introduction of the Federal Reserve System. Prior to 1913 National Banks were compelled by law to keep reserves equal to 25 per cent of their demand deposits in most large cities and to 15 per cent in the rest of the country. These reserves were to be kept entirely as vault cash by banks in New York and Chicago, while banks in other large cities might hold up to 50 per cent and country banks even up to 60 per cent of reserves required as balances with approved banks in financial centres. Reserve regulations for other commercial banks varied, but requirements were usually much more lenient than those laid down in the National Bank Act. As a matter of fact, total cash in vault amounted to nearly 800 million $ in 1900 and to 1,650 million $ in 1914, equal to 11 and 9 per cent of individual deposits in commercial banks respectively. Since 1913 member banks of the Federal Reserve System have had to keep 7, 10,

or 13 per cent of their net demand deposits[1] and 3 per cent of their time deposits as a balance with their Federal Reserve Bank, while they have been free to keep as much or as little currency in their vaults as they liked. Regulations for the non-member banks have remained substantially unchanged. Actually member banks have confined their Federal Reserve balances exactly to the amounts required by law, increasing them from 1¾ billion in 1922 to 2¼ billion during 1926 to 1931, being equal to about 8 per cent of total individual deposits in 1922, and to 7 per cent in 1930.[2] Moreover, member banks kept about 500 million $ in vault cash, equal to nearly another 2 per cent of deposits. Non-member banks, finally, held about 400 million $ more of currency, likewise amounting to 2 per cent of their deposits. All commercial banks, therefore, kept about 900 million $ of hard cash and bank notes in their vaults in 1930—not much more than half the total of 1914—but they had fully 3 billion $ of currency of all sorts at their disposition, making the absolute amount nearly double the pre-war total and the ratio of all cash to total individual demand deposits 12 per cent against 16 per cent in 1914. This is appreciably less than the British ratio standing at about

[1] i.e. demand deposits less the excess (if any) of amounts due from banks over amounts due to banks.

[2] Since bills rediscounted with the Federal Reserve Banks do not average more than 550 million $ for the decade 1922–1931 (to which bills bought averaging 250 million $ might be added), the majority of member banks' reserves have been acquired by turning over to the Federal Reserve Banks gold previously held as vault cash or received from abroad as a result of international movements of funds.

25 per cent of current accounts, but still nearly double the German figure.[1] Banks could easily manage with this reduced stock of vault cash because the Federal Reserve System had provided them with the possibility of procuring additional cash by rediscounting bills, or by selling bankers' acceptances and government securities, if the Federal Reserve Banks should choose to buy them just at that time.

2b. Commercial banks, i.e. institutions carrying accounts for any member of the public, which can be disposed of by way of cheques, constitute the second, the bank money circle. There existed about 29,000 independent institutions of this type in 1921. Their number has declined steadily during the last decade and has fallen to about 16,000 at the present time. (See Table 1.)

Commercial banks are, as a rule, incorporated unit banks confined to but one single office and having no intimate connections by way of stock ownership with similar institutions within or outside their home town. Branch banking has, however, made rapid progress since the war. About one-third of all commercial banks, having nearly 50 per cent of their total resources, are organized under the National Bank Act, passed in 1863. This means that they have to report regularly to the Comptroller of the Currency in Washington and have to comply with certain regulations as

[1] The proportion of currency held by banks to total individual deposits was 6 per cent in 1929 and 9 per cent in 1914; this compares with a British ratio of about 15 per cent.

to capitalization and activities. It does not mean, however, that all National Banks in the United States form any sort of coherent system or that they have any common policy possibly influenced by the Comptroller. The other commercial banks are incorporated under the laws of their 48 home states, which show rather important differences in nearly every respect, and are subject to the supervision of 48 different authorities, changing with every turn in the political tide. Statistics distinguish Loan and Trust Companies, of which there are only about 1,500, from State Banks; actual differences between these two types are small, except for the fact that Loan and Trust Companies are usually confined to larger cities and are of relatively large size, average resources amounting to 11 million $ in 1931 against not much over 1 million $ for State Banks and 4 million $ for National Banks.

The basic activity of commercial banks is the issue of bank money, which usually takes the form of granting seasonal credits to commerce, industry, and agriculture and of extending short-term accommodation to dealers and speculators in securities. The ideal commercial banks balance-sheet would, therefore, show demand deposits on the liabilities side counter-balanced by short-term credits, balances with other banks, and cash in vault (including deposits with the Federal Reserve Bank) on the assets side. As a matter of fact, however, most commercial banks combine the business of administering savings deposits (formally callable only at usually three months' notice, but as a

matter of fact always paid out on demand so long as the bank is solvent) with the function of issuing bank money; in 1921 about one third of deposit liabilities of commercial banks was classed as savings deposits, the proportion rising to somewhat over 40 per cent ten years later. Accordingly commercial banks hold assets, which belong to the type of long-term fixed claims, the most important of these being United States Government bonds, other American bonds, and loans on urban and rural real estate. In reality, assets of the long-term type have always been somewhat larger than true savings deposits, so that a part of bank money issued has been used to purchase bonds or to finance long-term building activities.

While the volume of currency in circulation has undergone but small and erratic changes up to 1931 the volume of bank money and of total bank credit has experienced important fluctuations. Bank money—i.e. demand deposits in commercial banks—expanded from 18 billion $ in 1921 to 23 billion in 1926, kept to this level up to 1930 to fall thereafter with tremendous rapidity to about 15 billion in 1933. Total bank credit as represented by earning assets of all incorporated banks (including Savings Banks) rose from 41 billion in 1921, to 59 billion in 1929, and declined to nearly the figure at which it started during the present crisis.

The total volume of bank credit in the United States is dependent on the volume of bank money on the one hand and on the absolute size as well as the proportion of total savings which is entrusted to

banks on the other. The ratio of savings deposits to total deposits may be roughly put at fully 50 per cent for all incorporated banks, but at 40 per cent only for commercial banks proper. Since the movements of savings deposits are usually rather steady the fluctuations of the volume of bank money have an importance which far exceeds the numerical proportion of bank money to total bank credit, particularly with respect to short-term developments.

The volume of bank money is determined by two factors: the amount of currency at the disposition of the banks and the customary ratio between demand deposits and currency held by commercial banks. Since currency in circulation has been remarkably stable during the last decade the amount of Federal Reserve money at the disposition of member banks has constituted by far the most important force governing the total volume of bank credit. This volume is limited on the one hand by the reserve percentages of the law making it impossible for member banks as a whole to expand demand deposits by more than roughly ten times and time deposits by more than thirty times the amount of additional Federal Reserve deposits. On the other hand the aversion against keeping "excess reserves" earning no interest is a powerful force, driving the banking system[1] always to expand credit up to this limit.

[1] If an individual bank, finding itself burdened with excess reserves, does for some reason or other not choose to expand credit it may lend the excess to other banks which were willing to do so (cf. Turner, *The Federal Fund Market*, 1931).

Member bank balances with the Federal Reserve Banks are affected by the following factors:—

(1) *Gold movements.*—Since member banks do not hold gold to any appreciable amount in their vaults, they immediately pass on any gold which they may receive as a result of arbitrage operations on the foreign exchange market to the Federal Reserve Banks, being credited on their current account. Gold imported by merchants or by foreign exchange operators who are not members of the system has exactly the same effect, since the sellers would have the proceeds of their gold imports transferred to the credit of the member bank which carries their current account. Gold imports into the United States (the same, of course, being true for gold produced by United States mines) will, therefore, nearly always result in an equal addition to member banks' reserve balances. Conversely, every gold export constitutes a correspondent drain on member bank reserves.

(2) *Monetary circulation.*—An increase of money in circulation (or an export of American currency) forces member banks to procure the necessary currency from the Federal Reserve Banks, as they keep their vault cash fairly constant, while a decrease, leading to depositing the surplus vault cash with the Federal Reserve Banks, results in an addition to their reserve balance. Changes in money in circulation have, however, been small from 1922 to 1930.

(3) *Open market operations of the Federal Reserve Banks.*—When the Federal Reserve Banks buy

United States securities (usually of the short-term type) or bankers' acceptances in the open market, they provide member banks either directly (if they are the sellers) or indirectly (if their customers are) with additional Federal Reserve Bank money. The reverse effect is obtained by selling securities or acceptances.[1] These operations are limited in size, so far as sales go, by the actual holdings at the beginning of the campaign; so far as purchases go, by the fact that securities bought in the open market could not be paid for by issuing additional notes (being ineligible as note cover until 1932).

(4) *Rediscount operations.*—The increase or decrease in reserve balances with the Federal Reserve Banks, brought about by gold movements, changes in money in circulation, or open market operations, are the result of forces more or less outside the influence of member banks. Member banks have, however, another means of changing the volume of their balances with the Federal Reserve Banks on their own initiative, viz. by increasing or decreasing their rediscount operations. The rediscount provisions are liberal since not only short term commercial bills discounted by customers, but the banks own promissory 15-day notes collateralized by United States securities or trade bills can be offered to the Federal Reserve Banks.[2]

[1] As a matter of fact, the Federal Reserve Banks never resell acceptances in the open market, obtaining the same result by letting acceptances in their portfolio run off without replacing them by new bills.

[2] Since the beginning of 1933 several other types of paper, particularly practically unsecured promissory bills of the banks, have been eligible too, even if only as an emergency provision intended to expire after two years.

In practice, member banks, particularly the larger institutions, prefer to tender promissory notes, since they are easier to handle from a technical point of view and do not give the Federal Reserve Bank an insight into the member banks operations.

It is a rule among American banks to make as little use of rediscount facilities as possible. Being indebted to the Federal Reserve Bank is regarded as a definite sign of weakness, at least where rediscounting is not restricted to very short periods or done in response to seasonal demands of customers. Experience has proved that the banks will use additional balances with the Federal Reserve Banks primarily to reduce their rediscounts and will not borrow in order to get into possession of additional or excess Federal Reserve funds. This attitude as well as the stability of the volume of currency in circulation have made gold movements and—to a lesser extent—Federal Reserve open market policy the determinants of the total volume of bank money in the United States in the twenties.

2c. The circle of unbonded long-term claims is made up chiefly of mortgage loans on urban and rural real estate and of long-term deposits with financial institutions. The total of rural mortgages not used as a basis for long-term bonds was ascertained by the Census of Agriculture to amount to 7¾ billion $ in 1920; it stood at 9¼ billion in 1930. Urban mortgages may have totalled somewhat over 12 billion $ in 1920[1]; they were put

[1] An estimate of Mr. Persons giving 11·1 billion for 1920 (see *Quarterly Journal of Economics*, 1930–1, p. 104) does not include mortgages given

at about 30 billion in 1929.[1] The amount of other types of unbonded long-term claims can not even be guessed; it may, however, safely be assumed that it was much smaller than the investment in mortgage loans. Total long-term deposits with financial institutions (including time and savings deposits with commercial banks and savings banks, deposits with building and loan associations, and reserves of life insurance companies) amounted to nearly 25 billion $ in 1920, while they had increased to about 50 billion in 1929. The total gross volume of long-term claims unbonded may be, therefore, estimated very roughly at over 50 billion $ in 1920 and at about 100 billion in 1929.[2]

The ultimate lenders as well as the ultimate borrowers of these unbonded long-term claims are extremely numerous: there are on the one hand about 53 million of savings depositors in commercial and savings banks, about 12 million of members of building and loan associations, and several dozen of million of life insurance policy-holders[3]; the

by individual lenders. Professor Edie's estimate (*Iron Age*, Jan., 1933) is 15·1 billion for 1921.

[1] The estimate of Mr. Warren (*HR*. 11499, p. 61) is 37 billion $, from which sum mortgages pledged as security for real estate bonds—amounting to around 6 billion—have to be deducted. Professor Edie (loc. cit.) gives 33 billion for 1929 and 35½ billion for 1932, both figures including real estate bonds.

[2] The net volume (i.e. gross less mortgages held by financial institutions) would amount to about 40 billion in 1920 and 70 billion in 1929.

[3] In 1931 the number of ordinary life insurance policies in force amounted to 32·6 million, with an average face value of $2,700; industrial (group) life policies totalled 89·6 million, with an average of but $240 (v. *Statistical Abstract*, 1932, p. 283). Since many persons carry more than one policy, the number of individual policy holders is appreciably less than the 122 million indicated above. (The same is true of the number of savings depositors.)

number of mortgages loan borrowers is not known, but we may be certain that they amount to several millions as well among farmers as among urban home owners.[1] Although there are large individual loans to be found on the borrowers' as well as the lenders' side, it may safely be assumed that the circle of unbonded long-term claims is one in which small individual items predominate so far as ultimate lenders or borrowers are concerned. When we come, however, to the intermediary institutions, the picture changes. The number of intermediary institutions is still rather large, it is true: there were in 1929 nearly 20,000 commercial banks doing savings business with total deposits of 18 billion $, about 1,300 savings banks with 10 billion $ of deposits, over 12,000 building and loan associations with 8 billion $, and 350 life insurance companies with assets of 19 billion $. But the greater part of this total of 55 billion $ is administered by a small number of very large institutions: 250 commercial banks hold probably not much less than half of total deposits; the one hundred largest savings banks account for 60 per cent of the group-total of deposits; the 50 largest life insurance companies are responsible for not less than 92 per cent of total reserves; 90 building and loan associations with over 10 million $ of assets each have lent about one-quarter of total mortgage credits advanced by all associations together.

[1] The number of mortgage loans of building and loan associations alone amounted to 4 million in 1929 (*New York Times*, 4th January, 1931). The size of the average loan outstanding was about $3,000 (see S. 875, p. 53).

For commercial banks the savings and mortgage business is, as a rule, still a secondary activity, though it has gained very much in size and importance during the last decade. Savings banks, on the other hand, derive nearly their entire funds from long-term deposits, and loan over half of them on urban real estate, the rest being chiefly invested in long-term bonds. Savings banks are more or less confined to the Middle Atlantic states ; nearly 40 per cent of their total deposits are concentrated in New York City, while the states of New York, New Jersey, Massachussetts, Connecticut, and Pennsylvania account for nearly 90 per cent between themselves. In the rest of the country their functions are performed by the savings departments of commercial banks. Building and loan associations may be found in every state of the Union, but their distribution shows a marked centre in a small Middle Atlantic district formed by the states of Pennsylvania, New Jersey, and Ohio, in which nearly half of all the associations are located. The entire funds of the building and loan associations are used in loans to builders and owners of usually small houses. These loans, which correspond to instalment credits in the field of durable and semi-durable consumers' goods, form the back-bone of the financing of home building activities over large parts of the country, and are probably nearly as important as the mortgages on small urban houses given by commercial banks, savings banks, and insurance companies taken together, for the United States as a whole. Life insurance companies are

using over 40 per cent of their funds in mortgage loans (about two-thirds on urban, one-third on rural real estate) while about 35 per cent are invested in bonds, and 10 to 15 per cent reloaned to policy-holders in the form of policy loans and premium notes.

Commercial banks, savings banks, and building and loan associations are predominantly local institutions. They get the largest part of their savings deposits from individuals living in their home community and use their funds, in so far as they are employed in mortgage loans, in financing local real estate operations, or farmers in the immediate neighbourhood. Life insurance companies, on the other hand, do a nation-wide business, having agents and policy-holders in every state of the Union and spreading their mortgage loans over the whole national territory too; the distribution of reserves and of mortgages is, of course, not uniform over the whole country—the Middle Atlantic and the North Central states claiming about 60 per cent of the total in both cases.

Institutions working in the field of unbonded long-term credits have, therefore, not much direct connection with each other, and lack any sort of central agency which might co-ordinate their policies or enable individual institutions to refinance a part of their long-term claims, when heavy withdrawals would make this necessary. Such a contingency does not arise in normal times, when new deposits as a rule are larger than deposits falling due or called. It became, however, of prime importance

during the present crisis and has finally led to the establishment of two large corporations financed by the United States Treasury—the Farm Credit Administration and the Home Loan Banks—which have the task, among others, of taking over mortgage loans from lenders in need of liquid funds.[1]

2d. The long-term bond layer is of about the same size as the circle of long-term claims unbonded. Both have a good many participants and characteristics in common. The number of borrowers is, however, much more restricted in the bond circle and a few of them—the National Government, large states and municipalities, and big corporations—are responsible for the majority of the total. Lenders, i.e. bondholders, are extremely numerous, but here, too, the ratio of total bonds outstanding, held by a small number of institutional investors, is high.

The total of long-term bonds held in the United States in 1921 may be roughly estimated at somewhat over 55 billion $. It had risen to about 90 billion by 1929.[2] Not less than about one-fifth of all bonds outstanding is issued by the United States Government (this ratio, which stood at over one-third in 1921, has again increased to about

[1] The Savings Bank Trust Company, organized in July, 1933, by the Mutual Savings Banks of New York State with the assistance of the Reconstruction Finance Corporation and the Federal Reserve Bank of New York (v. *Commercial and Financial Chronicle*, 1933, ii, pp. 421–2) is another example, and, moreover, one which is planned as a permanent institution.

[2] Based on financial statistics of United States and subdivisions and the consolidated balance-sheets contained in *Statistics of Income* for corporations.

one-quarter during the present crisis) while states and municipalities account for about 20 per cent. Railroads (steam and electric) and other public utilities (electricity, gas, water) are the largest private borrowers on long-term bonds, their issues each amounting to about 15 per cent of the total. Bonds of industrial corporations and real estate bonds—an innovation of the last decade—contribute about 10 per cent each; foreign bonds, finally, nearly equally divided between government and private business, do not form quite 10 per cent of the total American bond portfolio.

About one-third of total bonds outstanding is held by institutional investors, their share having risen appreciably since 1921, when it stood at about one-quarter. Nearly half of all institutional holdings is to be found in the portfolios of commercial banks, where they are held partly as a second line of defence in view of their marketability and partly as an outlet for savings deposits. Savings banks hold not quite 20 per cent, while the rest is to be found in the portfolio of insurance companies. The distribution of the other two-thirds of long-term bonds outstanding is not known. Appreciable sums are undoubtedly in the hands of holding companies (particularly in the railroad and the public utility field), investment trusts and industrial or trading corporations using them as a sort of liquid reserve.[1] Large holdings are administered

[1] According to *Statistics of Income* (1930, p. 266) industrial and trading corporations held 2¼ billion $ of tax-exempt securities (i.e. bonds of United States and subdivisions) alone.

by trustees in the interest of individual or corporate beneficiaries. The rest—amounting to perhaps one-half of total bonds outstanding—is directly owned by private investors,[1] among whom a very large number are holding but a few thousand dollars of bonds each. The extent of large individual holdings is not ascertainable except in the case of wholly tax-exempt securities, where it amounts to about one-third of the total,[2] a ratio which is probably appreciably higher than that to be found for other bonds.

The intermediary between bond issues and bond buyers (as well as between sellers and buyers of equities) is the investment banking community. Up to the war this community consisted rather exclusively of several thousands of partnerships. Since then an increasing number of commercial banks has instituted separate departments or founded formally independent subsidiaries, which have taken up the originating, wholesaling, and retailing of securities and had managed to appropriate about one-half of the total investment banking business by 1929.

Formally, nearly all these investment banking houses remain independent. In fact, however, the large New York originating houses are exercising a very large and very definite influence over the mass of wholesalers and retailers. This influence is derived from the originating oligopoly these houses

[1] The holdings of institutional investors have to be regarded as indirect investments of their depositors or policy-holders.

[2] Cf. Hardy, *Tax-exempt Securities and the Surtax*, p. 81, and current *Statistics of Income*.

have, at least for issues of larger size. An investment banker outside New York can rely on a share in desirable new issues, i.e. issues which can be sold easily and with adequate profit, only if he is on the permanent " list " of one or more of the large Eastern originators. This in turn presupposes that he will take his share in less desirable issues too, and that he will, in general, trust more the originating house's choice than his own judgment and preferences. It is true that only very few originating houses can simply " allot " the share each client has to take in a new issue instead of the client asking for as much as he wants. But the tendency of making the distribution of new issues more dependent on the will of the originator than on the decisions of wholesalers and retailers has been prominent over the whole range of the investment banking business during the last boom as well as in pre-war days.

Only a few of the largest investment banking houses in New York and, rarer still, in other centres confine their operations to the origination of bonds and stocks (i.e. to preparing an issue and buying it *en bloc* from the issuer as head of or participant in a group of investment banks) and to their wholesaling to other dealers in securities. Many investment bankers combine either the three functions of originating, wholesaling, and retailing or—if their size or their location precludes them from taking part in originating operations, as is the case for the numerical majority—wholesaling and retailing only. A great number, finally, are restricted to retailing,

purchasing new issues from wholesalers, and distributing them among their local clientele. The institutions which do only originating and wholesaling to other investment bankers or to large institutional investors need large capital, but very little technical staff, and no branches. Pure retailers, on the other hand, purchasing securities if and when they see immediate prospects of reselling them, can work with little capital, but must have a large staff of salesmen who visit established or prospective clients, giving information about securities and trying to sell new issues they have in stock by any of the devices of modern salesmanship. Pure wholesalers and small retailers, who confine their operations to their home town, usually work without branch offices. The large houses, on the other hand, active in every stage of investment banking, have developed nation-wide organizations with branches and salesmen in every large city in the United States.

There were about 7,000 investment bankers and brokers' offices in the United States in 1930, against 4,000 in 1914, and 5,000 in 1920.[1] This total was nearly equally divided between unit investment banks on the one hand and head offices and agencies of branch organizations on the other. Private investment bankers numbering about 3,000 with 1,800 branches were numerically still some distance ahead of the young 1,300 incorporated investment

[1] These estimates, as well as the following numerical data, are based on the annual directory, ***Investment Bankers and Brokers of America***, and relate to the year 1930.

banking institutions with their 1,000 branch offices. But, as far as the volume of business goes, incorporated investment banks had already nearly reached their older brethren. Numerically, unit investment banks were still predominant, there being about 3,500 of them against about 800 branch institutions with a total of nearly 3,000 branches. Using, however, volume of sales as the basis of comparison, branch organizations had probably taken the lead, particularly in the retailing field; among the 20 largest bond-selling organizations in the United States there were only four or five having no branch system.

The average investment banking branch system is but small; out of 800 branch systems about 350 have only one branch, and another 300 two to five branches only. There are, however, about 50 systems with more than 10 branches each (22 of them with head offices in New York, 13 in Chicago) and a total of nearly 1,100, representing almost 40 per cent of all branch offices. The average for these large systems is thus somewhat over 20, while some of them have as many as 40 to 60 branches.

The distribution of investment banking offices over the United States differs radically from that of commercial banks.[1] Out of a total of over 7,000, nearly 1,600 offices are located in New York City, 500 in Chicago, about 300 in Boston and Philadelphia, nearly 200 in San Francisco and Los Angeles, 150 in St. Louis, and about 100 in Detroit, Baltimore, Pittsburgh, Cincinnati, Cleveland,

[1] See Table 35.

Buffalo and Minneapolis, leaving not more than about 3,000 for the rest of the country. Another comparison is still more instructive: There are only about 700 places in the United States which have an investment banking office, while about 16,000 [1] had a commercial bank in 1927.

2e. The organization of the equity circle is almost the same as that of the bond circle. Investment bankers are the intermediaries between borrowers and lenders, so far as new issues go, while old equities usually change hands on one of the organized Stock Exchanges. The part of dealings in equities done privately is, however, appreciably larger than in the bond circle and is completely predominant so far as dealings in partnerships and unincorporated business are concerned. The owners of equities are extremely numerous, particularly since the popularization of investment in common shares during the last decade. It has been calculated that in 1928 the number of shareholders in American corporations had increased by 50 per cent since 1920 and more than doubled since 1913.[2] A recent estimate putting their number at about 10 million would make every sixth American over 21 years of age a shareholder.[3]

An appreciable part of all equities in existence is, however, not owned by private individuals, but

[1] This is the number of banking points in the United States, given in *Bulletin No.* 21, p. 13, of the Univ. of Illinois Bureau of Business Research, based on data in Rand McNally's directory.

[2] See G. M. Means, "The Diffusion of stock ownership in the U.S." (*Quarterly Journal of Economics*, xliv, p. 595).

[3] D. Starck in *Financial World*, 25th March, 1931.

by other corporations, notably holding companies.[1] All American corporations held in 1929 84 billion $ of not tax-exempt investments[2]; it can safely be assumed that by far the largest part of this total (deducting, of course, about 50 billion $ of bonds and mortgages held by banks and other financial institutions) had the form of common and preferred shares. Since the book value of all corporate stock in the United States amounted to nearly 100 billion $[3] an estimate that fully one-quarter of all equities was in the hands of other corporations is probably not far from the mark.[4] Out of the three-quarters of all equities held by private individuals about 25 per cent is owned by the rich (persons with over 100,000 $ annual income) while the well-to-do (incomes from 10,000 to 100,000 $) possess nearly half of it and the rest of the population have to divide the remaining quarter among themselves.[5]

There are about two million of businesses in which equities exist and could change hands,[6] the number

[1] Cf. Bonbright and Means, *The Holding Company*, 1932.

[2] *Statistics of Income*, 1930, p. 266.

[3] The value given by *Statistics of Income* is 96 billion $ for 1928 (*Statistical Abstract*, 1931, pp. 201–2).

[4] For comparative purposes similar data for Germany (see *Wochenbericht des Instituts für Konjunkturforschung*, iv, 24) may be of some interest. The percentage of common shares held by corporations was estimated at between 25 and 40 per cent; this proportion rises to between 40 and 60 per cent if shares held by not incorporated businesses and by public bodies are included.

[5] These figures are based on the dividends reported in *Statistics of Income* (see Means, loc. cit., pp. 598–9). They refer to 1927; the share of the rich has probably diminished in the following years.

[6] This is the number of firms reported by the commercial rating agencies as doing business in the United States in 1925 (see *American Economic Review*, 1925, p. 685).

of incorporated firms alone amounting to nearly half a million. As a matter of fact, however, dealings in the equities of a small number of large corporations listed on the stock exchanges completely overshadow all the other transactions of this type.

3. It now remains to look at the facts and to determine how far the movements of the total volume of bank credit since the war conform to the usual cyclical pattern and how far they show distinctive traits of their own.

Total deposits in commercial banks—more or less equivalent to total loans and investments on the assets side—rose from 27 billion $ in 1921 to 45 billion $ in 1929, an increase of 52 per cent, equal to an annual growth of about 5½ per cent. This corresponds almost exactly to the average rate of growth of bank credit during the period 1839 to 1914 (6 per cent).[1] The rate of growth is, moreover, appreciably lower than in the preceding periods of expansion, 1884 to 1892, 1896 to 1907, and 1915 to 1920. It can, therefore, not be said that the last boom has been characterized by an extraordinarily large expansion of the total volume of bank credit. The case is still further weakened if attention is concentrated on bank money proper, i.e. demand deposits in commercial banks, which increased by about 35 per cent during this period.

On the other hand the degree of shrinkage which bank credit underwent during the crisis of 1930–3 is truly extraordinary. Loans and investments

[1] See Warren and Pearson, *Prices*, p. 93.

as well as demand deposits of weekly reporting member banks decreased by not less than 24 per cent from the end of 1930 to March 1st, 1933; both percentages would be somewhat higher if data for all commercial banks (not yet available) were used, and the effects of the banking moratorium of March, 1933, taken into account.[1] A shrinkage of such proportions—bringing the volume of bank credit down to the low point of the depression of 1921–22—has never been experienced before. Loans and investments of National Banks decreased by 8 per cent from December, 1876, to the end of 1878, by 12 per cent between May, 1893 and February, 1894, by 5 per cent from August, 1907, to February, 1908, and finally by 8 per cent between November, 1920, and the end of 1921.[2] In no case, therefore, did the shrinking process last for anything like two years and a half, or lead to a reduction in the volume of bank credit of anything like 30 per cent, or undo the entire credit expansion of a whole decade. What needs explanation—so far as the question of total volume goes—is consequently not so much the expansion of 1922–9, as the deflation of 1930–3.

What could be charged, however, is that the credit expansion of the twenties, although not diverging from the trend previously established, was not in accord with the development of the

[1] Earning assets and total deposits of all commercial banks on 30th June, 1933, were probably about 10 per cent lower than a year before and about 35 per cent lower than at the end of 1930.

[2] For data see Young, *An Analysis of Banking Statistics in the U.S.*, pp. 68–9.

needs for credit—depending on the growth and the structure of production and distribution—or with the supply of monetary gold, the basis of the whole credit fabric. These charges are not easy to substantiate, however. Industrial production increased by 40 per cent from 1922 to 1929,[1] or almost 6 per cent annually, so that an appreciable difference between rate of growth of bank credit and growth of production does not exist. Moreover, the expansion of bank credit has outrun the growth of physical production to some extent for nearly a century; bank credit increased at an average annual rate of 6·05 per cent from 1839 to 1914, while basic production grew by only 4·03 per cent.[2]

There appears to be more truth in the charge that the supply of bank credit was excessive, even if expanding in accord with the growth of production and the growth of the National dividend (estimated at 84 billion $ in 1929 against 60 billion in 1922[3]), because the demand of trade and industry was not increasing *pari passu* with the total volume of production owing to changes in the methods of financing production and distribution. There can be no doubt that industrial production proper required decreasing amounts of bank credit per unit as the twenties went on. This decrease was, however, accompanied by, and to a certain degree dependent on, an increased demand for credit to finance the distribution and the purchase of the

[1] Indices of the Federal Reserve Board.

[2] See Warren and Pearson, *Prices*, pp. 45, 93.

[3] Estimates of the National Industrial Conference Board (see *Economist*, 1931, p. 1154).

goods produced with less bank credit as well as the floatation of those huge masses of common stocks, the proceeds of which corporations used to reduce their overdrafts.[1] It is, therefore, very dubious if total demand for credit per unit of output has fallen to any appreciable extent, if at all.

Turning finally to the relationship between bank credit and gold, it is found that total individual deposits in commercial banks amounted to not quite nine times the size of the monetary gold stock in 1921, but were ten times its size in 1929. Undoubtedly, then, bank credit has expanded somewhat more rapidly than the gold basis has grown. This is, however, a tendency which has been at work for at least fifty years and which was much more marked before 1920. The ratio of bank deposits to monetary gold stood at three and a half in 1890, at nearly five in 1900, and at seven in 1914.[2]

One is, therefore, led to the conclusion that the expansion of the total volume of credit during the last boom was well within the limits indicated by similar developments in the past. It was the usual corollary (to use a word which is neutral as to the problem of cause and effect) to the upward phase in a major business cycle. What was not quite in accordance with previous developments was the use to which the additional volume of credit was put; instead of being employed in

[1] Some remarks on these points will be found in Ch. III.

[2] If demand deposits only are used there is no increase in the ratio whatever (5·5 times in 1921, 5·4 times in 1929, against 4·9 in 1914).

short-term loans to trade and industry the bulk of additional funds was loaned on securities and on urban real estate or invested in bonds.[1]

EARNING ASSETS OF ALL INCORPORATED BANKS [2]
(In billion $)

30th June	Commercial credits	Loans on securities	Loans on real estate	Investments	Total
1920	19·5	6·4	5·0	11·4	42·3
1925	16·4	8·2	9·0	15·4	49·0
1929	18·0	11·3	11·3	17·4	58·9
1932	10·2	7·2	10·7	18·2	46·3

The foregoing arguments all refer to the period 1922–1933 as a whole. It is, therefore, necessary to turn now to year-to-year changes (see Table 3). A parallelity of movement between total volume of bank credit (particularly the volume of bank money, i.e. demand deposits) on the one side, and the flow of currency into and out of the banks on the other is noticeable in nearly every year. An increase of the monetary gold stock of the country, a decrease of money in circulation) and an expansion of Federal Reserve credit (in the form of increased holdings of bills or Government securities) will all widen the flow into the banks, while a decrease in the gold stock, a growth of money in circulation

[1] This explains, even if only in part, the phenomenon of a boom without a rise in commodity prices, which has puzzled so many observers. That commodity prices did not rise (Index, 1922, 97; 1929, 95, taking 1926 as base year) is chiefly the result of technological changes (lowering real costs and counterbalancing the effects of an expansion of credit slightly in excess of the growth of the volume of production) and partly the outcome of a diversion of the additional flow of credit into the markets for equities and for urban land; consequently stock prices trebled and urban real estate values probably nearly doubled between 1922 and 1929.

[2] See full data in Tables 5 and 6.

and a contraction of Federal Reserve credit result in an increase of the flow of currency out of the commercial banking system.

From the middle of 1920 down to the middle of 1924 the gold reserves of the United States grew nearly without interruption, increasing from almost 2,900 million \$ in 1920 to 3,800 million in 1922 and to nearly 4,500 million \$ in 1924. During the first half of this period money in circulation decreased by a little over 1 billion \$ as a corollary to the depression and a rapidly falling price level. The total flow of currency into the banks would consequently have amounted to nearly 2 billion \$, if it had not been for a reduction of Federal reserve credit of not less than 2,005 million \$ which turned the inflow into a net outflow of approximately 100 million \$. Earning assets and demand deposits of commercial banks meanwhile decreased by 2½ to 3 billion each. During the next two years business revival increased money in circulation by 400 million \$, thus compensating for more than half of the gold influx, while a further decrease of Federal Reserve credit absorbed most of the remainder. The net flow of currency into the commercial banks was thus but small. It sufficed, however, to induce—with the help of the psychology of revival—a very considerable expansion of bank credit, earning assets increasing by about 4 billion and bank money by a little over 1¾ billion \$. From the middle of 1924 to the middle of 1926 net changes in gold reserves and in money in circulation were small. Federal Reserve credit, however, increased

by 350 million $ making possible a continuation of credit expansion at an accelerated pace: total earning assets grew by 5 billion $, bank money by nearly 3 billion. In 1926–7 an appreciable gold influx coupled with a small shrinkage of money in circulation and only partly counteracted by a 100 million $ decrease in Federal Reserve Bank credit provided the basis for another year of expanding credit.

Developments in 1927–8 are of special interest. In this year the Federal Reserve Banks tried to overcome a minor business recession at home by a policy of easy money which was at the same time destined to lessen the attraction of New York as a centre for international short-term funds and to help the Bank of England in its endeavour to lower the British level of interest rates. Consequently, a gold outflow of nearly half a billion $, due to an easing of home interest rates, was more than compensated by an expansion of Federal Reserve Bank credit. This expansion was initiated through purchases of Government securities by the Federal Reserve Banks. Later on (from April, 1928), the speculative fever, nourished by this initial injection of additional credit, led the banks to replenish their funds by rediscounting to such an extent that a reversal of the Federal Reserve Banks' open market policy could lessen, but could not stop, the increase of total Reserve credit outstanding. Total earning assets of commercial banks increased by another 3 billion $ during this year. Demand deposits, on the other hand, show a decrease of about a quarter

billion $, which is partly a result of a shifting of demand to time deposits, and partly the consequence of a drain of demand deposits into the call loan market (where they appear as " Loans for others "). It was this last dose of additional Federal Reserve credit which kindled the flame of speculative activity already brightly burning for several years, into a wildfire which no remedy out of the central bankers pharmacy could stop and much less extinguish. It consequently burnt until it was finally quenched by the cloudburst of the crash of October, 1929, and by the long drawn monsoons of depression during 1931 and 1932. If we consider that nearly all the worst abuses of the great boom were committed during its two final years and that a great part of the extraordinary severity of the depression is nothing but the aftermath of these excesses, we will realize how correct Dr. Miller, senior member of the Federal Reserve Board was, when he told a Senate Committee as early as on January 23rd, 1931, that the expansion of Federal Reserve credit in 1927 " resulted in one of the most costly errors committed by . . . any banking system in the last 75 years ".[1]

From the summer of 1928 on, the gold flow changed its direction and turned again towards the United States for fully three years, nearly undisturbed by the crash of 1929 and the depression of 1930–1. Up to the middle of 1930 the inflow of gold (amounting then to 400 million $) was reinforced by a further decrease in money in

[1] *SR.* 71, p. 134.

circulation totalling 250 million \$. Since Federal Reserve Bank credit shrank by over 500 million \$ during these two years, the net flow of currency to the banks was very small. Bank money responded with an increase of about one-third billion \$, while total earning assets showed no appreciable net change over the period.

Since the middle of 1930 depression prevails and the usual mechanism breaks down to some extent. In 1930–1 further additions to gold reserves are nearly counterbalanced by an increase of money in circulation, bearing testimony to banking disturbances and the beginning of hoarding on a large scale. Reserve credit remains stable. There is still a very small net flow of currency into the banks. Demand deposits as well as total earning assets, however, decline by fully 2 and nearly 4 billion \$ respectively. This process becomes more accentuated still during 1931–3. Gold reserves show a net loss of over 600 million \$, resulting from numerous violent movements into and out of the country. Simultaneously money in circulation shoots up from 4¾ to 5¾ billion \$ as a consequence of hoarding and the substitution of notes for bank money over wide areas. This currency outflow of altogether 1½ billion \$ is not quite balanced by an increase of Federal Reserve Bank credit of 1,300 million \$, almost exclusively in the form of additional purchases of Government securities. Bank credit, consequently shrinks, but with unprecedented rapidity, decreasing by about 5 (demand deposits) and 10 billion \$ (total earning assets).

There are two conclusions to be drawn from a study of the year-to-year movements of gold, money in circulation, Federal Reserve Bank credit and commercial bank credit.

The one is the observation that the Federal Reserve Banks tried to avoid on the one hand the multiplicative effect of gold movements on Reserve Bank credit, which would have been possible under the law. They absorbed gold inflows and gold outflows by allowing their reserve percentage to rise or to fall, as the case might be. They made consequently no use of their power to issue notes up to roughly[1] 250 per cent and member bank deposits up to nearly 300 per cent of gold reserves. But they did not, on the other hand, counteract gold movements completely by changes in the volume of Federal Reserve Bank credit equally large, but of opposite direction. This means that the Reserve Banks in general allowed an influx or outflow of gold to become an equally large addition to or drain on currency at member banks' disposition, but not an addition (or drain) two and a half times as large as the original gold movement. They tried, in one word, to be purely passive to gold movements (except in 1927).

The second conclusion is, that the total volume of bank money and of bank credit will move in the same direction as the net flow of currency (being the result of changes in gold reserves, money in

[1] There are various minor statutory or technical facts which make the percentage or expansion actually possible appreciably lower (see Goldschmidt, *Banken und Bankpolitik in der Ver. Staaten, Archiv . Sozialwissenschaft*, 1932).

circulation and Federal Reserve Bank credit), but that its changes are many times as large—the ratio, however, varying—as the movements of the net flow of currency and that parallelism is more pronounced during the upswing than during depression. Since changes in the volume of currency in circulation are more or less outside the circle of banking influence, the total volume of credit is thus seen to depend on international gold movements and on the extent of the creation of Federal Reserve Bank credit.

CHAPTER II

DEPOSITS

TOTAL deposits of all reporting banks (excluding, of course, bankers deposits which cancel out when looking at the banking system as a whole) rose from 34½ billion $ in 1921 to 52 billion in 1930,[1] an increase of 51 per cent. There is nothing very unusual in this rate of growth as the preceding chapter endeavoured to show. Nor have there been many novel or unusual features in the year-to-year changes of total deposits, except the stagnation witnessed in the boom years 1928 and 1929, which bears testimony to the drain of several billion $ of deposits into brokers' loans for others, i.e. stock exchange loans made by New York City banks for account of non-banking lenders, mainly large American corporations.[2] The two striking developments which have taken place in the period under review were rather the rapidly growing importance of time deposits and the shift towards large deposit accounts, materially increasing the size of the average deposit.

Statistical evidence about both developments is sadly lacking or, at least, open to controversial interpretation. Particular controversy has been

[1] See Table 4.

[2] How far such a " drain " is possible and how it affects bank credit will be discussed in Chapter V.

aroused about the question of whether the rapid increase time deposits show in banking statistics is an indication of a real increase in savings entrusted to commercial banks or nothing but the result of an artificial shift in the books of the banks, the incentive for such a shift being provided for the member bank by the reserve ratio of only 3 per cent (as against 10 or 13 per cent for demand deposits) and for the customer by the higher rate of interest.

While popular and congressional opinion evidently have a strong leaning towards the shift-theory, economists have been rather at a loss to find much evidence in its favour. Total time deposits of all reporting banks, as shown in their balance-sheets, increased from 13 billion \$ in 1919 to 28 billion in 1928 (remaining at practically the same figure for the next three years), whereas demand deposits rose only from 19 to 24 billion \$. Looking somewhat more closely at the figures, it is found that time deposits in Mutual Savings Banks (the true savings character of which has not been contested), rose by 110 per cent during the twelve-year period 1919–1931, while time deposits in commercial banks show a growth of 150 per cent, this being the result of an increase of no less than 215 per cent in member banks and an increase of but 60 per cent in other commercial banks. Taking the rate of growth of time deposits in Mutual Savings Banks as an indication of the increase in true savings in the period under review, it might be argued that the excess of time deposits increase in commercial banks amounting to 2½ to 3 billion \$, represents the result

of a purely book-keeping shifting process within the total mass of deposits. Such a figure is, however, to be regarded as a maximum, the amount of shifting with its concomitant creation of "fake" time deposits being probably much smaller.

The greater part of the relatively speedier growth of time deposits in commercial banks is to be attributed to the increased activities of commercial banks in the savings field, which resulted in the multiplication of the number of commercial banks accepting savings deposits and having separate savings departments (sometimes with sub-departments for the convenience of women and children), and meant a definite encroachment on the field of other savings institutions. The extraordinary growth in the number of savings depositors in commercial banks (8½ million in 1915, 13 million in 1920, 33 million in 1925, and 41 million in 1930 !), coupled with a marked decrease in the balance standing to the credit of the average depositor (about $700 in 1920; somewhat over $500 ten years later) is the best proof for such a statement.[1]

We may therefore assume that the figures for time deposits, as they stand after attention has been paid to the changing fraction of deposits reported as unclassified (this has been done in Table 4)[2] are not appreciably biased and may be used as

[1] See the careful investigations of Mr. French in *Journal of Political Economy*, 1931, p. 771.

[2] This table might be compared with the figures for time deposits Mr. French gives on p. 766, which, although arrived at in a somewhat different way, do not diverge to an appreciable extent from the data used in the text.

a basis for further investigations. Time deposits as reported undoubtedly do contain large sums which cannot be regarded as individual savings but rather as excess liquid funds of corporations, held in the form of time deposits for a shorter or longer term. This is particularly true for the majority of time deposits evidenced by certificates of deposits or kept in open time deposit accounts, amounting to a total of nearly 3½ billion $ in 1931 and more or less stable since 1928,[1] but it does not apply to time deposits evidenced by savings pass books, which represent about 90 per cent of total time deposits. Year-to-year changes and regional differences of behaviour of time deposits may therefore be taken as significant movements.

Time deposits have increased at a much more regular and, on the average, decidedly higher rate than demand deposits, their growth, however, being most marked during the years 1922 to 1925 and 1928. In 1915 time deposits represented but 45 per cent of total individual deposits of all banks. By 1921 they had risen to 48 per cent, and a decade later they stood at 57 per cent. For member banks alone, i.e. eliminating savings banks and smaller commercial banks in rural areas, the increase is much more spectacular: 20 per cent in 1915, 34 per cent in 1921, 46 per cent in 1931. Time deposits have grown in every year up to 1928 and did not decrease in the present crisis until the

[1] See *Annual Report of the Comptroller of the Currency for* 1931, p. 131, and *Annual Report of the Federal Reserve Board for* 1931, p. 95; comparable back figures are not available.

autumn of 1931, and then to a much smaller degree than demand deposits did.

This addition of 12 billion $ to the time deposits of the banking system in the decade following the first post-war depression, representing, as they do, mostly true savings, is an expression of the large increase that took place in the United States' capacity for saving and investment after the war and a result of the tendency of the American public to invest a relatively larger share of its savings, individual and corporate, in the form of time deposits with commercial banks. Even so, however, savings banks and commercial banks were not entrusted with more than, on the average, about 10 per cent of the annual savings of the American people, equally large or larger sums going to insurance companies and building and loan associations or being invested in securities newly issued or utilized in the process of reinvestment of profits in going concerns.

It is interesting to note that time deposits have grown at a higher rate than demand deposits in nearly every part of the Union. There are, however, very significant differences in rate of growth as between the different parts of the country. Taking the period of 1922–9 and the figures for member banks of the Federal Reserve System as basis of comparison, it appears that the increase did not amount to more than 26 per cent in the Minneapolis district, 34 per cent in the Dallas district, and 48 per cent in the Kansas City district. In the Eastern part of the country, on the other hand (Boston, New York, Philadelphia, and Cleveland districts),

the rate of growth is between 85 and 130 per cent. If time deposits in Savings Banks, which are concentrated in the East, were taken into account the difference would become more striking still. What these movements reflect is nothing else than the good trade and the rapid accumulation in the Eastern part of the country, highly industrialized nearly everywhere, and beginning to show signs of changing into a country of rentiers in some stretches, as compared with the long-drawn-out depression which hit most of the Western and Southern districts and rendered the process of capital formation slow and irregular. It is significant that the San Francisco district, having but comparatively little industry but a rapidly growing leisure class, ranks with the Eastern states (increase of 87 per cent), as does the Atlanta district, newly industrialized and thus distinguished from its Southern surroundings; whereas the Chicago and the St. Louis districts, which both contain agricultural as well as industrial areas, occupy a sort of intermediate position, the rates of increase being 62 and 66 per cent respectively.

Demand deposits of all banks have increased from 19 billion $ in 1919 to 24 billion in 1929, thereafter rapidly falling to nearly 15 billion in 1933. They have shown a rather close correspondence to the movements of the business cycle, as evidenced by indexes of production or by clearings outside New York City, a correspondence to be found to a much smaller degree, if at all, in time deposits. They reached a first peak about the middle of 1920, fell by no less than 14 per cent in the next year as a result

of the depression, and did not pass their previous high mark until 1924. After a remarkable increase of more than 2 billion between the summer of 1924 and the middle of 1925, which may be attributed to the then easy money policy of the Federal Reserve Banks, they averaged between 23 and 24 billion up to the present crisis. The absence of growth in the years 1928 and 1929, which contrasts with the expansion then experienced in nearly every other field of economic activity, is, to a great extent, the result of the stock exchange boom financed by non-bank lenders, who otherwise would have kept the funds they loaned at the money desk of the stock exchange in deposit with their bank. The unprecedented shrinkage of demand deposits since 1930, amounting to more than 8 billion $ in three years, or over one-third of the total, reflects the extraordinary curtailment of economic activity during the present crisis as well as wholesale bank failures (accounting for probably about 1½ billion $ of the increase in demand deposits before March, 1933), the repatriation of foreign balances, and hoarding within the United States.

There are no significant regional differences in the behaviour of demand deposits during the last decade, a striking contrast to the developments witnessed within the time category of deposits. The rates of increase of demand deposits of member banks within the several Federal Reserve districts between 1922 and 1929 are compassed within the relatively narrow range of 9 per cent and 35 per cent. The differences are, moreover, apparently

not associated with similar differences in economic activity or financial organization.

Bankers' deposits (nearly exclusively repayable on demand) may not be important from the economist's point of view of the banking system as a whole and as part of the nation's financial structure. They are so, however, to a very marked degree, for the individual bank as such, for the inter-relations of banks, and for the relations of commercial banks to their central bank.[1] Up to 1914 American banks held their reserves, so far as the latter were not kept as cash in vault, rather exclusively in the form of balances with correspondent banks, these balances, moreover, forming an essential part in the clearing organization every bank was forced to build up and to preserve in the absence of any other form of inter-city clearing. Bankers' balances, therefore, were of unusually large size, amounting to 2¾ billion $ in 1914, equal to 30 per cent of individual demand deposits, concentrated in New York, Chicago, and, to a lesser degree, in St. Louis, Boston, and Philadelphia.

At the time of the passing of the Federal Reserve Act it was widely believed that bankers' balances would diminish quickly and radically, since the Act introduced for member banks the compulsory keeping of reserves in fixed percentages with their Federal Reserve Bank, as well as a nation-wide clearing system. Events have shown, however, that bankers' balances have continued to play an

[1] An exhaustive treatment of all the problems related to bankers' balances may be found in Professor Watkins's book.

important role in the American banking system, even if the proportion they bear to individual demand deposits has fallen from 30 per cent in 1914 to about 20 per cent in recent years; taking into account member bank reserve balances with the Federal Reserve Banks, which have averaged somewhat over 2 billion $ in recent years, the former ratio has, however, been surpassed by a few per-cents.[1] They stood at nearly 4 billion in 1919, falling to $2\frac{3}{4}$ billion in 1921, thereafter ascending in regular steps to nearly $4\frac{1}{2}$ billion in 1925; after two years of stability they fell to somewhat over $3\frac{1}{2}$ billion in 1929, shooting up again to nearly 5 billion $ in 1931. As these figures show, bankers' balances usually are depleted in times of good trade and speculative activity, the banks in the interior withdrawing their balances with their city and metropolitan correspondents in order to use them at home, while these balances return the moment unused funds accumulate in the tills of interior banks. The movement in 1932–3 was somewhat unusual, the interior banks recalling a great part of their balances to finance withdrawals by frightened customers, notwithstanding the continuance of economic activity at an extremely low level.

There has not been much change in these movements since pre-war times. Nor has there been an appreciable change in the regional distribution of bankers' balances, New York City banks holding

[1] Moreover, the growth of branch banking and the process of amalgamation have eliminated quite appreciable sums, which formerly appeared as bankers' deposits from published balance-sheets; the relative stability of bankers' balances is therefore the more remarkable.

over 30 per cent and Chicago banks nearly 10 per cent of the total amount due to banks. This persistence of bankers' balances on a large scale has several causes. First, non-member banks are still holding the greater part of their total reserves with correspondents, an item amounting to about three-quarters of a billion $ in recent years. Then foreign commercial banks usually carry the greatest part of their dollar holdings with some of the big Eastern banks; member banks alone reported about 500 million $ of balances due to foreign banks up to 1931. Thirdly, reserves with correspondent banks have the attraction of yielding interest, even if usually at a rather low rate, whereas balances with the Federal Reserve yield none whatever, so that any reserves exceeding the lawful minimum requirements are carried with correspondents—save in exceptional circumstances as they arose in 1932–3. Further, reserves with correspondents remain necessary for the settlement of certain operations which are not within the compass of the Federal Reserve clearing system. And last, but not least, banks, who by the seasonal character of their business, are forced to borrow at some time of the year from correspondents, or that wish to make use of other facilities provided by them, are expected to hold adequate credit balances for the rest of the year. The result is that in 1927 New York banks were reported as correspondents in 16,800 cases by outside banks (there being about 27,000 of these) and Chicago banks in 9,400 cases, and that at the same time 6,300 out of the 16,700 banking points

in the United States had at least one New York, and 4,700 at least one Chicago, correspondent bank.[1]

Not much is known about the size distribution and about the origin of deposits held with American banks. Separate data are available for public deposits only, and even here do not run farther back than 1927. It would seem that public deposits did not matter much before 1917. In the two or three years following, United States deposits totalled appreciable sums, the Treasury having very large balances available after every issue of securities. Since 1920, however, the category of public deposits has been dominated by the sums standing to the credit of cities, states, counties, school-districts, etc. In 1930 the deposits of states and territorial subdivisions amounted to 2½ billions (about 80 per cent of the total being repayable on demand), an increase of 1 billion $ since 1927, while United States deposits stood at but 200 million $, plus the 170 million $ owing the Postmaster-General in accordance with the law that all the money deposited with the Postal Savings system shall be entrusted to local banks, who have to provide Government bonds in equal amount as security, another vestige of regionalism in American banking legislation. During the present crisis deposits of states and municipalities have been heavily drawn upon, while the deposits of the Postal Savings system have shot up to over 1 billion $ as a result of widespread

[1] See "An Analysis of Bankers' Balances in Chicago," *Bulletin No.* 21 of the Bureau of Business Research of the University of Illinois, p. 13.

distrust in the safety of private banks, so that the two main groups of public deposits may be roughly equal at the moment. Total public deposits amounted to 3 per cent of total deposits in 1927, and had risen to about 6 per cent by 1931; they are probably somewhat higher now.

The origin of the remaining 95 per cent of individual deposits is not known in detail.[1] An inspection of balance-sheets shows that the 544 largest industrial corporations of the country in 1927 had bank balances of about 3 billion $,[2] equal to nearly 8 per cent of total deposits. The deposits owing large public utilities and railroads must sum up to another appreciable total; so must the balances of the innumerable corporations and businesses of smaller size. The credit balances which borrowers are bound to hold, averaging up to 20 per cent of the loans granted them by commercial banks,[3] may amount to several billions more. There seems, however, to be no doubt that the greater half of demand deposits as well as an overwhelming majority of time deposits are held by private individuals, i.e. professional people, rentiers, employees, workmen, and farmers. Further

[1] The data the Comptroller of the Currency gives in his *Annual Report* for 1921 (pp. 31–2) are fragmentary. They indicate that about 2 per cent of individual deposits of National banks came from railways, 2½ per cent from the coal mining and iron industries, and 1½ per cent from the oil industry, but do not break up a block making up nearly 90 per cent of total deposits.

[2] Sloan, *Corporation Profits*, p. 22.

[3] This is the percentage Angell and Ficek give as "common to American banking practice" (*Journal of Political Economy*, 1933, p. 30), adding, however, considerations which make it probable that the ratio is appreciably lower as a matter of fact.

than this we cannot venture at present, statistics being woefully silent on this point.

Our information is not quite as deficient, even if very incomplete, with regard to the size distribution of deposit accounts. A recent statistic—the first of its kind to be published—shows that about one quarter of total deposits of member banks consists of a very great number of small accounts with a balance of less than $2,500 each (see Table 4). Another quarter of deposits is to be found in accounts with a balance of $2,500 to $50,000, while a very restricted number of large accounts embodies nearly half of the sum total of deposits. An inclusion of non-member banks would alter the distribution somewhat in favour of the smaller accounts, without, however, appreciably changing the picture.

We know that the size distribution is very different for time deposits from what it is for demand deposits. Detailed data are, however, nearly entirely lacking. The average sum standing to the credit of every one of the 53 million savings depositors is now not much over $500 (it was nearly $700 in 1920), making the existence of an appreciable number of large accounts very improbable.[1] A recent estimate[2] puts the proportion of savings accounts with a balance of under $1,000 at 25 per cent of the total, assigning 50 per cent to deposits of $1,000 to $3,000, thus leaving 25 per cent to accounts with a balance of over $3,000. This may be correct for savings

[1] See the data given in "Savings Deposits and Depositors," published annually by the Savings Bank Division of the A.B.A.

[2] By Account Builders Inc., quoted by Pitkin, *The Consumer*, p. 182.

deposits evidenced by pass books, which form the bulk of the total. Time deposits evidenced by certificates of deposit or kept in open time accounts, on the other hand, show a very large proportion of large accounts. In May, 1931, not less than about 70 per cent of member banks' total time deposits of this type were found in individual accounts with a balance exceeding $25,000.[1] Assuming this percentage to hold for non-member banks too, we would get a total of about 2 billion $ of deposits of over $25,000, evidenced by certificates or kept in open accounts. Since accounts of this size are very rare among savings deposits proper (they did not amount to more than 8 per cent of this type of time deposits with member banks in May, 1931), the aggregate of all time deposits in accounts with a balance of over $25,000 may be estimated at about 3½ billion $, equal to nearly 15 per cent of the total.

The size of the average demand deposit is unknown, although undoubtedly appreciably higher than the savings deposits' $500. Data given in 1920 by the Comptroller of the Currency,[2] as well as indirect calculations, would lead one to put it at about twice this amount. There is no doubt, moreover, that a very great part of total demand deposits are to be found in a small number of large accounts. The data for member banks permit the estimate that accounts with balances of over $25,000 contain nearly two-thirds of total demand deposits. It would appear, moreover, that this percentage

[1] See *Member Bank Reserves*, 1931, p. 14.
[2] See *Annual Report for* 1920, vol. i, p. 21.

has increased appreciably during the last decade, since an estimate made in 1920 by the Comptroller of the Currency[1] gives the proportion of accounts with balances exceeding $5,000 as nearly 60 per cent. Information obtained by a number of individual institutions have generally confirmed these deductions from global figures.

All these data lead us to the conclusion that a large and increasing part of total deposits and particularly of demand deposits of American banks is provided by a relatively small number of big depositors, mainly corporations. This tendency is just the opposite of the trend towards smaller loans, which will be encountered in an investigation of the structure of loans made by banks.

[1] *Ann. Report*, vol. i, p. 21.

CHAPTER III

COMMERCIAL CREDITS

WHILE the total volume of credit increased by nearly 50 per cent from 1921 to 1929, short-term loans to commerce and industry showed practically no growth whatever. They did so notwithstanding the fact that industrial production and business activity were rapidly increasing in nearly every branch during this period. This striking stagnation of commercial credits, which is not to be found in preceding American business cycles nor paralleled by contemporaneous experience abroad, may be said to constitute the cardinal point in American banking developments before the present crisis.

It is the more unfortunate in view of the importance of correctly understanding these developments that banking statistics are rather unsatisfactory on this point. All that we have is the series headlined " All other loans and discounts ", which contains the mass of those loans which are not classified as secured by real estate or by securities, as well as all sorts of paper discounted to customers or bought in the open market. The loans covered by this heading are therefore of a very varied character, and an attempt at breaking down the total into the more important component parts is an imperative condition of understanding what has happened.

Short-term loans of banks to agriculture, the first major component, are to a great extent an heritage from the agricultural boom years during the war. Between 1914 and 1920 these loans are estimated to have shot up from 1½ to not less than 4 billion $, thus overtaking even the rapid expansion of the total volume of credit. Moreover, banks had invested at the same time about 1½ billion in farm mortgages (about which something will be said in the following chapter), so that their direct agricultural commitments amounted to nearly 5½ billion, equal to about one-eighth of their total assets.[1] Agricultural commitments were, however, distributed in a most unequal way between the different groups of the banking community. National Banks in reserve cities had granted not more than one-sixth of the total bank credit extended to agriculture, investing therein on the average only 5 per cent of their loans.[2] In the rest of the country, that is in smaller towns and in rural areas, loans to agriculture formed on the average not less than about 25 per cent of total loans. For banks in the agricultural belt as well as for state banks the proportion may typically have run as high as 50 per cent; even in large cities, like Omaha, Kansas City, and Denver, about half of total loans were reported as agricultural.

Since 1920, however, bank loans to agriculture have been subjected to a constant shrinking process,

[1] See Table 7.

[2] See *Annual Report of the Comptroller of the Currency*, 1921, vol. i, pp. 36 to 38.

bringing the total (excluding farm mortgages) down from 4 billion to 3 billion by 1923 and to 2 billion by 1930.[1] As most other types of bank loans increased rather rapidly during this period, the decline of the relation which loans to agriculture bear to total loans has been more spectacular still, standing at about 13 per cent in 1920, but at not more than 5 per cent ten years later. Likewise the bankers' share in financing agriculture has declined rapidly during this decade.[2] A small part of this 2 billion decrease in short-term loans to agriculture (including farm mortgages the decrease is about 2½ billion) may be attributed to the process of writing off bad loans in the books of the banks, either by the management or by the receiver. The bulk, however, has undoubtedly been paid off by the farmer-debtors using for this purpose what net farm income there was and, to a greater extent, the proceeds of new long-term loans contracted with the newly organized land banks or with insurance companies; mortgage loans of Federal and Joint Stock Land Banks increased from 400 million $ in 1920 to nearly 1,800 million in 1930; farm mortgages held by insurance companies stood at 1,100 million $ and 1,900 million $ respectively,[3] while mortgages from all other sources remained practically stationary at about 5 billion $.

[1] See Table 8.

[2] In 1932 bank loans represented about 13 per cent of farmers' total indebtedness, while bank mortgages contributed another 7 per cent (see *Yearbook of Agriculture*, 1932, p. 502).

[3] *Proceedings of the Ann. Convention of Life Assurance Presidents*, 1925, p. 33; and 1930, p. 102.

These figures, incomplete as they may be, indicate at least clearly enough that the direct connection between the American banking system as a whole and American agriculture has become much looser during the last decade and that, consequently, the importance of the farmer as a pillar in the foundation of the banking structure has decreased considerably. There is, however, still a very strong link between the agricultural situation and the well-being of the banking system all over the West and South, forged not so much out of bank loans to farmers as out of their credits to merchants, storekeepers, and small businesses, which are more or less dependent on agricultural income. This link is strong enough to transmit an agricultural depression to the banking system in the form of increased bank failures in agricultural areas. It is, however, not in a position to endanger the American banking system as a whole. An agricultural crisis—if not simply a part of a general depression—cannot any longer produce a major disturbance in the nation's banking system as it might have done up to 1914. In this respect the American banking system is now very similar to that of the leading countries in Europe, even if the importance of agriculture as a borrower is still somewhat greater than in Central Europe or in Great Britain.[1] Developments during the present crisis, providing new credit facilities for the farmer

[1] Credits to agriculture and fishing were given as 7 per cent of total loans for London clearing and Scotch banks in 1929 (see *Macmillan Report*, p. 298), while the average ratio would move around 10 per cent—in 1920 still 20 per cent—in the United States. Distribution of agricultural credits is, however, probably much more even in Great Britain than in U.S.A.

and creating an opportunity of shifting a part of the agricultural loans of the commercial banking system to the enlarged Federal Land Banks, will probably go far in emphasizing and strengthening this tendency of leaving the task of financing the farmer to other agencies, which are better fitted for this function.

Returning to the movements of " All other loans and discounts ", after having tentatively eliminated loans to agriculture (compare Table 8), we find a decrease from 15½ to 12½ billion between 1920 and 1922, reflecting the post-war depression, followed by a slow increase leading to a peak of nearly 16 billion in 1929, and interrupted by small declines in 1924 and 1927, both years in which a mild recession in business activity took place. The present crisis then caused an unprecedented shrinkage, reducing commercial loans to about 8 billion $, or not much more than half the peak figure, by the end of 1932.[1]

Commercial loans have shown a close similarity to movements of the business cycle. They have, however, been conspicuous for the absence of the

[1] In order to include all short-term loans to industry and trade, that portion of loans on securities which, although secured by bonds and stocks, is in reality used by the borrowers in their business, ought to be added to the figures given here. The extent of this type of " sham security loans " is not known. A special inquiry conducted in 1930 with the help of thirty large banks gave the percentage of security loans, which, in fact, are to be regarded as commercial loans, as about 20 per cent (see *Operation of the National and Federal Reserve Systems*, p. 1012) ; for all banks combined the ratio is probably appreciably smaller. Using this estimate as a basis, commercial credits would have been larger by 1 to 2 billion $ than statistics indicate in 1930. Whether the relation between genuine and " sham " security loans has changed since 1920, and if so in which direction, is beyond even a guess.

strongly upward trend which characterizes nearly every similar series during the period under review.

Not much is known about the distribution of this total mass of commercial credits. The only statistical information dates as far back as 1920.[1] At that date nearly 25 per cent of all loans of National Banks (including loans on securities and loans on real estate, neither of which, however, were yet prominent, but excluding loans to agriculture) were granted to manufacturing industry and about 30 per cent to merchants, the greater part of the remaining 45 per cent being unclassified. Loans to industry held first place in the Eastern and Middle Atlantic cities, while mercantile loans dominated in the South, the Mississippi region, and on the Pacific coast.

It is possible, however, to establish at least one rather startling fact of great importance: Bank loans to large industrial enterprises do not at present form any appreciable part of total commercial loans. There is every evidence that this situation is to a great part a result of developments taking place after 1920. Five hundred and forty-four large corporations with total assets of over 17 billion $ were indebted to banks to not more than about 400 million $ in 1927.[2] The 729 large corporations investigated by Mr. Currie showed bank debts at practically the same figure and had been able to reduce their liabilities to banks between 1923 and 1928 by

[1] See *Annual Report of the Comptroller of the Currency*, 1920, vol. i, pp. 32, 36 to 38.

[2] See Table 9.

44 per cent,[1] while total commercial loans increased during the same period by about 10 per cent. On the basis of these data not more than 3 to 5 per cent of bankers' loans to industry and trade went directly to large corporations, controlling well over one-third of the total business wealth of the country.[2]

Now, of course, banks were lending to these large corporations in a number of roundabout ways. One of these is the holding of bankers' acceptances and commercial paper bought in the open market, financing, in fact, for a great part import, export, or merchandising operations of large concerns. Banks held about 900 million $ worth of bankers' acceptances and commercial paper in 1922, about 600 million in 1929, and somewhat over 600 million in 1932.[3] Even the assumption that the majority of these sums did finally reach the tills of large corporations would not increase their share in total commercial loans by more than 3 to 4 per cent, thus bringing their total share up to about 8 per cent in 1922 and something like 6 per cent in 1930.

Another form of roundabout credit to large corporations, and a much more important one, is to be found in the instalment paper held by banks. Instalment credit is to all intents a new development of the last fifteen years. The volume of instalment credit outstanding increased very rapidly during the first years after the war, fluctuated around 2½ billion $ in 1923–8, rose to more than 3½ billion

[1] See Table 9.

[2] See G. M. Means, *American Economic Review*, 1931, p. 20.

[3] See *Ann. Report of the Fed. Res. Board*; acceptance holdings for 1922 estimates.

in 1929, and had fallen back to the former level as early as 1930,[1] further decreasing to about 2 billion $ in 1931.[2] About one-half of the total volume of instalment credit is used in financing automobile sales, while the other half is claimed by radio apparatus, gramophones, electric household appliances, furniture, and jewellery. Banks are put into contact with financing instalment sales in two ways: they discount instalment paper (accepted by the purchaser or the retailer, made by the retailer or the wholesaler) to customers and they rediscount paper of similar character accepted or endorsed, or notes made by one of the institutions specializing in this type of business and very often affiliated with the manufacturer of the goods sold on the instalment plan. The notes of these institutions gained great popularity among banks, due to their liquid character, the security behind them, and the relatively high return they yielded, and have probably displaced a good deal of instalment paper discounted to dealer-customers in the last years of the boom. The General Motors Corporation, largest of this type, had not less than 400 million $ of instalment credits outstanding in 1929 (against 105 million $ in 1925), and sold its notes to nearly 5,000 banks all over the country. Instalment credit has withstood the shock of the present depression much better than most critics on both sides of the

[1] Estimates of Mr. M. V. Ayres (see *Journal of the American Bankers' Ass.*, 1930, pp. 784–5). The computations of Professor Seigman result in a total which is about 20 per cent lower (see *Economics of Instalment Selling*, vol. i, pp. 100–1).

[2] Neifeld, *The Personal Finance Business*, p. 57.

Atlantic had predicted. Losses on instalment sales went up to 3 per cent in 1931 and to 4·3 per cent in 1932,[1] but dealers and finance companies in general were able to take care of them, so that banks apparently have experienced no appreciable losses on their instalment paper holdings. This result may be due to the care taken in the selection of dealers and finance companies, whose papers the banks discounted, or to an extraordinary degree of fidelity with which the purchasers stuck to their contracts, facing the loss of all their instalments previously paid if they defaulted. Complicated agreements with all the safeguards in favour of the seller as well as very energetic methods of collecting instalments due are said, however, to have played their part, too. The greater part of all instalment paper outstanding is carried by banks; an estimate made in 1929 placed the proportion of automobile instalment sales financed by banks at three-quarters of the total.[2] It seems, therefore, a safe guess that commercial banks were on the average holding about 1½ billion $ of instalment paper between 1923 and 1930, equal to about 10 per cent of their total commercial loans.[3] This sum is to be added to credits extended to large industrial corporations, as the overwhelming part of the goods sold on the instalment plan is manufactured by the very giants of American industry, e.g. General Motors, Ford,

[1] See *Survey of Current Business*, 1933.

[2] Moulton, p. 415, quoting M. V. Ayres.

[3] Cf. M. V. Ayres, " in 1929 banks were loaning to finance companies in excess of one billion $ " (*Commercial and Financial Chronicle*, 1932, vol. i, p. 771).

Chrysler, General Electric, Westinghouse, Radio-Victor.

The credits extended to big business more or less directly are in this way finally increased to about 2½ to 3 billion $, or 15 per cent to 20 per cent of total commercial loans. This is a proportion which appears very small in comparison with the nearly 60 per cent of total loans German banks are loaning to large corporations,[1] and will probably not reach the ratio prevailing in British banks.

How have these large corporations been able to expand production rapidly while making less and less use of bank credit? They have been able to do so by decreasing, on the one hand, the amount of working capital per unit produced as a result of reducing inventory and speeding up turnover, and by financing, on the other, what demand for working capital remained, to an increasing extent out of surpluses reinvested or out of the flotation of common shares instead of selling senior securities or applying for a loan at a bank. The record of twenty-two leading industrial corporations may be taken as an indication of changes in methods of corporate finance. In 1918 these corporations had provided for 56 per cent of their total capital by issuing common shares, for 28 per cent by selling preferred shares or bonds, and for 16 per cent by incurring current debt (only part of which was contracted with banks); in 1930 the ratios had

[1] Loans of over $125,000; if the limit is taken at $25,000 the ratio rises to 80 per cent (v. *Westphal, Das reguläre Bankgeschäft der deutschen Kreditbanken*, p. 80).

changed to 20 per cent for senior securities, 7 per cent for current debt—a three-fifths decrease in twelve years—and not less than 73 per cent for common shares.[1] A development like this required a coincidence of a public mania for "equities" irrespective of their present yield and a series of excellent years in industry. The result was that large corporations making use of bank credit, except quite occasionally for very short periods of time, had become the exception rather than the rule. In fact, up to the present crisis, large businesses showing an item "due to banks" on their balance-sheet were, generally speaking, to be found in only a few lines of industry, e.g. coal mining, sugar refining, tin, copper, and paper[2]—as will be noticed, to a large extent industries which did not get their full share of the then prosperity—as well as among department stores, and, of course, wholesale merchandising firms and foreign traders. Things went so far that making use of bank credit—or even possessing a funded debt, for that matter—was looked upon as a distinct sign of weakness, not to be expected in a healthy business.[3] This "horror debendi" of American business is chiefly a heritage of the crisis in 1921. Business then learnt how quickly and easily fixed debts will lead to failure or force concerns to sell out to competitors when sales are falling off and prices tumbling down. It memorized this bitter lesson so thoroughly that not many firms

[1] See Hardy, *Credit Policies of the Federal Reserve System*, p. 270.
[2] See Currie, loc. cit., p. 700.
[3] Loc. cit., p. 705.

have been brought down in the present crisis by the burden of fixed debts piled up to dizzy heights (as e.g. in Germany)—excepting, of course, the building industry, which to its own detriment had not been caught in the 1921 depression owing to the home building shortage of the war years, as well as some public utility holding corporations which lost every connection with the realities of earnings and coupon payments in a maze of stocks and bonds reared to an ever-increasing number of storeys. This "horror debendi" is, furthermore, one, and not the least one, of the causes which have rendered every attempt to stop the present crisis by making credit cheap and easily available so completely abortive. It remains to be seen if a revival can be got under way so long as this attitude persists, and it may be doubted if American business will have an opportunity of financing the next period of expansion in the same way as it did the last.

But if big business—directly and indirectly—has not taken more than about 2½ to 3 billions out of 16 to 18 billion $ of commercial loans, and if agriculture has not received more than on the average 3 billion, where is it that the remainder, amounting to something like 12 billion $ in 1921 and again in 1930, has gone? One might think of small personal loans. It is, however, highly improbable that any appreciable amount has been invested in this way, notwithstanding the fact that an increasing number of commercial banks (notably the National City Bank in New York) have opened "Personal Loan Departments" in recent years.

Estimates place the total at not more than about 100 million $.[1] Consumers' loans in larger individual amounts, and therefore not within the scope of the personal loan department, may have some importance,[2] but cannot well account for any sizable sum in relation to total commercial loans. The field of consumers' loans is still dominated by Morris Plan Banks, Co-operatives, and Personal Finance Corporations (with aggregate assets of about half a billion $), pawnbrokers and unlicensed lenders (with assets of nearly equal size [3]), so far as loans of small amount are concerned, whereas the favourite form of consumers' loans of somewhat larger size is the policy loan, granted by the company which has written the insurance (total policy loans were estimated at somewhat over 2 billion $ at the end of 1929, but at no less than 4 billion $ in August, 1932 [4]).

The great bulk of the nearly 12 billion $ of commercial loans, which we have not been able to allocate hitherto, must have gone to small or medium-sized firms in industry, wholesaling, retailing, and in the service trades, and, to a much smaller degree, to professional men.[5] This conclusion is not so striking

[1] See Ryan, *Journal of Business of the University of Chicago*, 1931, p. 404.

[2] The report of the National Economic Conference Board places much emphasis—too much, it would appear—on this point (see p. 80); they matter, of course, much more during the present crisis than they did in prosperous times. Neifeld (*The Personal Finance Business*, p. 57) estimates the total of loans of this type at 600 million $ in 1930 and 1,000 million $ in 1931—obviously not more than a rough guess.

[3] See Ryan, loc. cit., and Neifeld, pp. 57–8.

[4] See *Commercial and Financial Chronicle*, 1933, vol. i, p. 348.

[5] In 1920 2·7 per cent of total loans of National Banks were classified as granted to professional men (*Ann. Rep. Comptroller*, 1920, i, p. 32).

as it may appear at first sight. Businesses with an annual value of production of less than 1 million $ are still responsible for about one-third of the total industrial output of the United States, a proportion which is undoubtedly very appreciably exceeded in merchandizing and in the service trades. These smaller-sized businesses have not been able to reinvest as large a part of their net earnings as large corporations could—it being much more disagreeable to starve an owner-operator and his family than shareholders—they have not been in a position to float securities, thereby paying off their short-term indebtedness and accumulating huge liquid funds for a rainy day, and they have, generally speaking, succeeded only to a much smaller extent in accelerating turnover and cutting down inventory. They have, therefore, been forced to continue seeking bank loans in appreciable amounts above their normal trade credit. The figures seem to show that they did so in 1930 in about the same amount as a decade ago, which, taking into account the expansion of their business, would indicate that they, too, have become somewhat less dependent on bank credit.

The statement that the greater and increasing part of total commercial loans—approximately three-fifths in 1920, three-quarters in 1930—has gone to small or medium-sized businesses need not, however, rest completely on the statistical computation just presented. Interviews with bank officials and what little internal statistics there are have corroborated them to a large extent. The vanishing of large

commercial debtors is a phenomenon realized and discussed in the banking circles of nearly every large city, notably in the regions in which the typical boom industries (i.e. automobiles, steel, machinery, electrical power and apparatus) are located, that is roughly the pentagon with the corners at Chicago, Detroit, Buffalo, Pittsburgh, and Dayton. It will be noticed that it is exactly this region in which the growth of real estate loans has been more pronounced and in which the most severe banking failures have occurred since 1931.

This predominance of loans of smaller size, necessitating as it does a very great amount of routine work, has left a visible imprint on the methods of handling bank credits and on the organization of separate credit departments, which may be regarded as being more or less a post-war development in American banking. Among the more important effects of this development, a certain standardization of credit policy, involving the use of a small number of ratios and making the presentation of balance-sheets as well as regular reports as to earnings and sales a matter-of-course feature for every borrower except a very few large concerns, may be mentioned. Another effect is visible in the readiness with which American banks will communicate with each other about credits extended to individual borrowers; in some places an organization affiliated with the clearing house will even regularly collect data from all banks in the city about lines of credit granted, so that the total extended to any firm can easily be verified. The

situation in which the banking creditors of a firm come to know each other for the first time when the receiver calls a creditors' meeting is therefore not as common in the United States as it is in many parts of Europe. The existence of a great number of small or medium-sized debtors has, moreover, the consequence that banks do not guard every one of them jealously and are quite willing, or even eager, to see the borrower carry accounts with one or two more banks in the community or probably in some financial centre. This attitude is being reinforced by the habit, not always adhered to, of course, of having the customer pay off his indebtedness at least once a year, a performance which in many cases is only possible by the borrower shifting his overdraft from time to time between the several banks with which he is doing business.

The diminishing importance of bank credit has also been reflected in the relations between commercial banking and industry. The influence exercised by commercial banks over mercantile or industrial concerns has, as a rule, been rather small at all times, differing very much from conditions in Central Europe. It has further diminished during the last decade. This statement seems to be in contradiction with the well-known and still more talked-of influence of "Wall Street" over industry. So far as such an influence is wielded, it is, however, in the hands of investment bankers, whose position has been strengthened in the decade past by the increasing importance which the floatation of securities acquired in industrial financing. Commercial banks

have been able to compensate partly for their diminishing influence as commercial lenders by a development of their investment activities, and some banks have undoubtedly succeeded in more than compensating gain and loss of influence. Detailed studies, completely lacking hitherto, will be necessary before much more can be said on this subject.

CHAPTER IV

REAL ESTATE LOANS

FROM 1921 to 1929 total earning assets of American banks increased from 41 to 59 billion $, while commercial credits remained practically stationary. The total addition of 18 billion $ had, therefore, to find other outlets. It is the way in which this additional fund has been employed that, to a very great extent, determined the lines of development for American banking during the last decade and became responsible for its fate during the present crisis. Commercial banks used about one-fifth of their additional resources to expand real estate loans and one-third to increase their investments, while nearly one-half went into loans on securities. (Including Savings Banks, the ratios change to about one-third each for real estate loans, investments, and loans on securities.)

The growth of real estate loans is somewhat smaller in absolute figures than the increase in investments and is far surpassed by the expansion of loans on securities. Real estate loans, however, rank first if their relative growth since 1919 is considered (up to 1930 the growth was 160 per cent against 150 per cent in loans on securities and 45 per cent in investments) or if their importance for the present situation of American banking is taken into account. Moreover, the growth of real estate loans has been

confined to a few years, the increase since 1926 being small. This is true, too, with regard to real estate bonds held by banks, which to all intents are equivalent to loans, although the increase after 1926 may have been comparatively larger here.

The great majority of bank real estate loans is at present secured by urban real estate. Farm mortgages held by banks were estimated at about 1 billion $ in 1918.[1] They rose to nearly 1½ billion in 1920,[2] fluctuating around this level up to 1924. The shrinking process noticeable since that date had brought the total down to about 1 billion by 1928. Commercial banks in 1920 held nearly one-fifth of the total mortgage indebtedness of American agriculture, estimated at about 8 billion $; in 1928 their share had fallen to not much more than 10 per cent of the enlarged total of about 9½ billion. In 1920 real estate loans of commercial banks were still predominantly agricultural (urban mortgages being more or less confined to savings banks); a decade later commercial banks had not quite 1 billion $ left in farm mortgages, but more than 3½ billion invested in urban real estate loans. Over the greater part of the United States the proportion of farm mortgages is now negligible, amounting to not more than from 2 per cent to 5 per cent of total real estate loans; in the Southern states as well as in the St. Louis district the ratio, however, rises to over 25 per cent, reaching about 50 per cent in the Middle-Western and North-Western states.

[1] Estimates of the Department of Agriculture.
[2] See Table 7.

Excepting some rural areas, farm mortgages have, therefore, not troubled the banking system to any extent. Should the plan to refinance 2 billion of agricultural mortgages by means of, and in exchange for, government guaranteed bonds of the Federal Land Banks, which has been passed as a part of the emergency legislation in May, 1933, materialize to its full extent, an appreciable part of the farm real estate loans still held by the banks would disappear from their balance-sheets, probably never to return.

Commercial banks have come to invest nearly 4 billion $ in urban mortgages (savings banks are holding nearly another 7 billion), equal to about one-seventh of their total loans and one-tenth of their earning assets. Their connection with the urban real estate market and the building industry is thus much closer than in nearly any other country. This seems to be due largely to the specific organization of this market in the United States. Up to 1919 building and real estate activities had to look as sources of funds rather exclusively to builders' and contractors' capital, to loans from Building and Loan associations, savings banks and insurance companies, and to mortgages from individual lenders. The possibility of attracting funds by an issue of bonds or shares did not exist to any extent; the total amount of real estate obligation outstanding in 1919 has been estimated at not more than half a billion $.[1] Commercial banks would usually refuse to lend on security of this type. These old sources

[1] See Persons, *Quart. Journal of Economics*, 1930, p. 104.

of funds proved insufficient to finance the terrific expansion of building, which began after 1921,[1] doubling the volume of new construction in a few years, and keeping it at nearly that level until 1929. The old urban mortgage lenders, it is true, increased their loans by no small amounts: the savings banks expanded theirs from 3 billion $ in 1920 to over 6 billion $ ten years later, the Building and Loan associations from 2 to 8 billion, the insurance companies from 1 to 5 billion $. There remained however, a gap to be filled by sources untapped hitherto. And filled it was, in the first place, by real estate bonds, an instrument novel to the United States, issued by rather small local corporations with the intermediary of an investment banking house—usually a smaller and younger member of the fraternity—for the purpose of financing an individual building project and secured by a mortgage thereon. American real estate bonds thus differ radically from the mortgage obligations familiar to European investors, which are generally issued by large mortgage banks and secured by all the real estate loans, usually large in number and small in average size, which the bank has made. It is not known exactly how many real estate bonds were floated during the great American boom; the estimates range between 4 and 12 billion $,[2] a figure near

[1] See Table 9.

[2] e.g. see Boysen (*Investment Banking*, June, 1931, p. 9), putting the total at 8 to 12 billion; Pope (*Commercial and Financial Chronicle*, 1932, vol. ii, p. 3280), whose estimate is 6 billion; and Persons (loc. cit.), who would not go materially beyond 4 billion; total issues during the years 1919 to 1930 are given as 4·8 billion $ by Nelson, Hunt & Co. (see Dana, *Prosperity Problems*, p. 413).

6 billion being the most probable. The second new source of funds was found in the commercial banking system. A third source, more subsidiary in character, however, was provided by mortgage guarantee companies, operating rather exclusively in New York State and having up to 1932 guaranteed about 3 billion $ of mortgages, the funds coming for the greater part from private lenders. In 1929 the 4 billion $ which the commercial banks had lent on urban real estate represented over 10 per cent of the total 37 billion of urban mortgages outstanding in the United States,[1] while savings banks had provided another full 15 per cent.

The demand for mortgage funds unsatisfied by the former lenders has been the main force attracting commercial banks into this field. The existence of surplus funds which could not be profitably used in short-term loans to trade and industry enabled the banks to respond to this demand. The high rate of interest obtainable on urban real estate loans provided the incentive to use surplus funds in this way; insurance companies, which used to be rather careful in their lending, obtained an average yield on their mortgage loans of 6 per cent during 1919 to 1928,[2] commercial banks, whose loans as a rule do not run longer than three years, charging somewhat higher rates. A yield of 6 to 8 per cent, however, was unobtainable for any length of time on open market loans or on an investment in American bonds (averaging about 5

[1] Estimate of Mr. Warren (see *H.R.* 11499, p. 61).
[2] See Mertzke, *National Real Estate Journal*, Sept., 1929, p. 68.

per cent) or even up to 1928 on loans on securities. Moreover, the rapid growth of time deposits provided commercial banks with a plausible excuse for investing large funds in urban mortgages, the 7 billion increase in time deposits more than compensating the expansion of urban real estate loans by nearly 4 billion $. Finally, changes in legislation, notably the McFadden Act of 1927, seemed to give official sanction to this sort of loan policy, as it permitted banks to invest up to 50 per cent of their time deposits in real estate loans.

The years 1922 to 1926, during which most urban mortgage loans of banks were first made, form a period of unequalled activity in the American real estate market. When it ended, urban real estate values, which had not risen appreciably up to 1921, stood at about double the pre-war level [1]—a striking contrast to the development of farm-land prices, which averaged 170 per cent of their 1913-value in 1920, but not more than 124 per cent in 1926.[2] Building was expensive all over this period. The index of building costs proper remained nearly stationary after 1923 at near 200 per cent of 1913, while total expenses of real estate development, including cost of land and expenses accompanying financing operations, had probably risen still more. The reasons for these developments are various. Building wages increased by 120 per cent to 190 per cent [3] owing to keen demand and the unions'

[1] See Boysen, loc. cit.

[2] U.S. Dept. of Agriculture, Circular No. 150, p. 11.

[3] *Statistical Abstract*, 1930, pp. 348–9.

rigorously enforced policy of the closed shop; prices of building materials rose by about 80 per cent, i.e. double the rise in the general level of wholesale prices; an elaborate system of commissions, sub-commissions, and gratuities to contractors, builders, foremen, architects, supply agents, appraisers, brokers, and financial middlemen added sensibly to the ultimate costs of any project; financing by real estate bonds put the costs up by another 5 per cent to 10 per cent (sometimes even 15 per cent), which went to the investment bankers wholesaling and retailing the securities. It is no wonder that, under conditions like these, home buyers and tenants had to pay very high prices for what they got and that land and buildings were capitalized and lent upon on a basis which had not much to do with long run costs of reproduction or with average earnings.

Up to 1926 all went well, however, and the increasing supply of urban real estate was easily absorbed. The cessation of home building operations in the years of the war; the unshaken faith of the average American citizen in the law of ever increasing land values, which had made so many families rich; a clever and efficient publicity emphasizing the "home" idea and using the fact that real estate is indestructible as proving that it can not lose value; finally, the widespread increase in real income, are probably the most important facts explaining this development. As early as 1926, however, that is, in the midst of the general prosperity, some cracks in the shiny edifice of the

urban real estate situation became distinctly visible. Rents begin to decline in 1925, a sign that the demand for dwelling space is nearly saturated; so does residential building from 1926 on; real estate market activity slackens, beginning with 1925. For three more years the recession in residential building is, however, nearly compensated by increased activity in the field of apartment houses, hotels, and office buildings, financed to a large extent by the floatation of real estate bonds or by mortgage loans from insurance companies. The most splendid structures to be admired to-day in American cities, lavishly provided for with every technical device and financed in the most reckless and castle-in-Spain way, have been begun in these years, to be finished (or left more or less unfinished) in many cases exactly in the depths of the present crisis. The situation of the real estate market as a whole had become decidedly and noticeably[1] unstable as far back as 1927. In 1928 and 1929 some big developments, having extraordinarily shaky foundations, got into difficulties. The desperate state of affairs prevailing in the entire real estate market and the maze of unsound practices which had grown up in the years of prosperity did not become visible until the end of 1930, and for some parts of the market, notably smaller residential properties which had been somewhat less unsoundly financed, not for another year.

The sequence of events is well known. It begins with an increase in vacancies, a rise in uncollectable

[1] See Levy, "An Analysis of the present Real Estate Market," in *Annals of the Association of Real Estate Boards*, 1928, pp. 220–235.

rents and the necessity of granting rent reductions to tenants. With the whole calculations based as completely on the maintenance of the rent-level of a period of unusual prosperity as well as of an extremely low vacancy-percentage, and the total building costs defrayed so exclusively by fixed interest liabilities as has been the case with almost every one of the larger American real estate developments, even a relatively small decrease in rent-income will wipe out what net earnings there were, and will very soon make impossible the payment of fixed charges in full (besides interest at an actual rate of 7 to 10 per cent most buildings are burdened with relatively high amortization payments, often amounting to another 2 to 4 per cent). If, moreover, developments based on prosperity standards have to begin working in a depression, and if the shrinkage of consumers' income does not amount to a small fraction but to nearly 50 per cent, it is not astonishing to learn that at the end of 1932 the great majority of real estate obligations was in default,[1] interest arrears on urban mortgages were piling up at a rapid rate, no mortgage guarantee company was in a position to honour its signature,[2] and foreclosures had nearly quadrupled since 1926.[3]

[1] Cf. Boysen (loc. cit.) and the estimates given in the *Commercial and Financial Chronicle*, 1932, vol. i, pp. 1063 and 1123; 1932, ii, pp. 3293, and 1933, i, p. 936. When the Strauss organization—one of the large houses issuing real estate bonds—was wound up in the beginning of 1933, it appeared that out of 380 million $ bonds outstanding about 250 million $ were in default (see *Chronicle*, 1933, i, p. 1988).

[2] Cf. *Nation*, 1933, pp. 548–9.

[3] See results of a survey of the Federal Home Loan Bank Board (*Commercial and Financial Chronicle*, 1933, i, p. 2537). Cf. the data given by Dana, *Prosperity Problems*, pp. 79–83.

As a result of these developments urban real estate values have fallen heavily. The depreciation amounted to not less than about 25 per cent on the average as compared with the prices of 1929 as far back as late in 1931; in those parts of the country, which were chiefly favoured during the boom, and for those types of property where supply most markedly exceeds demand—i.e. hotels, large office buildings, apartment homes of the luxury type, and suburban subdivision terrains—the fall in values often reached 30 and 40 per cent. Since then prices have continued to decline, although it is impossible to guess by how much, as practically no market exists, larger buildings being more or less unsaleable.

Banks have been affected very seriously by these developments in the real estate field. It is not so much the arrears in interest and amortization payments which have endangered their position, as the inability of the borrowers to repay mortgages falling due, and the impossibility of refinancing mortgages held, or disposing of the property mortgaged by way of foreclosure at a price covering loans made on the basis of very optimistic—to say the least—appraisals in times of prosperity. The bulk of real estate loans has thus become frozen to all intents. Real estate loans have not shown any appreciable diminution (amounting to 10 per cent in member banks as between the end of 1929 and 1932, which is, however, fully accounted for by the loans of banks closed and therefore disappearing from the statistical records) during the entire crisis, whereas

commercial loans, as well as loans on securities, have decreased by nearly 50 per cent up to the middle of 1933. How large the losses which commercial banks will suffer on their urban real estate loans are or will be, depends, of course, a good deal on the future development of the market. It is, however, certain, that very appreciable sums—probably in the neighbourhood of one billion $—will have to be written off on these engagements in any case and have to a certain extent already been dealt with in this way: member banks of the Federal Reserve System showed a loss (so far as their published balance-sheets indicate)[1] on their loans of 195 million $ in 1930, 295 million $ in 1931, and still more in 1932, as against 130 million $ on the average 1923–9; it is a safe guess that the greater part of the additional losses occurred in the real estate loans department. Banks, on the whole, have however, not fared as badly as the owners of real estate bonds or some of the insurance companies, because they have loaned to not quite as high a percentage of so-called "actual" value and, which is much more important, because they have greatly favoured small and medium sized loans on houses, abstaining with exceptions, of course, from large mortgages on office buildings, hotels, and apartment houses.[2]

Even a more or less complete freezing of urban real estate loans and a loss of 10 to 20 per cent

[1] See Table 16.

[2] The average size of the 53,000 individual loans of the largest bank in Detroit, e.g., was not more than $2,900 (see *S.* 4115, p. 96).

on their face value would not unsettle a bank which had but a small part of the assets invested in this way. Thus in the Eastern states urban real estate loans are, as a rule, not very important, amounting on the average (in member banks) to not more than 6 per cent—in New York State but 4 per cent—of earning assets.[1] The situation in the South—with a ratio of 4 per cent—is similar. In the Mississippi region (excluding St. Louis) urban real estate loans are even nearly negligible. The intense connection between commercial banking and urban real estate financing is, in fact, confined to two parts of the United States, the Great Lakes industrial region (notably the cities of Detroit, Cleveland, Toledo, and Dayton; the outlying banks in Chicago) and California. Here the ratio of urban real estate loans will be as high as 25 per cent of earning assets for whole states, and climb up to about 40 per cent in individual cities or large banks, e.g. in Detroit, Cleveland, and Los Angeles. The reason—telling, however, only a part of the story—is that so far as the Lake region is concerned, specialized savings institutions are unknown, and commercial borrowers have disappeared to a large extent owing to the prosperity of the industries located in these parts. A bank with anything like such a proportion of mortgage loans among its assets, will, of course, be vitally affected by a breakdown of the urban real

[1] Data as for end of 1929. The percentages are higher if state banks and trust companies are included, but would probably not show a different picture for purposes of regional comparison.

estate market as it occurred in the United States, the more so if savings deposits prove not much less unstable than deposits in chequing accounts. Broadly speaking, difficulties—not failures which only announce those difficulties which could not be remedied one way or another—in American banks have been proportionate to the ratio of urban real estate commitments to their total assets. Practically none of the large banks which had a ratio of over one-third has survived the crisis—the last proof for this rule of thumb being provided by the big Detroit and Cleveland institutions.

Real estate loans have formed the weakest link in the American banking structure and it has been clear for some time that the banking system of the Union is not any more in a position to weather the storm of a breakdown of the urban real estate market. The activities of the Government have therefore been directed towards a defreezing of urban real estate loans since the time when the National Credit Corporation was constituted. It was one of the major aims of the Reconstruction Finance Corporation to advance money to banks which were overburdened with urban mortgages they could not liquidate. The Federal Home Loan Banks were actually created for the express purpose of refinancing mortgages on residential properties held by institutional lenders; owing to various circumstances not much use could be made of their facilities, their loans up to February, 1933, not aggregating more than 27 million \$.[1] Finally,

[1] See *Commercial and Financial Chronicle*, 1933, vol. i, p. 2164.

in May, 1933, the Government initiated a scheme of refinancing not less than up to 2 billion $ of home mortgages—out of an estimated total of about 9 billion $[1]—in the hands of institutional lenders, intending to exchange them, after adjustment to a "sound" basis of value, for 4 per cent bonds of the Federal Home Loan Board guaranteed by the Treasury. If this plan were carried through in its entirety it might relieve the commercial banks of an appreciable part of their urban real estate loans, giving them instead securities having some saleability (and even being eligible for a restricted period as collateral for promissory notes to be discounted with the Federal Reserve Banks), and offering undoubtedly more safety. A thorough and lasting improvement of the banking situation will, however, require definite restrictions on future real estate activities of commercial banks. A repetition of the experiences of the last decade is surely not wanted.

[1] Loc. cit., p. 2530.

CHAPTER V

LOANS ON SECURITIES

THE rapid growth of security loans during the last decade represents a very important and certainly the most discussed trend in American post-war banking history. It is not, however, as the comparative concentration of banking students' interest on the subject might suggest, the cardinal point in the story.

Commercial banks' loans on securities began to increase rapidly as far back as 1922 (cf. Table 11). Starting from less than 6 billion $ they advanced by leaps and bounds reaching a peak of 13 billion in the fall of 1929.[1] Their share in total loans and

[1] These figures do not include the type of security loans known in Europe as report credit, which arises out of the term settlement method, and consequently is not possible in the United States, the stock exchange dealing exclusively on a cash basis. Their place is taken by the "Repurchase agreements" representing a simultaneous purchase and sale of the same securities with a difference in prices and in time of delivery and payment. Securities bought on repurchase agreements are entered in the balance-sheet under "Investments", although they really do not differ from a loan on the securities in question. An inquiry revealed that in 1930 at most one-sixth of total investments of New York City banks was held under repurchase agreements (half of the amount being United States securities), while interior banks did not use this form of credit to any appreciable extent. The total amount of securities loaned under repurchase agreements may, therefore, be roughly estimated at not over half a billion $ in 1930 (cf. *S.R.* 71, pp. 1047–8). On the other hand, those loans which are secured by bonds or stocks and not used to buy securities, but employed in the borrowers' business, ought to be deducted from the total given in the statistics; their size is unknown, but it may be assumed that the deduction would not amount to more than 10 per cent of customers' loans on securities (cf. p. 59).

discounts increased from 24 to 38 per cent during the same period. As is the case with commercial credits, but contrary to the behaviour of real estate loans, the movements of security loans reflect the ups and downs of the business cycle with some accuracy. They decrease by about 10 per cent during the depression of 1920–1, grow rather constantly while the long period of prosperity lasts, the expansion being greatest in the years 1924–5 and 1927–8, which mark a revival after short setbacks in business activity, and drop sharply since the middle of 1930, losing more than half of their peak volume in two and a half years.

Up to 1925 the total sums lent on securities in the United States are nearly identical with security loans of commercial banks, moving on an average level not more than about 10 per cent higher. From that date on, however, the high rates prevailing in the call-money market begin to attract outside funds—originating for the greater part with large industrial corporations, and (in 1928–9) with investment trusts[1]—in ever increasing volume, these funds shooting up from less than 1 billion $ in 1926 to about 4½ billion in 1929. Outside funds thus equalled more than one-third of total bank loans on securities in 1929, while they had formed not quite 10 per cent only a few years ago. They disappeared still more rapidly, after the stock exchange crash, than they had come, falling to under

[1] Cf. the estimate that investment trusts had about 750 million $ outstanding in call loans in October, 1929 (Beckhart, *The New York Money Market*, vol. iii, p. 184).

half a billion $ in the middle of 1932 and completely vanishing the following year.

Total bank loans on securities are the result of a summation of two component series rather widely different in size, in movement, and in variability: brokers' loans and security loans to customers. In 1921 nearly 5 out of a total of 6 billion $ represented loans to customers. During the next eight years brokers' loans shot up from 1 to nearly 9 billion $ (including loans to brokers by out-of-town banks and others), while banks' security loans to customers did not show more than the comparatively small increase from 5 to not quite 9 billion $, though still appreciably outpacing the expansion of the total volume of credit. The result was that at the peak of the stock exchange boom total borrowing on securities in the United States was approximately evenly divided between stock brokers (who, of course, were simply acting on account of their own clients) and individual customers of commercial banks. During the three years which followed, brokers' loans nearly evaporated, falling to about half a billion $ in 1932. Customers' borrowings on securities, on the other hand, actually increased in 1930 and were not declining in a marked way up to the end of 1931. Even one year later security loans to customers still stood at over 70 per cent of their mid-1929 level, while commercial loans had declined nearly 50 per cent by that time. There have thus been rapid and far reaching changes in the methods of financing the public's purchases of securities. During

the boom the broker, being the spiritual adviser of his client, who changed rapidly from one speculative commitment to the other, and the executor of large-scale pool operations, was also the most convenient agent for procuring the necessary money. While the depression lasted, however, holders of securities turned to their banks to help them carry through their commitments, to a great part entered into during the boom, since the broker was unable to secure the funds and to wait until the customer could pay off his loan or at least reduce it to the point where it became fully collateralled again, such a process often involving the elaboration of an instalment repayment plan covering several years. From the banks' point of view these changes take a somewhat different aspect. In times of rising security values and active markets it was sufficient to have a margin clerk see to it that the book value of the securities pledged kept its proper margin over the amount of the loan, and any amount could be loaned to a broker provided he produced enough securities to comply with these requirements. When exchange quotations tumbled down and large blocks of bonds or shares were practically unsaleable, such a procedure was not sufficient and the willingness and ability of the ultimate borrower to repay his loan out of resources other than the proceeds of a sale of the securities pledged, became essential; the broker, therefore, ceased to be an appropriate intermediary for security loans.

Loans to brokers and security dealers are, of

course, concentrated in a very marked degree in New York. Usually about three-quarters of all brokers' loans in the United States (in 1929 even as much as seven-eighths), go to firms located in New York City; the rest is confined more or less to brokers in Chicago, Boston, and San Francisco. Customers' loans on securities, on the other hand, are fairly evenly distributed among the urban districts in the United States. It is only in the agricultural Middle West and South as well as in California that the ratio of loans on securities to total loans stands at a level appreciably lower than the average for the entire country—amounting in 1930 to roughly 10 to 15 per cent, as against a national average of about 25 per cent.

Brokers' loans have proved their liquidity beyond expectation in the present crisis. They have proved their safety too, even if not as completely. Several banks have suffered quite appreciable losses when some brokerage houses—notably the large firm of Pynchon & Co.—failed, but these losses do not aggregate a total which matters, when the banking situation as a whole is considered, or one which could be compared in any way with the losses suffered on real estate loans, on commercial loans, or on investments. The speedy and easy liquidation of brokers' loans has, of course, to a certain extent, only been made possible by the banks' taking over part of the public's commitments previously financed via brokers. There is no doubt that very appreciable losses have been or will have to be taken on some of these loans, as well as on loans on

securities which had been financed by the banks from their very beginning. This is particularly true of some large-size loans granted to holding companies on the security of bonds and stocks in their portfolio; the loans of Chicago banks to some of the Insull companies and the loans of Cleveland banks to the Eaton (steel) and Van Sweringen (railroad) interests are examples to the point. But apart from this type of credits, and apart from the loans on securities granted to the banks' own higher officials (quite astonishing details about these came to the knowledge of the public when the affairs of several large banks were investigated in the spring of 1933), losses seem to have been on a comparatively moderate scale. With very few exceptions no bank got into difficulties on account of losses on security loans proper. Thus, from the purely bankers' point of view, security loans have passed the test of the crisis in a generally quite satisfactory manner.

It may be doubted if the same could be said from the economist's viewpoint. Of course, the popular criticism, that loans on securities starved industry, trade, and agriculture of the credit they needed and deserved, has no sound basis at all. This much ought to be beyond discussion, that who really gets the proceeds of loans on securities is not the borrower (be it a broker or an individual customer) but he who sells the securities loaned on, since the absorption of funds necessary for financing the increase in stock exchange turnover is very small.[1]

[1] A very extended literature has sprung up on this point as well as on the questions discussed in the following pages. The contributions which

The seller is then in a position to use the proceeds either to increase his bank balance temporarily or permanently (repayment of indebtedness having the same effect), or to spend them immediately on new investment or on consumption goods. If we want to know the ultimate recipients of the 12 billion $ (average 1925–1931) of security loans in the United States we have to inquire into the character of the bonds and stocks, which formed the basis of these loans. Unfortunately nearly nothing is known in a numerical way about this point. A special investigation conducted in 1931[1] showed that 4¾ billion $ worth of security loans of 30 large banks were secured as to 76 per cent by shares. It can be assumed, moreover, with some confidence that the great majority of the stocks pledged consisted of American industrial and public utility shares, while shares of investment trusts and real estate holding corporations did not amount to more than an inconspicuous fraction of the total.[2] How the 24 per cent of loans secured by bonds and debentures were divided between American and foreign securities is open to conjecture. Assuming that securities loaned on were distributed in approximately the same way in borrowers' portfolios as they are in the total turnover on the stock exchange or in the total amount of securities listed on the New York

have been mostly made use of are those of Machlup (*Börsenkredit, Industriekredit und Kapitalbildung*, 1931), Eitemann (*Journal of Political Economy*, 1932), Hardy (*Credit Policies of the Federal Reserve System*, chapter viii), Rogers (*Stock Speculation and the Money Market*, 1927), and Balogh (*Schmollers Jahrbuch*, 1929).

[1] See *S.R.* 71, p. 1014.

[2] See loc. cit., p. 1015.

Stock Exchange, one would be led to the conclusion that the great majority of total loans on securities in the United States represented sums which had been transferred, with the help of the banking system, to a small number of large industrial and public utility corporations. This transfer took the form of a very large number of individuals being enabled by a credit from their bank or their broker to buy a participation in these corporations or to subscribe to bonds and shares offered to the public or to shareholders as the case may be. It would be a fair guess to say that no more than 10 per cent of total security loans went to foreign governments or foreign corporations in the way just described. If this is correct it means that in reality the American banking system was loaning to large corporations not only the nearly 3 billion $ of direct and indirect commercial loans (as found in Chapter III), but about three to four times that amount. The share of big business in the loans made by commercial banks then advances to about one-third of the total, a relation which may not be very far from the European average, even if it still remains appreciably lower than in Germany, the only country of which we possess sufficient data to determine the ratio with some accuracy at about 60 per cent.[1]

In order to determine the economic effects of security loans, it would be necessary to know furthermore how the ultimate recipients used these funds. The balance-sheets of American corporations during the period under review shed a little light on this

[1] See *Der Bankkredit*, p. 162 ff.

question.[1] They show, that the proceeds of stock and bond floatations went for the greater part to swell the property accounts, i.e. that they were used to expand investments in fixed capital, while the increase of cash and investments is more or less clearly traceable to earnings reinvested in the business.[2] It can be argued, however, that failing the possibility of floating those securities, which in reality were financed by bank credit in the form of security loans, the expansion of plant and machinery would have been curtailed by but a part—possibly only a small one—of the proceeds, and that, consequently, the increase in cash[3] (or the decrease in current liabilities, notably bank overdraft, which amounts to the same thing) and investments, and/or the dividends paid to shareholders would have been smaller. So far as loans on securities have made additional dividend disbursements possible they may have, in fact, constituted consumers' credit —the extent to which they did depending on the share of the additional dividends reinvested. They certainly acted in this way in so far as they permitted speculators leaving the market to cheque out their net gain and spend it on consumption goods, although in this case again it was not the splashing speculator, but the man who bought the securities the speculator sold, who appeared as recipient of the credit in the bank books. Finally, in so far as speculators or investors leaving the market kept the proceeds of

[1] Cf. the attempts made in this direction by Professor Beckhart in *The New York Money Market*, vol. iii, pp. 175 ff.

[2] Beckhart, p. 179.

[3] For a part reappearing among security loans for others.

their sales immobilized in a deposit account, the only result would be an increase in reserves required, which, failing a compensating expansion of Federal Reserve credit, must result in a curtailment of loans to the same amount in some other place of the banking system.

The first effects of security loans from the economists' point of view are the financing of new investment (not feasible without outpacing the growth of savings in this way), and—to an appreciably smaller amount—of current consumption out of additional bank credit.[1] They do not stop here, however. The increase of the public's demand for loans on securities, incited by the profits expected on equities, necessarily brings about a rise in the interest rates on security loans (spreading more or less quickly and completely to the other types of short-term credit) as well as a decrease in the current yield of shares,[2] sharpest in those types of shares which stand in the centre of speculative favour. This means a general tendency towards over-investment, long-term capital available on the market at

[1] Loans to Veterans on the basis of their United States Certificates of Indebtedness are an example of another type of consumers' loans—rather unimportant in size—hidden among loans on securities.

[2] Money rates and share yields in the United States developed as follows (in per cent):—

	Call Money.	*Rates charged customers New York.*	*Yield.* 60 *Am. bonds.*	*Yield.* 90 *Common Shares.*
1926 .	4·50	4·66	4·60	4·94
1927 .	4·06	4·53	4·47	4·76
1928 .	6·04	5·15	4·49	4·00
1929 .	7·61	5·88	4·70	3·47
1930 .	2·94	4·69	4·52	4·51
1931 .	1·74	4·22	4·70	6·15

Source: *Survey of Current Business, Ann. Supplement,* 1932, pp. 77, 99, 105.

rates which were absurdly low in the later stages of the American boom at least, and specifically a still more marked over-investment in those branches of industry favoured on the stock exchange with more or less reason. This over-investment and this misapplication of capital are perhaps the most serious consequences of a large-scale increase in the volume of security loans. Hardly less important, however, is the encouragement which the easily forthcoming stream of loans on securities gives to the spirit of speculation, not only on the stock exchange but all over the economic structure. In the case of America, the speculative spirit, fostered by an all-round over-supply of credit concentrating on the field of stock exchange loans, became an epidemic and one so virulent that none of the usual anti-toxins could stop its course until it had driven stock exchange quotations and real estate values to dizzy heights, placed several billions of very questionable home and foreign securities, which could not pay interest except in an uninterrupted period of high prosperity and under continuous foreign lending, in the portfolios of individual and institutional investors, and had lulled an increasing number of people into the illusion of paper-riches and paper-profits resulting in spending habits inconsistent with their normal income as well as in the acceptance of future commitments in the form of instalment contracts signed or securities bought on margin on a scale equally inconsiderate. Thereafter any wind could blow the house of cards down. That it was a monetary stringency in Great Britain resulting in a

withdrawal of funds placed on the New York market which brought the initial gust, and that it blew in September of 1929, is just fortuitous.

This change from direct commercial credits to large-scale industry and trade to the roundabout way represented by security loans has been of prime importance for the commercial banking system, affecting its liquidity and internal stability as well as its position in the American economic system. It has increased its apparent liquidity, substituting a type of loans which may be quickly liquidated by an individual bank without losing too much customers' good-will, for the commercial loan, the fluctuations of which are more a matter of the borrower's decision than of the bank's policy. It has, however, for the banking system as a whole replaced a type of loan which, even if not speedily liquidable *en masse*, responded quickly and reliably to changes in trade activity by a block of credits, the proceeds of which have been sunk for the greatest part in permanent investments and can be reduced in the last analysis only by repayments out of the borrower's current income, meaning a sharp reduction in consumers' outlay and exercising a specially marked deflationary influence in business activity. It has, before all, made the individual bank as well as the banking system extremely sensitive to price movements on the stock exchange, in fact turning any serious setback on the exchange into a vital matter and making a banking policy which might lead to this effect, however appropriate or necessary it be deemed for other reasons, extremely difficult and

unlikely. Turning to the effects of the growth of security loans on the relations between banks and industry, it is clear that the change to indirect methods of commercial credit implied therein leads to a diminution of the commercial banks' influence on business. At the same time it enlarges the importance of the investment banker, whose financial connections and whose selling machinery make possible the floatation of the securities which permit the paying off of current debts and the accumulation of large cash balances. As a matter of fact the power of commercial banks over American industry has undoubtedly greatly lessened during the past decade, and this despite the fact that most of the larger commercial banks have been able to compensate a part of their receding influence as purveyors of short-term credit by their entering the investment banking field.

CHAPTER VI

INVESTMENTS

INVESTMENTS have always formed a comparatively large part of total assets of American banks. Including savings banks the ratio was about one-quarter in 1914; it rose to over one-third in 1919, fell back again to somewhat over one-quarter in 1929, and reached about two-fifths during the present crisis.

Investments have a dual function for the American bank. One part is destined to provide a liquid second line of defence, the other is kept primarily as an interest-earning asset. The place of investments as secondary reserve is taken, before all, by United States Government securities, particularly those of a short-term type. They have the advantage of being readily saleable in a large and stable market. They open, moreover, the way to the Federal Reserve Bank, in the form of collateral for the banks' own promissory notes.[1] Some other prime securities, particularly short-term obligations of states and municipalities are used as secondary reserves too. Yield is, however, normally a powerful determinant of the banks' policy regarding expansion and contraction of the gilt-edged portfolio. It is dominant in so far as other investments—consisting chiefly of American railroad and public utility

[1] As a matter of fact, the discount of collateralized promissory notes is the way in which an American bank, particularly a larger one, commonly makes use of the discount facilities of the Federal Reserve System.

bonds—are, concerned. The movements of Government security holdings are, therefore, mainly dependent on a comparison between their yield and the interest that can be earned on other types of assets, which are likewise easily marketable and convertible into Federal Reserve money, i.e. bankers' acceptances, commercial paper, call money, and balances with correspondent banks. The ups and downs of other investments, on the other hand, are determined by the difference between their yield and that of other earning assets in the proper sense—commercial loans, loans on securities and real estate loans. In times of a crisis, of course, comparisons like these lose their value, and safety becomes the only criterion.

Within the investment portfolio of commercial banks on the average not less than two-fifths of the room is occupied by United States Government securities. This very high ratio dates back to the war years and has been further increased to over 50 per cent during the present crisis. Before the war the banks did not own many United States Government securities above those the National Banks had to hold as cover for their notes issued, holdings not exceeding 1 billion $ and equalling one-fifth of total investments. Since a great part of the additional deposits received during the war years was invested in United States Government securities: they shot up to 5 billion $ in 1919, representing over 50 per cent of total investments. This war-time peak has not been reached again either in absolute height or in comparison with other investments

until twelve years later in the depths of the world depression. In the intervening period undulatory movements have been clearly noticeable (see Table 12): Investments were diminished from 1919 to 1921 and in the years 1928 to 1930; they were added to between 1921 and 1928 (particularly in 1922–3 and in 1926–7) and from 1930 on. It is the rule that the share of Government securities in the total portfolio increases when their yield comes near to the yield of other bonds and diminishes when the difference in yield between these two groups widens, the years 1931–3, however, being an exception to be explained by the "scramble for safety". The relation between Government security holdings, on the one hand, and open-market money rates and rates charged customers, on the other, is more striking still (cf. Table 13): When the difference between the yield of Government securities and open market rates is comparatively small (1924 to 1926; 1930 to 1932) holdings of Government securities increase; they decrease, on the other hand, when this difference is large (1920 to 1921; 1927 to 1929). There is, finally, a marked interdependence between changes in banks' holdings of Government securities and their price: Prices regularly go up in those years in which banks increase their holdings (1922, 1924, 1927 to 1928, 1930 to 1932), while they usually show a recession when banks sell Government securities (1923, and 1929, but not 1925).[1]

[1] All this is in full accord with deductive theory; cf. Fanno, "Die reine Theorie des Geldmarkts" (in *Beiträge zur Geldtheorie*, 1933), p. 40.

Commercial banks are a very important source of funds for the United States Treasury. They held about 15 per cent of the total debt outstanding in 1919, their share rising to about 20 per cent by 1925, 25 per cent by 1929, and about 35 per cent in 1932–3. Their share in short-term obligations of the United States alone is, of course, much higher.

The proportion which government securities bear to total investments varies considerably over the United States. When member banks had 47 per cent of their portfolio in government securities (end of 1931) on a national average, banks in the Dallas district had no less than 60 per cent, and banks in the New York district 57 per cent; on the other hand, the proportion was as low as 38 per cent in the Boston district or even 32 per cent in the Philadelphia and the Minneapolis districts. It is not easy to explain these differences.

While holdings of Government securities were subjected to several sets of undulatory movements without any definite expansion corresponding to the growth of the total volume of credit, other security holdings showed a definite upward trend up to 1930 (slightly interrupted only in the first half of 1920 and from the middle of 1928 to mid-1929), expanding from 5 billion $ in 1919 to 8½ billion in 1930. It is only in the present crisis that an appreciable decline in the total of other securities held—amounting for member banks of the Federal Reserve System to 1 billion $ (equal to 15 per cent) between the middle of 1931 and the end of 1932—has taken place.

The structure of the non-government portfolio is known in detail only for National banks, which hold, however, about half of the total investments of commercial banks (cf. Table 12). Bonds of states and municipalities account for about one-quarter of the total, while railroad bonds and public utility bonds and other American fixed interest securities amount to nearly 20 per cent each ; foreign bonds do not account for more than 10 per cent, stocks (excluding stock in Federal Reserve Banks) representing but 3 per cent of the total. There have been some significant changes since 1919, reflecting trends in American investment habits: State and municipal bonds have advanced from 18 per cent of the non-government portfolio to 23 per cent in 1931 and foreign non-government bonds from 3 to 5 per cent, while the share of railroad bonds declined from 22 to 16 per cent and foreign government securities fell from 11 to 5 per cent. These tendencies have been partly accentuated and partly reversed during the present depression, state and municipal securities further gaining in volume while the holdings of railroad, industrial, public utility, and notably foreign bonds showed sizable decreases, due as much to sales of part of the portfolio as to write-offs on the securities held. It is important to note that a very appreciable part of commercial banks' holdings is composed of securities which will mature during a few years ; many banks have practically no securities running for more than five years in their portfolio.

Investments now represent not less than about

two-fifths of total earning assets of commercial banks, a proportion appreciably higher than is to be found in other countries, the ratio being about 20 per cent with the British Big Five and as low as about 5 per cent with the German Big Three. This fact, coupled with the large extent of loans on securities, which they closely resemble from the economist's point of view,[1] necessarily makes the American banking system extremely sensitive to movements in security prices, since more than half of total earning assets is directly affected by them. Every per-cent by which the average of bond prices moves up and down means a profit or a loss, at least on paper, of about 3 per cent of total capital and surplus of American banks; a fall of the bond price level by 10 per cent would—for book-keeping purposes—wipe out the greater part of the total surplus of all banks. As a matter of fact, bond price movements have not quite these disastrous effects; a large part of total investments is in short-term securities and therefore not completely dependent on the movements of bond prices; furthermore, changes in the market value of investments are taken account of only in part in making up balance-sheets and profit-and-loss statements, the method of carrying investments at a constant cost price for longer periods being approved by most bank supervisory

[1] Investments constitute another form of long-term credits of commercial banks. While loans on securities serve, in fact, to increase the funds of industrial and public utility concerns, investments are really in their majority long-term loans to public bodies and to railroads. Investments, however, lack the majority of the consequences of loans on securities described on pp. 93 ff.

authorities. On the other hand, banks have heavily invested in some types of bonds which have depreciated far more than the average during the present crisis: foreign bonds, real estate securities, land bank bonds, and second-grade railroad bonds. Statistical information is available only as far as regards foreign bonds; member banks held about 700 million $, and the holdings of all banks may be estimated at about 1 billion $, a great part consisting of Canadian securities. Holdings of second-grade railroad bonds are probably small. Investments in real estate securities have some importance, but hardly exceed about half a billion $ at cost. There were, taking everything together, to be found in the portfolios of commercial banks about 1½ to 2 billion $ of securities which became seriously endangered and even completely frozen during the present crisis.[1] Even at the minimum quotations of the spring of 1932 losses on these holdings can not have amounted to more than about 1 billion $, equal to about 10 per cent of capital and surplus of all commercial banks. But holdings of depreciated and frozen securities were by no means evenly distributed among the banking system and their concentration in the portfolios of only one section of the banks was the fact that made them really dangerous. It has been common opinion that the worst type of foreign bonds and of real estate securities were to be found in the portfolios of rural banks and of banks in small cities. These

[1] See the estimate that the banks "have to be got ridden" of about 2 billion $ of their security holdings (*S.R.* 71, p. 552).

banks, having to cope with decreasing earnings in most fields of activity, were often guided exclusively by the yield apparently to be derived from a bond. Lacking experience in the investment field they were, moreover, an easy prey of security salesmen prompted by the lure of high commissions to spare no effort in disposing of their stock in trade irrespective of its quality. Statistical evidence of this unequal distribution of second and third-grade bonds is lacking, but it seems significant that member banks in large cities had only 4 per cent of foreign bonds among their investments at the end of 1930, while other member banks had 9 per cent, the ratio being highest in Vermont, Maine, New York, and Maryland, but decidedly below the national average in the Southern and Pacific states.

The depression of bond values, which started as far back as 1929 in the field of urban real estate bonds and reached foreign bonds and land bank bonds in the course of 1931, began to endanger the whole banking structure and notably the large city banks the moment first-grade bonds were affected in a most drastic way: From the middle of 1931 to the middle of 1932 railroad bonds lost nearly 36 per cent of their market value, public utility bonds 27 per cent, industrial bonds 22 per cent, foreign bonds 45 per cent, and even United States Government securities 10 per cent. This movement, signifying a depreciation of the total security portfolio by over 20 per cent, or about 4 billion $ for all banks in the United States, would have wiped out more than one-third of the total

capital and surplus of the banks if it had been allowed to appear to the full extent in the bank balance-sheets for 1932. As it is, the recovery of security prices from the panic levels has reduced the amount of depreciation very considerably. Moreover member banks of the Federal Reserve System have written off 264 million $ in 1931, and nearly double this sum in 1932 on their investments, and large blocks of questionable or frozen securities are at the present time in the hands of receivers, having thus ceased to endanger the banks still active. A return to more or less normal conditions in the bond market will further reduce losses. There is, however, no doubt that even giving full allowance to all these factors, very considerable amounts have still to be written off the investments of American banks, making heavy inroads on surplus necessary, and in not a few cases even on capital. It is only a few city banks which have so far begun with this process.

CHAPTER VII

THE RISE OF DEPARTMENT STORE BANKING

THE continuous process of adding one new field of activity after the other to the urban commercial banks' formerly completely dominant and nearly exclusive business of accepting deposits repayable on demand and granting short-term loans to trade and industry has been one of the most characteristic as well as the most important developments in American banking during the last decade. As a result of this process the average larger commercial bank in an American city will now accept savings deposits, act as trustee or executor, underwrite and distribute investment securities, grant mortgage loans on urban real estate, and transact foreign business of every description, besides continuing its activities in all fields of short-term commercial banking. Some indications of this trend go back as far as the beginning of this century. Some steps towards amalgamating kindred fields of activities have also been taken by other financial institutions. The difference in compass as well as in intensity is such, however, that the rise of department store banking can be treated as a movement peculiar to urban commercial banks and to the post-war years without unduly pressing the facts in any way.

Two aspects of this tendency towards functional integration, which closely parallels the movement towards local concentration to be treated in Chapters VIII and IX, have already been dealt with: the growth of the savings deposit, and the rise of the urban real estate loan. Savings deposits of member banks have doubled from a ratio of 20 per cent in 1915 to over 40 per cent in 1931. There is hardly any commercial bank in the United States left which does not carry savings accounts,[1] and separate savings departments had been installed in more than 60 per cent of National Banks as far back as 1928. Urban real estate loans of commercial banks, which were practically insignificant in 1921 at 1 billion $, shot up to nearly 4 billion, equal to one-tenth of their total earning assets in 1930. The granting of urban mortgage loans on a large scale by commercial banks has, however, been limited to a comparatively small section of the country (the Great Lakes region and California), and the limits between commercial banking and mortgage banking have been kept up to a certain degree, the banks usually limiting their loans to three years' duration and preferring mortgages on small and medium-sized houses. Only very few commercial banks have established more intimate contacts with mortgage credit institutions. The outstanding example is the affiliation of the New York Title and Mortgage Co. (an institution

[1] Forty per cent of National banks reported savings accounts in 1916, 70 per cent in 1921, and 84 per cent in 1928 (see Dailey, *Journal of Business of the Univ. of Chicago*, 1931, p. 61).

having guaranteed urban mortgages to an extent of over 700 million $ face value), with the Bank of Manhattan group, an association which, however, did not take place until 1930 and did not continue for more than two years.

Until the war, American commercial banking was nearly exclusively a domestic affair. The large New York, Boston, and San Francisco banks had correspondent relationships with foreign institutions, it is true; an appreciable part of American foreign trade (especially the export of agricultural staple products) was financed through London and, on the other hand, American banks were busy in Mexico and Central America. But on the whole these activities completely disappeared when compared with the mass of domestic financial transactions, and, before all, the outlook of the American banker remained domestic throughout. There has been a thorough change in nearly every one of these directions in the last fifteen years. Although direct financial relations with the world outside the 48 states are still more or less confined to a small number of commercial banks in the urban centres on the Atlantic and Pacific sea-board, the American commercial banking system can be said to be firmly linked to the international financial machinery. This could not be affirmed before, say, 1920.

The relations between American commercial banks and the outside world are carried on partly at the home office and partly abroad. The first type of activities centres around acceptance credits for international trade, cash credits to foreign borrowers,

and deposits held for foreign account. The second type is represented by the foundation of branches or of affiliate banks in foreign countries and by the acquisition of an interest in foreign commercial banks.

American banks could not enter the field of accepting foreign trade bills before the creation of the Federal Reserve System had provided the possibility of rediscounting such bills, and did not do so in earnest before 1917. The total volume of bankers' acceptances then went up to a first peak of about 1 billion $ in 1920, fell in company with the decrease of the volume of foreign trade to nearly half this amount, and rose again, with foreign trade expanding, to 750 million $ in the middle of 1927 (cf. Table 15). Up to this time bankers' acceptances were used almost exclusively to finance imports into, and exports from the United States; at the end of 1926, e.g., 72 per cent of all acceptances outstanding arose out of foreign trade transactions, not more than 15 per cent being drawn on the security of goods warehoused in the United States' or shipped between domestic points, and 13 per cent for various purposes.[1] Hence dollar acceptances were used in increasing volume to finance goods moving between foreign countries, or goods warehoused abroad, and—in no small degree—to provide working or fixed capital for foreign concerns, there being no special movement or storage of goods whatever to connect the acceptances with. Acceptances of this type increased from 40 million $ at the end of 1926 to 561 million $ four years later,

[1] See *S.R.* 71, p. 462.

constituting not less than 36 per cent of total bankers' acceptances and nearly equalling acceptances drawn in financing American foreign trade, which had been declining since the end of 1929, in correspondence to the shrinking process experienced in international trade. It is true that a very appreciable reduction of this type of acceptance has been possible—the total falling from 561 to 296 in the year 1931—but so much as remains outstanding at the present time (about 200 million $) must be regarded as more or less frozen. This increase in what in reality were, to a large extent, finance bills, has been due chiefly to the low rates on acceptance credits prevailing in New York in comparison with London, and to the more lenient and indulgent attitude taken by American banks in accordance with the practice of the Federal Reserve Banks towards the pretence of these bills to be trade acceptances, an attitude evidenced by their not insisting on having shipping documents attached.

The recipients of the proceeds of the bills which American commercial banks accepted can not be traced in detail. It would appear, however, that on the average, since 1927, about half of the total was drawn by American firms, while the rest bore the name of a foreign bank or business house as drawer. Among those, German concerns were prominent, their drafts amounting to over 40 per cent of the foreign-drawn total in recent years.[1]

[1] The total of acceptance credits granted to Germany are known from the Wiggin Report. They amounted to 350 million $ at the end of 1930

The American acceptance business is highly concentrated. Not more than about 100 banks cultivate it at all, and nearly 60 per cent of the total are accepted by the ten largest institutions. New York banks are responsible for about 75 per cent of total bankers' acceptances. The rest is represented nearly completely by the bills accepted by a few large banks in Boston (about 10 per cent of the total), Chicago (3 to 5 per cent), and San Francisco (3 to 4 per cent). Banks outside New York tried to get a larger share of the business in recent years, but their experience during the crisis being rather unfortunate, the concentration of bankers' acceptances in New York will probably become still more marked in the future.

The rise of the acceptance business of American commercial banks to a total of over 1½ billion $ at the end of 1929, thereby running up very closely to the century-old London Bankers' Bill, at least in volume,[1] would not have been possible, but for the existence of a special source of funds: the Federal Reserve Banks as buyers of acceptances for their own as well as for foreign account. The Reserve Banks' own holdings of bankers' acceptances averaged not more than about a quarter of a billion $,

and to 295 million in June, 1931, the corresponding figures for total acceptances to finance exports to the United States and goods moving or stored within foreign countries being 782 and 696 million $.

[1] The total of London bankers' acceptances on account of foreign customers was 203 million £, i.e. 985 million $ in June, 1929 (see *Macmillan Report*, p. 43), comparing with about 900 million $ of liabilities of foreigners to American banks on account of acceptances (see Table 14).

and up to 1931 did not change much except in response to seasonal variations in supply, increasing towards the end of the year, and reaching their lowest level in summer. The acceptance holdings of foreign banks, on the other hand, did not gain any prominence until 1926, shot up to 865 million $ at the end of 1929, fell back to about 250 million $ in 1931, and disappeared nearly completely during the following year. About two-thirds of total acceptances held by foreigners were bought by the intermediary and with the endorsement of the Federal Reserve Bank of New York, the rest being purchased by other banks or in the open market.

No detailed data as to the foreign holders of American bankers' acceptances are available, but it is generally believed that the great majority was held for the account of foreign central banks, among which the Banque de France (including the French Treasury) held a dominating place, the Central Banks of Switzerland, Netherlands, and Belgium probably holding most of what remained, but following only at a great distance. At the end of 1927, 40 per cent of American bankers' acceptances were held by foreigners; the ratio reached fully 50 per cent in 1929, diminished quickly in the following years, and became insignificant since the middle of 1932. Up to 1930 the amounts of acceptance credits granted by American banks to foreigners and of American bankers' acceptances held for foreign account were nearly equal and moved

in striking correlation.[1] In fact America did not lend any appreciable amount to the rest of the world. What it did was to lend the guarantee embodied in the endorsement of its big commercial banks and the Federal Reserve Bank of New York, receiving as consideration the difference between the rates charged foreign customers and the bid rate in the New York market. This whole set of transactions resulted, roughly, but on the whole correctly, speaking, in the central banks of Western Europe financing parts of the foreign and domestic trade of Germany and Latin America in a roundabout way, and in reality making possible a type of transactions they would never have thought of touching directly.

Such was the outcome of the policy of the Central Banks keeping large foreign exchange reserves, which came to be known rather incorrectly under the name of the "gold exchange standard". It broke down the moment international confidence in the ability and the willingness of the central banking authorities of the financial centres, which were the repositories of the foreign exchange reserves,

[1] The figures, taken from the official statistics of the American balance of payments (see Table 14), are as follows (million $) :—

End of	Liabilities of foreigners on acc. of acceptances	Foreign holdings of American bankers' acceptances	Undiscounted foreign drawn acceptances	Net lending by U.S.A.
1927	402	406	118	− 122
1928	509	565	99	− 155
1929	884	865	105	− 86
1930	879	702	90	+ 87
1931	449	298	20	+ 131
1932	366	113	8	+ 245

to honour their obligations in bullion, if needs be, became severely impaired. The New York market has been subjected to three waves of distrust and of a large-scale flight of foreign funds on this account, for the first time in the fall of 1931, for the second in the early summer of 1932, and for the last time in February and March, 1933. Acceptances held for foreign account fell by over 100 million $ in the first, and by nearly 200 million $ during the second wave, after they had been slowly reduced by nearly half a billion $ during 1930, mainly as a result of the Banque de France converting part of her foreign exchange funds into gold. It was only then that the United States in reality began to finance the foreign transactions represented by her bankers' acceptances. From the end of 1929 to the end of 1932 the American capital actually employed abroad in the way of acceptance credits to foreigners rose by 331 million $, although total acceptance credits to foreigners fell by over 500 million $ during the same time.[1]

That part of total acceptances which the Federal Reserve Banks did not absorb was held to a large extent by the small group of the accepting banks themselves, their share being especially large when money rates are low. Up to 1930 the ratio did not exceed 20 per cent to 30 per cent of bankers' acceptances outside the Federal Reserve Banks, or about 10 per cent of the total outstanding. The combined influence of an extremely liquid position of the large metropolitan banks and of the shrinkage

[1] See the figures given in the preceding note.

of foreign-held acceptances resulted in making the accepting institutions the chief buyers of their own paper. Since mid-1931 they have kept no less than 60 per cent of their total acceptances outstanding in their own portfolios (more than a quarter of this amount representing bills accepted and held by the same bank), a ratio which was departed from only during the temporary monetary stringency in the winter of 1931–2 and in the spring of 1933. It may be doubted if this extent of "inbreeding"—completely contrary to the situation in the London market, where nearly the total of bankers' acceptances is held by non-accepting institutions, but similar to conditions in Germany—is wholesome or likely to be permanent. Before 1929 the bankers' acceptance was just beginning to find its way into the portfolio of smaller banks all over the country,[1] notably at times when discount rates were high, thus providing these institutions with a much-needed liquid second line of defence. The fall of selling rates for acceptances to extremely low levels, and the heavy withdrawals to which outside banks have been subjected since the middle of 1931, have, however, checked this tendency for the time being.

Cash credits to foreigners have always been of minor importance only. They did not exceed about a quarter of a billion $[2]—i.e. about 1 per cent of total loans—and have shown little change during

[1] See testimony of Gov. Harrison, *SR.* 71, p. 101. Even in March, 1929, member banks outside New York did not hold more than 127 million $ of acceptances, equal to 10 per cent of the total outstanding.

[2] According to balance of payments statistics ; see Table 14.

recent years in striking contrast to the up and down of acceptance credits. They must be regarded as frozen to an appreciable extent. The geographical distribution is not known, but it may be estimated from scattered data that about one-quarter of the total has been lent to German firms.

Deposits with foreign banks are of equally small size, averaging about 200 million $ since 1927. They are probably not much larger than is necessary for current international transactions. This as well as the exchange restrictions imposed in many countries may explain why these deposits have not shown any appreciable reduction during the present depression.

The United States have had rather unfortunate experiences with their short-term foreign credits in the crisis of 1920–1, when they had suddenly jumped from nearly nothing to more than half a billion $ [1] as a consequence of the restriction of London bankers' activities during the war and the tremendous surpluses in America's balance of current international transactions. A great part of the credits granted in these years—current mercantile credits to Latin American and Far Eastern customers and agents, to a large extent—had to be written off. The losses on short-term bank credits to foreigners fell almost exclusively on a few institutions on the sea-board and sufficed to affect the stability of one of the larger New York institutions quite earnestly. The extent of the losses American banks will have to take this time

[1] See J. H. Williams, *Review of Economic Statistics*, 1922, p. 209.

cannot yet be determined. The greater part of the foreign credits still outstanding are, however, frozen for some time to come, this being the case with nearly all credits extended to Central Europe and to Latin America. It is highly improbable that a thawing of this block will ever be possible without substantial sacrifices. Borrowers' ability to pay and other financial and economic realities had, in many cases, been too completely lost sight of when the credits were granted to make a liquidation of these commitments without heavy losses feasible (at least so long as a severe depreciation of the dollar is avoided). These losses will again be falling nearly exclusively on a small group of banks, and a group which is still better fitted to take them than any other section of the American banking community would be. That the overwhelming majority of commercial banks is not directly affected by the plight of short-term foreign credits is not so much due to their deliberate abstention from entering this field—in fact, quite a number of banks in the larger interior centres, notably in those regions where American commercial borrowers were dwindling away, were willing to do so—but to the difficulties of getting into connection with foreign borrowers of good standing and to the rather jealous protection of this field by the dominating metropolitan banks. The bulk of frozen foreign credits and of losses thereon is thus confined to about a dozen of very large city banks. The relation of foreign credits to total assets is, however, not large enough—except in one or two special cases—

to endanger the situation of the lending banks in any way, when the time to earmark the amounts frozen and to take the losses comes.

The history of foreign deposits with American banks is quite different from that relating to foreign credits. They, too, were insignificant before the war. Their rise, however, was not due to the changes the war wrought in the ways of trade and finance all over the world, but chiefly to the depreciation of currency and the flight of capital following the war in the greater part of Europe. Thus foreign deposits (including holdings of acceptances, treasury bills, call loans, etc.) were standing at nearly 2 billion $ in 1927,[1] which may have been their peak, slowly declining to $1\frac{2}{3}$ billion one year later and to well under three-quarters of a billion at the end of 1932. Foreign deposits represented about 4 per cent of total net deposits of American banks in 1927, but not more than 2 per cent at the end of 1932. The ratio they bear to total deposits is, however, much higher in the typical cases, as their bulk is concentrated in a small number of large Eastern commercial banks, the rest being held by a few New York investment banking houses, above all the firm of J. P. Morgan and Co.[2] As far as can be ascertained from data

[1] See Table 14 giving figures of the balance of payments. Amounts due to foreign banks by member banks (including amounts due to own branches) stood at 746 million $ in 1927, 635 million $ at the end of 1930, 434 million $ one year later, and 296 million $ at the end of 1932.

[2] The total deposits of J. P. Morgan & Co (including Drexel & Co., of Philadelphia) were given as about 540 million $ in 1930 and 340 million $ at the end of 1932 (see *The Times*, 24.5.33, p. 16). It would appear, therefore, that foreign deposits could not well have amounted to much over 200 million $ in 1930 and 100 million $ at most in 1932.

relating to member banks of the Federal Reserve System, nearly 90 per cent of total foreign deposits were held in New York City. Even in New York City commercial banks' foreign deposits do not amount to more than about 10 per cent of the total in 1930. Up to 1930 foreign deposits were very welcome. They were not subject to violent movements and required but low rates of interest. In the following years they proved rather embarrassing, forcing the depositaries to fall back on the Federal Reserve Banks at times of massed withdrawals, but they were not really dangerous for the individual banks. What made them dangerous, from the point of view of the American currency authorities, was their concentration in the hands of a limited number of foreign creditors, the most prominent being some European central banks and the French Treasury. Central Banks had built up these dollar balances out of a great number of individual accounts purchased after the stabilization of currencies had made them unattractive to the repatriating individual holders. It was this concentration which led to a withdrawal of nearly 2 billion $ of foreign short-term funds (not quite half of this amount being in the form of bank deposits) in a few months in 1931 and 1932, and at times made the situation of the Federal Reserve Banks precarious, because of specific legal restrictions, without, however, being able to endanger, and much less to wreck, the American gold standard. At the present moment foreign deposits are again without appreciable

importance for the American banking system and do not exceed by any substantial margin the minimum necessary in the ordinary course of foreign business.

More chequered still than either the course of their activities as short-term lenders to foreigners or as depositaries for foreign funds have been the experiences which American banks met with when adventuring into the business of banking in foreign countries.[1] In 1913 there were but four American (or to be more specific, New York City) banks which had branches abroad, numbering not more than six altogether, located in London and Paris; moreover, one independent foreign banking corporation had just opened four branches in the Republic of Panama. During the war additional foreign branches of American commercial banks, as well as subsidiary companies and independent corporations doing banking business abroad, grew with such a mushroom-like speed that not less than 219 direct or indirect foreign branches[2] of American banks were in existence when the Treaty of Versailles was signed, 100 of them representing branches of but seven large American commercial banks, while eighty-one belonged to five foreign banking corporations (usually controlled by a group of New York investment and commercial banks), and thirty-eight formed the agency net of the American Express Co. Their favourite fields of

[1] See Phelps, *The Foreign Expansion of American Banks*, 1926.

[2] Including the thirty-eight branches of the American Express Co., which were to a large extent engaged in banking activities.

action were Central America, the Far East, and—to a lesser extent—South America. They reached, however, as far as Western Europe (the London and Paris branches being of the greatest importance), the Near East, and India. The semi-paralysation of European banks working in these countries during the war, as well as their more conservative methods and the frenzied state of trade in the years 1919 and 1920, had provided a wide and apparently open field to the newcomers from the United States. The depression of 1921, the restoration of more normal methods in financing foreign trade, and the reappearance of the British foreign and imperial banks quickly showed that a great part of the credits granted to native customers in the preceding years was frozen or lost and that there was much less scope for profitable current banking activity left in these countries than had been imagined. The result was that more than one-third of foreign branches was closed down or disposed of during the next few years, retrenchments and consolidations, moreover, being effected in a large part of the remaining offices. By 1926 foreign branches of American commercial banks had been reduced to 107, all of them directly or indirectly affiliated with eight large New York and Boston banks (the five independent foreign banking corporations having liquidated) while the American Express Co. had expanded the number of its branches to forty-seven. Since 1926 changes have been small.

American banking is still in a dominant position

in those regions, which either by law or in fact are dependencies of the United States, i.e. Cuba, Haiti, the greater part of Central America, and the Philippine Islands. Outside of this circle their influence is very limited. The few branches which American banks have in foreign centres like London, Paris, Buenos Aires, Mexico City, Shanghai, and Tokio are quite large and in some cases comparable to medium-sized native institutions, but they are more or less confined to dealings with American residents, American tourists, and business houses trading with the United States and have not much influence—nor do they aspire to any—on the banking and financial system of the country they work in.[1] American bank branches in these centres had importance so long as the dollar was the standard currency of international trade—i.e. up to about 1925—and they regained part of it when the New York stock exchange became the Mecca of speculators all over the world. The volume of their activities has consequently decreased rapidly since 1930 and received a very severe further setback from the time when the stability of the dollar was questioned and finally abandoned. In October of 1929 the deposits in foreign branches of four large New York banks, controlling about four-fifths of the total, stood at 755 million $[2]; they had fallen to 358 million $ at the end of 1931,

[1] Capital and deposits of American banks in the Argentine, e.g., did not exceed 3½ per cent of the total in 1925 (see *Revista de Economia Argentina*, 1926, p. 414).

[2] These sums are included in the estimates of total foreign deposits of American banks given some pages ahead.

and declined further to 329 million $ in February, 1933.[1]

Over one-half of the total foreign branches of all American banks are in the hand of the National City Bank of New York, with branches concentrated in Cuba and in South America, and its subsidiaries, the International Banking Corporation (Far East, Central America) and the Bank of Haiti. The other half is more or less divided between the Chase National Bank (which, having had practically no foreign branches of her own, took over those of the Equitable Trust Co., merged in 1930, and in the same year acquired, through the intermediary of the Chase Securities Corporation, the total share capital of the American Express Co.), the Guaranty Trust Company, the Bankers Trust Co. —all of New York—and the First National Bank of Boston. The foreign expansion of American commercial banks is confined, therefore, to not more than five institutions. Up to now it has not proved an unmixed advantage, the Central American branches in particular having led to very unfortunate and expensive commitments, economical as well as political. A further expansion is improbable for some years and it may even be doubted if the present net of branches can be profitably worked in all its parts. If some reorganization is carried through it will, however, affect only some outlying branches, the position of American banking in Central America and the Philippines being strong enough to withstand the present crisis, and so

[1] See *Berliner Börsen Zeitung*, 10.3.1933.

vital in the financial machinery of these countries that they could not well be dispensed with.

While the addition of foreign banking, in the widest sense of the word, to the list of commercial banks' activities is a development which touched but a small section of the American banking community in a direct and noticeable way, the growth of fiduciary activities has been widespread and general. This movement could already be observed before the war, National banks, who by law were not permitted to do fiduciary business in several cases resorting to the method, extensively used later on, of creating a subsidiary company to specialize in this type of activity; in 1911 no less than 300 affiliates of this sort were in existence, according to an estimate of the then Secretary of the Treasury.[1] The decisive growth of fiduciary activities of commercial banks is, however, a development of the twenties and of the few years following 1926 in particular. It has been greatly accelerated by the Federal Reserve Act, which opened up this field, hitherto closed, to National Banks (in part by the Act of 1913 and nearly in full by an amendment in 1918), and has resulted in effacing rather completely any differences which had existed between larger commercial banks and trust companies. In 1926 not more than 1,100 National Banks out of over 8,000 were engaged in fiduciary activities, their number increased to 1,600 in 1928 and to 1,900 two years later. The growth of this line of activity is better illustrated

[1] See Moulton, p. 704.

by reference to the increase in funds fiducially administered. Trust funds in National Banks (statistics for other banks are very fragmentary) amounted to only 0·9 billion $ in mid-1928, jumped to 3·3 billion in the fall of 1928, and continued to grow to 4½ billion in 1930.[1] Trust activities of all member banks of the Federal Reserve System increased by at least 50 per cent between 1927 and 1931, if it is permissible to use the earnings of their trust departments as an indicator.[2]

Although National Banks have made great strides in acquiring trust business, the greater part of fiduciary activities is still handled by the large and old-established trust companies (which, of course, now possess full commercial banking facilities). Some of these companies have trust funds aggregating over one billion $; the trust companies in the State of Pennsylvania alone reported about 4 billion of trust funds in 1930, nearly as much as all National Banks in the United States; one of the largest New York trust companies is believed to administer more than 2 billion $ of funds. If the estimate of Mr. Anderson[3] is correct, National Banks with 4½ billion $ did not control more than one-sixth of total individual trust funds, aggregating nearly 28 billion $, the remainder being divided in an unknown ratio between trust companies and State Banks on the one side, individual trustees and solicitors on the other.

[1] See the *Annual Reports of the Comptroller of the Currency.*

[2] See Table 16.

[3] See *Trust Companies*, 1931, p. 89.

Fiduciary activities are more or less confined to larger banks, but they are very evenly distributed regionally. In 1930 only one out of fourteen National Banks having a capital of less than $50,000 was engaged in trust business; for medium-sized banks, on the other hand (capital $50,000 to $500,000), the ratio is one out of three, and that for large banks, one out of two. Large banks, of course, take a dominant slice of the business, their share among National Banks being about 85 per cent, nearly coinciding with the 80 per cent share of large cities.

The growth of trust activities of commercial banks has its basis in the rapid accumulation of wealth among the upper strata of the American population. It forms another link in the process of elimination of the small independent business—in this case the law office—by the large-scale concern, even if the necessary formalities continue to be entrusted to apparently independent members of the legal profession, largely as a result of statutes prohibiting any other course of action.[1]

There seem to have been three major forces favouring the bank as trustee with the would-be customer. The life of the bank is, in theory at least, unlimited, and the management continuous;

[1] A more recent development in the trust field is the appearance of Investment Counsels, independent organizations, which give advice as to the safe and profitable investment of trust funds as well as of other capital, but refrain from handling any technical detail in the legal or the banking sphere. They have up to now not encroached on the field of the banks' trust departments to any appreciable extent, but might do so if the banks cannot manage to sever in the public's eye and the public's suspicion every connection between trust department and security department.

the individual trustee can not aspire to either. The customer of the trust department has at his disposition not only the brains of its own officers, but the services of every other department of the bank—its legal staff, its intelligence department, its economist, its foreign connections. And last, but not least, the bank as trustee is believed absolutely safe, and correctly so—there is only one case on record, dating back to 1910, in which a customer lost money he had fiducially entrusted to a bank[1]; malfeasance of individual trustees, on the other hand, is not so rare or unheard of an occurrence, although the number of cases would, of course, nearly disappear statistically if it were compared with the mass of trusteeships faultlessly performed. It would require the experience of a specialist to decide if, as banks' trust officers often claim, the bank as trustee is, moreover, less expensive than individual or professional trustees would be.

From the banks' own point of view, two considerations have made the addition of trust activities especially attractive. The one is the fact that the trust department is a good, steady, and promising earning asset; the income of member banks' trust departments rose from 55 to 80 million $ between 1927 and 1930, and did not fall off by more than 5 million $ in the following year of depression, thereby increasing its share in total earnings from 3½ to 6 per cent. The other is the enlargement of the banks' clientele and the tapping

[1] See *Trust Companies*, 1931, p. 282.

of classes of customers, which could not be reached otherwise, but may become valuable customers of other departments later on. It is particularly the security department which looks with interest on the trust department's customers as potential, reliable, steady, and long-range buyers of bonds and stocks distributed by the bank.

All these tendencies are overshadowed in importance and—still more—in the public's eye by the rise of security affiliates and investment banking activities of commercial banks. It was the shrinking of the demand for short-term commercial credit which led commercial banks into the new fields of urban real estate loans and of foreign credits, and induced them to grant security loans in a most liberal way, when the total volume of credit expanded as a result of a large and continuous influx of gold into the country. Changed methods of financing American industry, particularly the process of paying off short-term indebtedness out of the proceeds of new stock and bond issues, were responsible to a large extent, too, for commercial banks entering the investment banking field. They had to equip themselves with the machinery necessary for marketing those securities if they were not prepared to lose every contract with a group of customers which had formerly represented their most important debtor-clients and who apparently were to dominate American economic life to an ever-growing extent. It may be doubted, moreover, if commercial banks could have kept completely aloof from investment banking activities, even if they had decided to

forego for the future any direct contact with "big business" and all the advantages accruing therefrom. Total floatations of investment securities in the United States rose from about 1½ billion $ in the years preceding 1914 to 4 billion in 1922, then starting a rapid increase leading to a peak of 10 billion $ in 1929. The machinery of the old private investment banking houses, located predominantly, so far as importance goes, in New York City, and covering the whole United States with a net of branches and an army of security salesmen,[1] would not have been in a position to cope with this avalanche of new security issues. The old system might have increased the number of its branches and its salesmen, as it actually did; it might have added a number of new members to its ranks, as happened too. It appears, however, extremely unlikely that the capital necessary to finance the immense totals of new security issues could have been provided by individual sources. The commercial banks, therefore, simply had to choose between advancing nearly all the money necessary to carry through the origination and the distribution of new security issues in the United States, in the indirect form of loans to brokers and to dealers in securities, and on the slender basis of the relatively small capital of private investment banking firms on one side, and directly participating in the business of investment banking on the other. As a matter of fact they have used both ways extensively in the last decade, preferring the indirect

[1] See pp. 23 ff. for some data about this machinery.

way during the first years, but turning more and more to the direct form of participation as the twenties went on and the attraction of fabulous profits in the investment banking field, and finally the power of fashion, became irresistible.[1]

The direct connection between commercial banking and investment banking is not, however, exclusively (even if nearly so) a post-war development. Some of the large New York City banks, particularly the institutions belonging to the Morgan Group, had long taken part in originating and underwriting investment securities, though they refrained almost completely from the wholesale or retail distribution side of these transactions. The establishment of formally independent security corporations, owned to 100 per cent by the parent bank or indivisibly held in trust for the benefit of its shareholders, had been invented as far back as 1908. In this year the First National Bank of New York organized the First Securities Co., providing the capital of the new corporation out of its own surplus; the First Securities Co. was, however, less an investment affiliate in the modern sense than a holding company for shares, which the parent bank was legally debarred from acquiring. Three years later the National City Bank, then America's largest banking institution, followed suit with the National City Co., which was to develop

[1] Commercial banks did not directly enter, however, the stock exchange brokerage business, being ineligible for membership. In fact, they financed the greatest part of the brokerage houses' activities by brokers' loans, thereby enabling the brokers to require but a marginal payment from their customers.

into the most extensive security-selling organization in the United States. First Securities Co. and National City Co. remained solitary for some years. Commercial banks apparently had not yet experienced any necessity or inclination to enter the field of investment banking, which continued to be regarded as the private bankers' domain, much as it was in England. The war-loan campaigns, bringing the bulk of the commercial banks in the country for the first time into intensive contact with the distribution of securities, and emphasizing the necessity of enlarging the machinery available for distribution, quickly changed this attitude. Investment affiliates were organized in 1917 by the Chase National Bank (the Chase Securities Corporation), the following year by the First National Bank of Boston, in 1919 by the Guarantee Trust Co., in New York, the Shawmut National Bank in Boston, and the Hibernia National Bank in New Orleans, and in 1920 by the Central Illinois (now the Continental Illinois) Bank in Chicago. These investment affiliates grew in a steady and remarkable way for the next few years, developing some of the largest and most efficient security-distributing organizations in the country, based on a branch system covering all the large cities in the United States and thus surpassing nearly all of the older private firms. In 1930 the National City Co. numbered nearly 60 branches, the Chase Securities Corporation (including the branches of Harris Forbes & Co., which were merged later), about as many, while the Guaranty Co., the Bankers Co., and

the First National Old Colony Corporation (Boston) had 20 to 25 each.[1] Up to 1927, however, the overwhelming majority of commercial banks and even the greater part of large urban institutions had only an indirect participation and interest in investment banking. It is only in the following year that the idea of having a separate investment affiliate spreads like wildfire among large commercial banks, the movement in part simply changing the banks' bond department into an independent corporation, but signifying to a large extent a true expansion into fields hitherto not cultivated. The easy way of acquiring the machinery necessary for the origination and distribution of securities by taking over an old-established private investment banking house was made use of in only a few cases, the most important one being the merger of Blair & Co. with the Bank of America. Since investment affiliates of commercial banks were generally catering for new needs, this procedure of growth by amalgamation was indeed not to be expected.

As the result of this movement in 1929 nearly every large urban commercial bank in the United States boasted of one or several security affiliates, usually bearing the parent bank's name with but slight alterations, having as a rule no branches or only a very few in the immediate neighbourhood and relying for the attraction of customers on the ingenuity of a corps of salesmen and on the knowledge of customers' accounts and customers' habits,

[1] There are several annual publications listing all investment banking houses as well as their branch offices. "Investment bankers and brokers of America" has been used here.

possessed by the commercial and savings departments. Among National Banks alone about 200 instances of security affiliates are known.[1] In many cases these investment affiliates are—or were—important concerns, working with a capital only a few of the private investment banking houses could dispose of.

Details about the capital structure and the total resources of security affiliates are usually not known, as they are neither subject to examination by bank supervisory authorities nor bound to publish accounts. A special inquiry[2] showed that at the end of 1930, eleven large security affiliates had aggregate total assets of 535 million $. The Chase-Harris Forbes organization alone may have had at that time total resources of over 130 million $, the National City Co. ranking next with about 100 million $, the Continental Chicago Corporation following with about 60 million $, and a further half-dozen (among them probably the Bankers Co., the Guaranty Co., and the First National Old Colony Corporation) having total resources of 25 to 50 million $ each.[3]

[1] Legal considerations render a straightforward affiliation of parent bank and security corporation usually inadvisable. Out of 192 security affiliates of National Banks (1931) not more than four were directly owned by the parent bank; in seventeen cases the affiliate's stock was owned by another affiliate of the parent bank, while it was distributed in the form of joint and indivisible certificates of shares in the bank and the security company among the parent banks' shareholders in forty-five cases. As a rule, however (126 cases), the capital stock of the investment affiliate is held by a body of trustees for the benefit of all the shareholders of the parent bank; this arrangement makes it possible to keep the control of the affiliate in the hand of a body of persons which is pretty close to the management of the parent bank, but does not necessarily represent the majority of the parent bank's shareholders (data from *SR.* 4115, p. 392).

[2] See *S.R.* 71, p. 1066.

[3] In 1913 the resources of the First Security Corporation were estimated

Nearly all the funds needed by security affiliates are provided by the parent bank. For the group of eleven large security affiliates just mentioned, capital and surplus, which as a rule had been largely supplied by the parent bank, amounted to 64 per cent of total resources and it may be safely assumed that most of the 36 per cent representing total liabilities was owing to the parent institution. It would, indeed, be a rather startling event to see any one of the affiliates borrowing in the open market or—what is nearly out of the question—from another commercial bank.

This rapid development of commercial banks' bond departments, as well as the rise of investment affiliates, has led to a doubling of the banks' share in total new security floatations in the United States within a short period. Between 1927 and 1930 bond issues brought out by commercial banks or their investment affiliates as syndicate heads increased from 1,300 to 2,060 million $, their share in total bond floatations rising from 22 to 45 per cent (cf. Table 17). Moreover, while bond issues of commercial banks under their own name still amounted to over 70 per cent of affiliates' bond floatations in 1927, the ratio had fallen to 14 per cent in 1930, showing with how striking a speed the process of transforming bond departments into separate corporations had progressed. The participation of commercial banks and their affiliates

at appreciably over 35 million $ (see *Pujo Report*, p. 68). The resources of the house of Morgan alone, however, were still about as large in 1930 as those of the eleven largest security affiliates taken together.

in total sales to ultimate investors is probably somewhat larger than their share in heading syndicates indicate. It is, therefore, a safe guess, that in the last years more than half of the total distribution of securities in the United States was effected through commercial banks and their affiliates, whereas their share would not have exceeded a few per-cents of the total before the war. During 1927–1931 the National City Co. ranked first among all American security-distributing organizations with a total of over 5¾ billion $ of bonds,[1] the Guaranty Co. third with over 4¾ billion, the Bankers Co. fifth with nearly 3¾ billion, the Chase Security Corporation eighth with over 3 billion $. Among the thirty-six houses with totals of over 100 million $ each, there were eleven security affiliates of commercial banks.

As a rule these security affiliates performed a variety of functions. Three of these may be said to form an intrinsic part of their activity as investment banking institutions: the origination of new security issues, the formation of, or the participation in, the original selling group disposing of the securities in large blocks to retailing bankers all over the country or occasionally to institutional buyers, and the distribution of bonds and—to a lesser extent—of shares to the ultimate investor in lots

[1] See *Wall Street Journal*, 20.2.1932, p. 5. These figures include issues in which the bank in question headed the syndicate as well as those in which it was a syndicate member only. In both cases each issue is entered with the full amount of the total floatation, the individual participations being unknown. While these figures, therefore, seriously overstate the amount of securities each house handled, they may be used for the purpose of comparing the activities of individual firms.

averaging only a few thousand $ [1] by means of a branch organization and a corps of salesmen.[2]

Experience has shown that the business of retailing investment securities does not involve a very appreciable inventory risk, the turnover of the assorted stock of securities being very rapid, so that a falling off in investors' demand can be quickly counteracted by restricting wholesale purchases. Moreover, the technique of selling and the analysis of the short-term absorptive capacity of the market have developed far enough to render overstocking avoidable. On the other hand the expenses of building up an efficient security-selling organization are large and goodwill figures among its most valuable assets, so that a continuous depression of bond prices or a cessation of the stream of new saleable issues will have a specially serious effect on this branch of the investment banking machinery. The originating and—to a smaller extent—the wholesaling of investment securities, on the other hand, is fraught with immense risks as the turnover is much slower, the inventory is made up of blocks of but a few individual issues, and developments taking place within a much longer

[1] Mr. Morrow found that the average sale of several foreign issues brought out by J. P. Morgan & Co. varied from $3,000 to $4,300 (see " Who buys Foreign Bonds ", in *Foreign Affairs*, v, p. 222). Personal investigations would lead the author to place the average sale of American domestic securities at a somewhat lower figure, probably $2,000 to $3,000.

[2] The methods of distributing investment securities are best dealt with in Galston, *Security Syndicate Operation*, and in Willis and Bogen, *Investment Banking*. A great amount of material may be found in Biddle and Bates's *Investment Banking*, in the publications of the Investment Bankers' Association, and in various congressional documents, particularly the Hearings on Foreign Loans (*SR.* 19).

space of time—the interval between signing the contract with the vendor corporation or government and completing the selling syndicate—have to be taken into account. As has been often and painfully demonstrated a single issue, taken over before a break in the market, may wipe out the current profits of several prosperous years.[1]

Security affiliates would, therefore, have had to run many risks and to take many losses during the present crisis, even if they had scrupulously refrained from any activity outside their immediate function. They have, however, been far from doing so, and it is just the extra-curricular activities which have been responsible for the heaviest losses and the general condemnation of the whole development. Some of them have entered into speculative commitments for the short or the long run, some have financed stock operations of officers and directors of the parent bank; they have had their hands in real estate operations (which in the United States are as risky as stock exchange speculation is) and some have been used to manipulate the stock of the parent bank, buying and selling and participating in pool operations. These activities brought huge profits so long as the market continued to rise, but they ended with immense losses from the moment the tide turned, and the more so because they were often undertaken in order to stem that tide and to prevent it for a shorter or longer time from flooding a financial islet or archipelago in which the parent bank or some of its officers were especially

[1] Cf. *SR.* 71, p. 1057/58.

interested. It was originally believed that activities of this sort had been indulged in only by the affiliates of a few irresponsible and smaller banks, a notable example being the Bankus Corporation, security affiliate to the New York Bank of United States, which crashed in December of 1930, for the first time exposing a full collection of the above-mentioned practices to the public eye. As time and the severity of the crisis progressed, it became clear that these methods were not so rare and the losses consequently much higher than had been anticipated. It is only fair, however, to remark that some security affiliates refrained almost entirely from these extra-curricular activities, while they played but a minor role in many others.

For some time it was hoped that a turn of the market would enable affiliates to liquidate without losses, or to give rise to profits against which old mistakes might be written off. As this possibility became more and more remote, and was at last lost sight of, banks had to face the task of making at least part of those losses public and of reducing the affiliates' capital and surplus in order to make an adjustment to current values possible. The National City Co., e.g., reduced its capital from 55 to 11 million $, the Chase Securities Corporation, from 95 to 40 million $, the Guaranty Co., halved it from 20 to 10 million $. How many additional millions of loans to affiliates have had to be written off in the book of the parent banks is not known, but the total is probably not quite negligible.

Many banks have gone a step further and

liquidated their security affiliates, often by practically discontinuing their business or by very severely retrenching their activities without formal dissolution. Some institutions took this course as far back as 1932, e.g. the First National Bank of New York and the Baltimore Trust Co. It was not, however, until Congressional investigation had directed public attention to some excesses of the final years of prosperity, and legislative action was imminent, that the banks with the largest affiliates moved. On the 7th of March, 1933, the National City Bank announced that henceforward the National City Co. would restrict its activities to highest grade securities pending further developments, and that the management of bank and security affiliate would be immediately and completely divorced. The following day the Chase National Bank made public a more radical programme: the bank was to leave the investment banking field completely, the Chase-Harris Forbes Corporation to be liquidated or disposed of in some other way. The Banking Act of 1933, passed shortly after these developments, will make a separation of ownership and management of parent bank and security affiliate within two years obligatory and severely restrict any financial relations between them.

As things were at the moment of its enactment, the Act did nothing but to generalize and to hasten a development which was under way and had its moving forces in the sobering experience of the losses just experienced as well as in the terrific shrinkage of the volume of new issues in the United

States (falling from 10 billion $ in 1929, and 7 billion in 1930, to 3 billion in 1931 and not much over 1 billion in 1932, excluding United States Government securities), which very quickly proved the security-distributing organizations of the banks, adapted as they were to the dimensions of the last boom years, to be heavily oversized and unremunerative even on current operations. Liquidation will be relatively easy for those affiliates which were more or less confined to wholesaling and working without branches. Where, however, a carefully developed and widely ramified selling organization forms the backbone of the affiliate, great care will have to be taken not to destroy this machinery. It may be assumed that most of these organizations will continue business, after separation from the parent bank, in the form of independent partnerships, having the former executive officers of the affiliate as managing partners.[1] The provision of a new capital of sufficient size will still present some difficult problems. With new issues at the present low level, the private investment banking houses are easily in a position to handle the total. This would, however, become very difficult if a marked increase in floatations occurred, making recourse to the distributing organization of the security affiliates—in one form or another—necessary.

But contacts with the field of investment have not stopped at the participation in underwriting

[1] An example is provided by the fate of the Chase-Harris Forbes organization, the officers of which went partly to other investment banking houses and partly formed new partnerships.

and distributing activities. They have even brought the investment trust (starting its meteor-like history in American finance not earlier than 1927, and ending it three years later, thereafter to continue existence outside the centres of public or professional interest and in a rather small way) into the compass of commercial banking institutions. This is, however, a movement which has always been much more limited in extent than the organization of security affiliates or, for that matter, the rise of fiduciary activities. The investment trust was the favourite device of the private investment banker, in some way constituting the weapon with which he was able to counter the superior capital resources at the disposition of the security affiliates, since it embodied his only opportunity to tap, in a roundabout way, an apparently inexhaustible source of funds eager to be invested in bonds or shares of financial institutions. Commercial banks were not prominent in the organization of investment trusts. In 1930 National Banks had only seventeen directly affiliated investment trusts.[1] Examples of investment trusts organized and controlled by a large commercial bank are provided by the Irving Investors Corporation, the Old Colony Investment Trust, the Old Colony Trust Associates, the Shawmut Bank Investment Trust, the Chemical National Associates and the Chatham Phenix Allied Corporation[2]—all of them not belonging to the mammoth type represented, e.g., by United Corporation,

[1] See *SR.* 4115, p. 392.

[2] A complete list of American Investment Trusts may be found in Keane's *Manual of Investment Trusts.*

Lehman Corporation, or the Goldman-Sachs trio. The instances in which commercial banks, usually acting in collaboration with some friends, took an interest, manifested and cemented by acquiring a block of shares or delegating an executive officer into the board, in more or less independent investment trusts, are much more numerous, but difficult to trace. One or more directors or officers of large commercial banks may or might be found on the board of nearly every one of the more important investment trusts, but it always remains doubtful what degree of connection and control this implies. Some examples may, however, be given for what they are worth. There were representatives of commercial banks on the board of the American Founders Group (Chase National Bank), the National Investors Group (National Shawmut Bank; Guardian National Bank, Detroit; Marine Midland Bank, Buffalo), the Tri-Continental Corporation (Chase National Bank; Central Hanover Bank), the Continental Shares Corporation (Cleveland Trust Co.), the Adams Express Co. (Chase National Bank), the Selected Industries Corporation (Guaranty Trust Co.) and the Petroleum Corporation of America (Chase National Bank; Bank of America).

The contacts between commercial banks and investment trusts were threefold: Commercial banks invested in shares of investment trust, using as a rule one of their affiliates as intermediary; they extended loans to investment trusts on the security of the trusts' holdings of bonds and shares, and they granted loans to customers on the basis of investment

trust securities. It is unknown how large any one of these three connecting links had grown in the peak of the investment trust craze in 1929, the second link probably being the most important. Security loans to investment trusts and on the basis of investment trust securities were more or less a matter of routine. Participation in ownership and management, however, had a wider aim. The investment trust affiliate could carry out transactions for which not even the security affiliate was thought fit. It could, moreover, and with more justification, be used to attract long-term funds, which might provide a steady and lasting outlet for issues sponsored by the bank, whereas the security affiliate worked with the banks' own funds, which it had to turn over as quickly as possible. Last, but not least, the control of an investment trust offered the additional incentive of reaping profits made with other people's money, in so far as a large part of the capital was provided by fixed-interest securities or by loans.

Taking everything together it may be said that the connection of commercial banks with the investment trust field has proved less fruitful—and above all less necessary—still than the attempt to enter the business of originating and distributing securities. The chief reason is that the investment trust movement in the United States gained momentum only in the last stages of the boom, so that nearly every trust paid prices for its portfolio—very often acquiring its contents from the financiers and investment banks sponsoring the venture—which

had to be regarded as phantastic two or three years later. The capital commercial banks invested, directly or indirectly, in investment trust shares, may be regarded as almost completely lost. The losses on loans to investment trusts are unknown, but that they must be far from negligible can be inferred from the experiences some banks have had with their loans to some investment trust-holding company hybrids, like the Insull companies in Chicago, the General Theatres Equipment Corporation, the Continental Shares Inc. (Eaton group), and some corporations connected with the Van Sweringen interests.

Chapter VIII

THE STORY OF INTRA-CITY BANKING CONCENTRATION

The concentration movement is one of the forces which have wrought the most important changes in the structure of American banking during the last decade. It has been active in two directions. On the one hand, the total banking resources of each of the larger cities in the United States have become concentrated to an increasing extent in a very few large banking institutions, as a result of mergers, of the creation of city-wide branch systems, and—since 1930—of bank failures. A first movement of this type had been already experienced before the war, particularly in the first decade of the century, when it coincided with similar developments in industry.[1] On the other hand, there have arisen in a number of regions organizations combining one or more larger urban institutions as a nucleus, with a number of smaller banks in towns and villages scattered over a more or less extended area, either in the looser forms of bank groups and bank chains, or in compact overland branch banking systems. This is a development almost completely confined to the last decade and particularly to its final years.

[1] See Moulton, p. 721.

In 1929 there were about 3,500 individual commercial banks in cities having over 25,000 inhabitants; about 500 of these banks had urban branches, their number aggregating about 2,000.[1] Thus, unit banks and branch banks possessed a nearly equal number of banking offices, i.e. something like 3,000 and 2,500 respectively. About two-thirds of all branches were situated in ten large cities, dominated by branch banks. There were 580 branches in New York City, 309 in Detroit, over 200 in Los Angeles, 133 in Philadelphia, and between 50 and 100 in San Francisco, Cleveland, Buffalo, Cincinnati, Baltimore, and Boston.[2] Only six large cities in the United States—Chicago, St. Louis, Milwaukee, Minneapolis, Dallas, and Seattle—had no branch offices at all, because the law of their states expressly prohibited intra-city as well as intra-state branch banking, as it did in sixteen other states.[3]

The movement towards intra-city branch banking had taken its first steps before the war, without, however, making spectacular progress up to 1920. In that year intra-city branches numbered about 600. They had increased to 1,500 in 1924, and grew with nearly equal speed during the next four years, reaching 2,400 in 1929; they continued to gain slowly in number up to 1931, while the unit banks'

[1] See Table 18. Detailed statistics for later dates have not yet been published. The total number of branches, however, was nearly the same in the middle of 1931 as it was two years earlier. It is assumed throughout that branches within the place, where the parent bank is located, are practically synonymous with branches within cities.

[2] See *HR*. 141, p. 460; data refer to 31st Dec., 1929.

[3] Branch banking within city limits was expressly permitted in nineteen states, while the laws of the remaining seven were silent on this point.

ranks became thinner in almost every year of the whole period. The average size of the urban branch system is only small, there being not more than about 2,000 branches to about 500 parent branch banks. The frequency distribution is, however, irregular. Very many banks have one or two branches only, while a few institutions have many dozen of branch offices. The First National Bank in Detroit, the Bank of America in San Francisco and in Los Angeles, the Security-First National Bank in Los Angeles, the Cleveland Trust Co. in Cleveland, the National City Bank, the Bank of Manhattan, and the Manufacturers Trust Co. in New York City have 50 to 150 branches each within the limits of their home-town.

The extent of intra-city concentration effected through mergers is much less exactly known. There can be no doubt, however, that the number and the importance of mergers began to grow rapidly after 1920. Having moved between the limits of about 125 and 200 a year in the war-decade the number of mergers increased to from 300 to 400 annually in 1921–5, making another step forward in 1926–7, and reaching a peak of 600 to 800 in the years 1930 and 1931.[1] If not only the bare number of mergers is considered, but their size and importance is taken into account as well, 1929 and 1931 stand out prominently, 1929 as the year of the giant mergers between large banks in New York and Chicago, and 1931 as a period of numerous mergers of medium-sized institutions all over the

[1] See Table 20.

East and the Lake district. During the entire eleven-year period extending from 1921 to 1931 more than 5,000 banks—urban banks in the great majority—have disappeared as a result of mergers, a number not much smaller than that of banks failed during the same time. About 1,000 of the banks merged continued business as a branch office of the absorbing institution. The other 4,000 have disappeared without leaving any trace whatever except, as is often the case, in the absorbing bank's name and in its directorate.

Intra-city concentration by means of mergers and the development of city-wide branch systems has had the result that in 1929 nearly half of the 5,500 bank offices in existence in cities of over 25,000 inhabitants bore the name of one of the 500 branch banking institutions and that fully one-half of total urban deposits of about 38 billion $ were entrusted to the same group of banks.[1] What have been the forces behind this movement and how far has it progressed in the more important cities ?

The elimination of surplus banks, which was to become a major force in rural bank failures, has not been a factor in the intra-city concentration movement. If at all, it had importance only in some cities of smaller size, particularly in agricultural districts. As deposits in city banks more than doubled during the period under review, there would, as a rule, have been ample standing room and even growing-space for every one of the urban

[1] See Tables 19 and 32.

banks surviving the depression of 1921. There was, it is true a force at work making for concentration, which remained almost completely absent from rural banking: the growth of the average debtor firm, resulting from expansion and concentration in industry and trade. This factor, too, is, however, of minor importance only—a striking contrast to developments in Germany before and after the war, where it was regarded as the chief single force making for concentration in banking—and mainly so because industry and trade, although concentrating in fewer units of larger size, had less and less recourse to bank credit. This does not mean that it is a factor completely to be neglected. There are types of foreign credits and financial transactions (particularly in the originating business and in the line of industrial combinations) which can be handled only if the bank has very large resources; some metropolitan mergers have undoubtedly been influenced by the desire to reach the size necessary for this type of high finance business. The statutory provision that not more than 10 per cent of capital and surplus may be loaned to any debtor, has been another force making for concentration. In view of the easiness with which it could be circumvented (splitting the total into several loans, each reaching the 10 per cent limit, to formally independent subsidiaries or affiliates of the real debtor),[1] not

[1] In this way the Central Republic Bank of Chicago loaned about half the amount of its capital to several members of the Insull holding company maze, which, as Chairman Dawes candidly admitted, was contrary to the "spirit" of the law. (See *Commercial and Financial Chronicle*, 1933, i, p. 1294.)

too great an importance ought to be attached to this influence.

It is not on the assets, but on the liabilities side of the balance-sheet that concentration in industry and trade has reacted on banks and stimulated a parallel movement. In the course of the last fifteen years large accounts—testifying to the progress of the concentration process as well as to the continuously improving liquidity of big business—have gained an ever-increasing importance for the commercial bank. There is no written law which relates the size of individual deposit accounts to the banks' capital funds or to total deposits. Nobody will, however, entrust to a bank he does not control, a deposit which amounts to an appreciable part of that bank's total liabilities, because he would thus from the start seriously endanger the availability of his deposit and be tied up closely with the fate of that individual bank. The famous and much sought-after "million-dollar accounts" are practically out of the reach of banks having less than 30 to 40 million $ of total resources and the same proportion applies to the mythical "ten-million-dollar accounts"—of which at least some dozens of specimens are, or rather were, in existence in the United States.

A really momentous role in the concentration movement may be attributed to the "rounded-off service" idea, giving the customer the advantage of doing all his banking transactions with one institution, putting at his disposition the services of the intelligence and the economic departments,

as well as counsel's advice in matters of commercial and tax law, and helping him actively in solving his intricate financial, and sometimes even his organization and merchandizing, problems, in arranging mergers with domestic competitors or kindred firms, and in penetrating foreign markets—services which only the very large bank can afford to provide in an adequate way without endangering its earning position.

A parallel to the provision of every type of banking service under one roof, induced, however, by the banks' own desire to minimize the risk of losses and of massed deposit withdrawals, is to be found in the tendency to diversify the territory of the banks' activities, the circle of the banks' customers, and the type of business transacted. This tendency has probably been the most important single force making for concentration. Such a diversification means reduction of risks by spreading and mixing, and deserves special attention because many banks in the United States were originally restricted either by their location or by the course of their development to one part of the town, or to borrowers of one branch of industry and trade, or to customers of one nationality (banks serving Italians, Scandinavians, or Hebrew immigrants were quite common) or of one social class (e.g. banks for the leisured class in some suburbs of large cities), or were specialized in one type of commercial banking (e.g. savings deposits, commercial credit, security loans, foreign trade financing). The trend towards diversification of business handled and

customers served has found expression in two directions, both making for concentration of urban banking resources. It has given rise to the idea of the city-wide net of branches, covering the total urban and suburban area, and it has led to mergers between banks, which had hitherto been cultivating different fields.

Most cities, in which branch banking is not prohibited, have in fact developed city-wide branch systems. Examples of a remarkable predominance of this system are provided by Detroit, Cleveland, Buffalo, Washington, Philadelphia, Pittsburgh, Baltimore, Boston, San Francisco, and Los Angeles—to mention but the largest cities in the United States. The growth of city-wide branch systems in New York City is still more or less restricted to Manhattan and some parts of Brooklyn. The system is still in infancy in the other component parts of the metropolitan area (e.g. Bronx, Queens, the greater part of Brooklyn, Newark), which have local branch banks of their own. In nearly all of these cities, however, branch banks, covering only sections of the town, and unit banks continue to exist side by side with the city-wide branch system, although their importance is declining and comparatively small.

The tendency to offer a rounded-off service and to diversify activities has been particularly noticeable and conducive to mergers in large centres. The usual case is the merger between banks specializing in savings business and in commercial credits. The combination of these two banking activities

was a major incentive leading to the merger of the Illinois Merchants Trust and the Continental National Bank in Chicago, or to the amalgamation of the Security Trust and Savings Bank and the Los Angeles First National Trust and Savings Bank in Los Angeles, or to the merger of the Peoples State Bank and the Wayne County Home Savings Bank in Detroit. The merger of a bank specializing in commercial banking proper with an institution prominent in fiduciary activities is another favourite combination. The amalgamation of the National Bank of Commerce and the Guaranty Trust Co., the absorption of the Farmers' Loan and Trust Co. by the National City Bank (the trust business of both institutions being thereafter concentrated in the City Bank Farmers Trust Co., an affiliate of the National City Bank), and the merger between the First National Bank of Boston and the Old Colony Trust Co. furnish examples of this type of combination of activities. A very clear example of rounding off is provided by amalgamations between banks which specialized in local commercial credits and in correspondent for out-of-town banks' business respectively, e.g. the merger of the Central Union Trust Co. and the Hanover National Bank in New York. In some cases, finally, it was the desire to combine domestic and foreign business, which led to amalgamations; the merger of the California Bank and the London and San Francisco Bank (1905) is an older example of this tendency, while more recent ones are furnished by the acquisition of the American Express Co. by the

Chase National Bank and the absorption of the International Acceptance Bank by the Bank of Manhattan.[1]

There is probably no merger—barring emergency amalgamations—in which the prospect or the possibility of decreasing costs and higher earnings of larger banking units has not played a part, either in fact or in argumentation. Statistics seem to show that expense and loss ratios do actually decrease (resulting in rising profits) with the growth of the bank, at least up to about 20 million $ of total resources. Net earnings of banks with earning assets of less than 2 million $ in the Chicago Federal Reserve district (1928) remained under 1 per cent of earning assets (averaging about three-quarters per cent), while banks with assets of 2 to 15 million $ earned 1 to 1¼ per cent, the ratio rising to fully 1½ per cent in banks having assets over 15 million $.[2] The expenses of forty large banks in New York, Los Angeles, and San Francisco, having an average capital and surplus of 24 million $, declined from 83 per cent of gross earnings in 1921 to 72 per cent in 1929; the same ratio did not decrease by more than one-third of this amount for 113 medium-sized banks (average own funds 2½ million $) standing at 83 per cent in 1921 and at 78 per cent eight years later, while it showed practically no decrease at all for small banks, moving around 79 and 92 per cent for two groups

[1] In this case many other considerations influenced the step taken. This may, of course, be said to a certain extent in any of the mergers mentioned.

[2] See Table 21.

investigated, whose own funds averaged 268 and 107 million $ respectively.[1] It would seem, therefore, that economies in management during the last decade were producing higher earning ratios in large banks only, bringing their ratio decidedly under that of small and medium-sized banks at the end of the period.

Economies in management were really important, as a driving force, in mergers between banks of medium-size only, which might thus grow to the size where earning ratios are appreciably higher. They may still have mattered in mergers affecting banks with up to, say, 100 million $ total resources. They were surely not the factor deciding or strongly influencing, the mammoth amalgamations. In these cases the rounding-off idea and the tendency towards diversification will not be found to give an adequate explanation either. There is no denying the fact that the craze for " big figures ", the race for the numerically leading position among the banks of a city, a region, the entire United States, and, as it finally came to be, the whole world, and the influences of financial mass-psychology and financial fashion have all played their part—and not a secondary one it was in many cases—in fostering the intra-city concentration movement in American banking and in giving it the speed and compass it has acquired during the last five years before the present crisis. This is particularly true of the large mergers which took place in New York City in the last boom year. In these cases each of the banks

[1] See Lawrence, *Banking Concentration in the U.S.*, pp. 175–6.

affected was large enough, and in fact equipped, to do any type of banking business or to handle the largest accounts; none of them could look for a higher ranking (all being first addresses); they could not really expect a reduction in expense ratios, while they had every reason to be afraid of the increased influence of bureaucracy and routine banking, which the amalgamation of colossi like these was bound to generate. It was, in fact, the lack of leading personalities in banking which led to this accumulation of resources under the tutelage of the few which were or were believed to be.

The last great moving force of intra-city concentration was provided by the banking difficulties experienced from 1931 to 1933. Under their influence the concentration movement has been resumed even in cities where it would have been considered more or less finished by 1930. A concentration wave of this type has been experienced in Chicago (absorption of Foreman-State Bank by First National Bank, amalgamation of Central Trust Co. and National Bank of the Republic, both in summer of 1931), in Boston (absorption of Atlantic National Bank by First National Bank; merger between United States Trust Co. and Bank of Commerce, both early in 1932), in Cleveland (liquid assets of Union Trust Co. and of Guardian Trust Co., transferred to National City Bank), and in Detroit (current business of First National Bank and Guardian National Bank taken over by the new National Bank of Detroit in March,

1933). Emergency amalgamations have been more frequent, still in somewhat smaller cities, where massed withdrawals of deposits and the freezing of assets have led much earlier to the weaker banks' falling back on their stronger brothers or to the reappearance of several temporarily closed banks in the shape of a single amalgamated and reorganized institution. As a result of this development practically the whole commercial banking business of a number of important cities has been concentrated into one institution. Only a few of the numerous instances, in which things developed in this way, may be cited. In Toledo the four largest banks of the city were amalgamated in the fall of 1931. In Akron a merger of the two leading banks resulted in the formation of the First Central Trust Co. with about 75 million $ of resources. In Atlantic City not less than 14 banks combined to form a new institution, having nearly 60 million $ of resources and completely dominating the local banking situation. Other examples are to be found in Columbus (Ohio), Reading (Pa.), Youngstown (Pa.), Utica (N.Y.), Lansing (Mich.), Passaic (N.Y.), Scranton (Pa.), Houston (Tex.), to select only a few. The final winding up of the affairs of many of the banks, which were not able to reopen after the general banking moratorium in March, 1933, will probably lead to similar developments in many more places.

The intra-city concentration movement has been influenced by a multitude of tendencies. The movement has, however, obviously not been affected

to any remarkable degree by banking legislation, either in extent, or in rapidity.[1] Concentration has been equally remarkable in places which possess branch banks (Detroit, Cleveland, Pittsburgh, Buffalo, San Francisco, Los Angeles), in cities having unit banks exclusively (e.g. Chicago, St. Louis, Minneapolis, Kansas City) and in centres in which both types of banks are to be found and of importance (New York, Baltimore, Philadelphia, Washington). It is only in the forms the concentration process has taken—mergers vs. *de novo* branches—that legislative differences are, of course, reflected.

What remains to be done now is to give a short account of the progress and the present status of banking concentration in the more important financial centres.[2]

In New York—as in many large cities—the beginnings of the concentration movement date back to the beginning of the century. The movement did not gain momentum, however, up to about 1921, and had its peak in the years 1928 and 1929. The result has been that at present more than two-thirds of the total resources of all banks in New York City are concentrated in the ten largest institutions, whereas their share was only about two-fifths at the beginning of the century.

[1] Special studies hitherto lacking would be necessary to warrant a confidently positive conclusion of this sort.

[2] As very little research has been done on this subject and the author has not had an opportunity to study developments at first hand in every city mentioned, the sketch which follows is necessarily incomplete and probably not always quite to the point.

The three largest banks in New York held 16 per cent of the metropolis' total banking resources in 1901, but nearly 40 per cent in 1930.[1]

The concentration movement has centred around the three banks which now lead the list—the Chase National Bank, the National City Bank, and the Guaranty Trust Co. Total resources of these three banks rose from well over 800 million $ in 1914, to 2,200 million $ in 1924, the gain being not much larger than the expansion of total banking resources in the city warranted. In the following six years, however, their resources more than trebled, reaching 6¾ billion $ in 1930, while total banking resources of the United States did not increase by more than about 30 per cent. A development of this sort would have been impossible, but for mergers on a gigantic scale.

Of these three, mergers mattered least in the case of the National City Bank, which ranked first among American banks by a wide margin from the beginning of the century up to 1929. The City Banks' first big stroke, the absorption of the Farmers' Loan and Trust Co., a very old bank with resources of only a quarter of a billion $, but with an extraordinary large and valuable fiduciary business, was delayed until 1929. It was followed in the fall of 1931 by the absorption of the Bank of America, then a member of the Transamerica Group with resources of about 300 million $. Thus, about half of the 950 million $ increase in the total resources of the National City

[1] See Tables 22 and 23.

Bank between 1924 and 1931 is accounted for by mergers, while the other half represents genuine growth. The proportions are quite different for the Chase National Bank. The series of major mergers begins here as far back as 1926, when the bank, having well over 600 million $ of resources, absorbed the old Mechanics and Metal National Bank with assets of nearly 400 million $. This was followed by the absorption of the National Park Bank with about a quarter of a billion $ of resources, and the acquisition of the American Express Co. and its foreign branches. The biggest step, however, came in June, 1930, when the Chase Bank added about three-quarters of a billion $ to its total resources by merging with the Equitable Trust Co., which had but nine months earlier absorbed the Seabord National Bank, with assets of about 200 million $. The Chase Bank thus succeeded in increasing its assets from 0·6 to 2·6 billion $ in six years, and in gaining the first place among American banks, acquiring three-quarters of the additional resources by way of mergers. The Guaranty Trust Co., too, owes its growth from 650 million $ in 1924 to 2 billion $ in 1930 in large part to mergers, by far the most important being the absorption of the National Bank of Commerce with resources of more than three-quarters of a billion $ in May, 1929.

What is true of the three largest banks holds good to nearly the same extent for almost every big bank in New York City. The Irving Trust Co.,

e.g., acquired more than half of its total resources by mergers with the American Exchange Pacific National Bank (1926, total resources about a quarter of a billion $), the National Butchers' and Drovers' Bank and the Columbia Trust Co. More than one-third of the total resources of the Central Hanover Bank & Trust Co. are the result of the merger with the Hanover National Bank in May, 1929. The growth of the Bank of America (resources about 200 million $, 1924; 500 million $, 1930), is mainly to be accounted for by a series of mergers, the largest amalgamated institution being the Bowery and East River National Bank (1928), with about 100 million $ of resources, a bank which in turn represented the product of numerous mergers. It was only by a large number of amalgamations during the years 1922 to 1929 that the Manufacturers' Trust Co. rose in a few years from the position of a small Brooklyn bank to tenth place among New York City banks, and accumulated total assets of over half a billion $. After having lost nearly 200 million $ of deposits at the end of 1930, in connection with the banking troubles created by the crash of the Bank of United States, the bank was reorganized and entrusted with the task of acting as emergency liquidation and amalgamation institution on behalf of the other large New York Banks. In this capacity the Manufacturers' Trust Co. took over ten small banks with total assets of 38 million $ and finally absorbed the Chatham Phenix National Bank (resources at the end of 1931, 217 million $) early in 1932. Mergers have

played an important part, too, in the growth of the Bank of Manhattan.

Only three out of the ten largest New York Banks —the First National Bank, the Bankers' Trust Co., and the Chemical Bank & Trust Co.—have grown since 1920 more or less without the help of mergers, the two first-mentioned institutions, moreover, renouncing to build up a system of branches. The difference is most clearly visible in the rate of growth. These three banks have increased their total resources between 1924 and 1930 by 75 per cent only; the resources of the other seven institutions, employing mergers and branches as methods of expansion, however, have grown during the same period by 285 per cent.

Each of the three largest New York banks holds at the present time about 12 to 15 per cent of the total resources of all metropolitan banks, while every one of the six next largest institutions holds between 3 and 5 per cent. These figures fail, however, to give an adequate picture of banking concentration within New York, because several of the large banks are said (facts and figures about this question being entirely unavailable) to be controlled by the same interests. This is particularly the case with the Morgan group of banks which is usually believed to include at least the Guaranty Trust Co., the Bankers' Trust Co., the First National Bank, and the New York Trust Co., having together total resources of almost 3 billion $, equal to over 25 per cent of all banking resources in New York City.

Concentration has progressed farther in nearly all of the large cities in the United States than it has in New York, even if we abstract from the fact of common ownership which, in some cases—although probably not in many—may, in fact, unite institutions which, to the public eye and to the average student, appear as independent.

One of the most striking examples of intra-city concentration is provided by banking developments in Boston. This city had 38 banks and trust companies with total resources of somewhat over 600 million $ in 1913 (against about 50 with 375 million $ of resources in 1900[1]). In 1924 the number of banks had fallen to 29, while total resources had risen to nearly 1,300 million $. There had been expansion (notably in the field of branch development), but not much concentration. In 1932, total resources stood at about 1,200 million $, while the number of banks had declined to 17. There was not much all-round expansion, but there was strong concentration, chiefly after 1929. The real test of concentration, however, is the share of the leading institutions in total banking resources. As far back as 1913, the First National Bank, the National Shawmut Bank, and the Old Colony Trust Co., having resources of about 100 million $ each, held between themselves nearly 50 per cent of Boston's total banking capital. The Pujo Committee, moreover, asserted these three banks were under the control of J. P. Morgan & Co. and their associates, Lee Higginson & Co. and

[1] See Table 24.

Kidder Peabody & Co.[1] By 1924 the share of the three leading banks had slowly risen to about 60 per cent. From then on, the First National Bank definitely took over the leadership of Boston banking, merging in 1929 with the Old Colony Trust Co. (resources about 200 million $), and absorbing in April, 1932, one of the largest remaining institutions, the Atlantic National Bank with resources of 65 million $. In this way the First National Bank has succeeded in directly controlling more than half of the total resources of all commercial banks in Boston, which is probably about as near to a banking monopoly as any bank in a metropolis of this size in the world has come[2]—excepting the position of the First National Bank in Detroit. The National Shawmut Bank, having resources of about 200 million $,[3] holds another 15 per cent, leaving a share of about 20 per cent for all other banks in the city.

The extent of concentration is not yet quite as large in Philadelphia, although progress has been very rapid during the last years. Philadelphia had 76 national banks and trust companies, with total resources of 450 million $ in 1900.[4] Up to 1924 new banks were founded on a liberal scale, their total number rising to 113, while resources quad-

[1] See Report of the Pujo Committee, p. 131.

[2] It ought to be added in this connection that Mutual Savings Bank's not included in the above figures, are of appreciable importance in Boston.

[3] The data about resources given in this Chapter refer, if not otherwise specified, to the middle of 1932, later figures often being distorted by influences of the banking crisis. Moreover, figures for June, 1933, do again not differ much from those of a year ago as a rule.

[4] See Table 24.

rupled to nearly 1,700 million \$. Then a concentration process of striking force and rapidity set in, bringing the number of banks down to seventy-six in 1930, by way of numerous mergers, while resources continued to increase slowly. The present crisis has given this movement a new impetus (concentration being, however, this time brought about chiefly by failures, not by mergers) diminishing the number of banks to about fifty, with about 1¼ billion \$ of resources before the crash of March, 1933. The two largest institutions, the Philadelphia National Bank with assets of 320 million \$ (about one-third of them acquired through the absorption of the Franklin-Fourth Street National Bank in 1928) and the Pennsylvania Co. with 230 million \$ are holding between themselves about 40 per cent of the city's total banking resources. The four banks following in ranking, the Fidelity Philadelphia Trust Co., the Girard Trust Co., the First National Bank, and the Corn Exchange National Bank, with about 100 million of assets each, account for another 25 per cent. This means that about two-thirds of Philadelphia's banking resources are in the hands of the six largest banks.

Pennsylvania's second capital, Pittsburgh, has gone some steps farther still in banking concentration, its banking business being now—i.e., after the failure of a number of independent banks in 1931 and 1932—more or less completely dominated by two groups. The Mellon group embraces the Union Trust Co. of Pittsburgh (resources 234 million \$), the Mellon National Bank (230 million \$),

the Farmers' Deposit National Bank (73 million $), and several smaller institutions, none of them having a large branch system. The other group is formed by two affiliated and co-operating banks, the Peoples Pittsburgh Trust Co. (96 million $), an institution which has gone through many mergers and possesses an extended net of branches, and the First National Bank (92 million $). The process of concentration has been a steady one in Pittsburgh. The number of National Banks declined from 31 in 1900, to 22 in 1913, and to 11 in 1930, while their resources rose from 134 million $ to 615 million $.

Developments in Detroit have been similar. Detroit, however, has seen the rise of a new device in intra-city banking concentration, the holding company owning majority interests in several banks in the same city. Two of these companies amalgamated in September, 1929, formed the Guardian Detroit Union Group,[1] which controlled the National Bank of Commerce, the Guardian Detroit Bank, the Guardian Trust Co., the Bank of Detroit, the Union Trust Co., and seven smaller Detroit banks, having altogether about fifty branches and nearly 350 million $ of total resources.[2] Since Detroit at that time had about 300 banking offices with assets of somewhat over 1 billion $, the group controlled nearly one-third of the total banking business of the city. The rest was for the greatest part in the hands of one single mammoth institution, the Peoples Wayne County Bank (controlled by the Detroit Bankers' Corporation), with about 450 million

[1] See testimony of its President, Mr. Lord, in *HR*. 141, pp. 1037 ff.

[2] The group, moreover, owned banks in other cities in Michigan.

$ of resources and over 150 branches, the 1928 born issue of the amalgamation of the Peoples State Bank and the Wayne County and Home Savings Bank. All the other banks of the city were left with not more than 20 per cent of the total business to divide among themselves. In the years following, the concentration process made some further progress. The Guardian Detroit Union group simplified its structure by merging the National Bank of Commerce with the Guardian Detroit Bank (resources nearly 200 million $), and by amalgamating the Union Trust Co. and the Guardian Trust Co. The Peoples Wayne County Bank acquired the American State Bank, with resources of about 50 million $, early in 1931, and absorbed the First National Bank (assets well over 150 million $), in which it had already had an interest, later in the year. With total resources amounting to well over 500 million $ and branches numbering about 220, the First National Bank—as the amalgamated institution was called—controlled in 1931 about three-fifths of the total banking business of Detroit. Both groups went to pieces in the crisis of 1933. Banking concentration has, however, not been diminished since the First National Bank and the Guardian National Bank of Commerce had to be amalgamated, so far as their current business goes, into the new National Bank of Detroit, set on foot with the help of the Reconstruction Finance Corporation. The city of Detroit, therefore, roughly speaking has now only one commercial bank for its 1½ million of inhabitants.

Cleveland banking has been dominated by three institutions for many years. The Union Trust Co. of Cleveland, formed in 1920 by an amalgamation of the Citizens Savings & Trust Co., and the First Trust & Savings Co., both of which had gone through many mergers, had at the end of 1931 total resources of nearly 300 million $, 20 branches and the most (partly acquired by absorbing the Cleveland Trust Co., had reached 280 million $ of assets, and 60 branches without the help of many mergers after 1922, and passed its rival early in 1932 by absorbing the Midland Bank of Cleveland. The Guardian Trust with 150 million $ of resources (partly acquired by absorbing the Cleveland National Bank in 1919 and the National Commercial Bank in 1921) and 16 branches still lagged somewhat behind. Other banks of importance were non-existent except the Central United Bank with resources of nearly 100 million $. In March, 1933 the Union Trust Co. and the Guardian Trust Co. had to close their doors, liquid assets and current business being transferred to the small National City Bank. Total banking resources of Cleveland will, therefore, in the future be almost completely concentrated in two institutions, the National City Bank and the Cleveland Trust Co.

The two-bank system has been in force in Buffalo since 1926. In that year the M. & T. National Bank and the Fidelity Trust Co. formed the M. & T. Trust Co., the new institution absorbing the Central Park Bank and the Riverside National Bank in 1926, and acquiring in 1929 the Peoples Bank, thus

assembling 150 million $ in resources in 1931 (1933: 100), as well as numerous branches by 1931. The Marine Trust Co. of Buffalo, which had absorbed the Bank of Buffalo in 1920 and the Citizen Trust Co. in 1923, however, led easily with total resources of 240 million $ (1933: 175) and a net of over thirty branches.

Intra-city concentration has not yet reached as advanced a stage in California, the second great region in which branch banks dominate, as it has in the Great Lakes industrial district. Los Angeles is, however, nearer this stage than San Francisco. In the middle of 1931, out of total deposits of 923 million $ within Los Angeles,[1] 392 were held by the Security First National Bank and its city branches, an institution issuing from the amalgamation of the Security Trust Co. and Savings Bank and the Los Angeles-First National Trust & Savings Bank (reflecting its character as a merger product in its very name) in 1929. The second place was occupied by the Los Angeles branches of the Bank of America of San Francisco, having 191 million $ of deposits. These two banks, therefore, kept 42 and 21 per cent of total deposits respectively. The Citizens National Trust and Savings Bank and the California Bank, both branch institutions with about 100 million $ of deposits each, and the Farmers' and Merchants' National Bank, having 70 million $ of deposits, but no branches, held another 29 per cent of total deposits between themselves. The remaining

[1] See statistics of the Clearing House.

8 per cent were divided among seventeen smaller banks.

Banking in San Francisco is still in the hands of about half a dozen independent institutions, competing on a nearly equal level, although mergers have been numerous during the last decade, and the Bank of America is now heading the field by a fairly wide margin. Out of its total resources of over 900 million $ (1931) not more than about a full third is employed in the city of San Francisco. Two other large branch banks, the America Trust Co. and the Bank of California had total resources of about 250 and 120 million $ in 1931 (the first bank works partly in branches outside San Francisco) while the assets of five unit banks, the Anglo and London-Paris National Bank, the Anglo-California Trust Co. (controlled by Anglo & London), the Crocker First National Bank (incl. the Crocker First Federal Bank), the Wells Fargo Bank & Union Co., and the San Francisco Bank amounted to 130 to 180 million $ each. Concentration is thus less marked in San Francisco than in any other large American city (excluding Washington and perhaps New York City).

Concentration has made somewhat less striking progress in the large cities south of the Mason-Dixon line having branch banks than it has in the East and in the Lake region, where legislative regulations are very similar.

Baltimore had 25 national banks and trust companies with total resources of 180 million $ in 1913, 24 with 390 in 1924, but only 14 with

about the same total in 1932.[1] This means expansion without concentration in the first period, and concentration without expansion in the second. At the end of 1931, however, not more than about 15 per cent of total banking resources were held by each of the three largest banks, the Baltimore Trust Co. (resources end of 1931, 86 million $; reorganized in 1933), the First National Bank (85 million $), and the Union Trust Co. (72 million $). Another quarter belonged to four medium-sized institutions, while about a dozen smaller banks claimed the remaining 25 per cent.

In Washington the number of commercial banks declined only from 21 to 17 between 1920 and 1932, while total resources rose from 186 to 275 million $.[1] Not quite 20 per cent of the total is held by the leading institution, the Riggs National Bank; the American Security & Trust Co. follows with about 15 per cent, another half dozen of banks holding 5 to 10 per cent of the total each. The degree of concentration is, therefore, exceptionally low.

The situation in New Orleans has more similarity to developments in the East, about two-thirds of total banking resources being in the hands of three banks, the Whitney National Bank (resources at the end of 1931, 86 million $, incl. affiliated Whitney Trust Co.), the Canal Bank (75 million $), and the Hibernia National Bank (62 million $).

It may be astonishing to discover that intra-city banking concentration has not made less progress in places where branches are prohibited

[1] See Table 24.

by law. The most notable example for this thesis is provided by developments in Chicago.[1] Up to 1927 progress was not very striking it is true, and the five largest banks held 47 per cent of total resources of Chicago banks in 1913 as well as in 1926,[2] their amalgamations being compensated by the creation of numerous small banks outside the financial district and in the suburbs. Since then amalgamations reached such a scale while no new banks were founded and many of the old smaller ones failed, that not less than two-thirds of total banking resources of a metropolis having four million of inhabitants have been concentrated since 1931 in two branchless banking institutions of now nearly equal size—the Continental Illinois Bank and Trust Co., and the First National Bank—located at a few hundred yards distance, which did not hold more than 35 per cent of the total in 1914 and 30 per cent in 1924. The Continental Illinois Bank is the outcome of a series of mergers, the last of which united in 1929 the Continental and Commercial National Bank (being an amalgamation of the Continental National Bank and the Commercial National Bank), and the Illinois Merchants Trust Co. (a combination formed in 1923 to 1925, out of the Illinois Trust & Savings Bank, the Merchants Loan & Trust Co., and the Corn Exchange National Bank). Total resources of the bank were as high as 1¼ billion $ in 1930, ranking first among banks outside New York City, but have fallen

[1] See Table 25.

[2] *Bull. No.* 17 *of the Bureau of Business Research, Univ. of Illinois*, p. 24.

since to about 750 million $ in the middle of 1933. The First National Bank, on the other hand, has not expanded by way of mergers up to 1929, in which year it absorbed the Rawson State Bank and amalgamated the Union Trust Co. with its own savings bank affiliate into the First Union Trust and Savings Bank, the savings department of which was in turn reabsorbed by the parent bank early in 1933. In the summer of 1931 the First National almost reached the size of the Continental Illinois Bank when it took over the Foreman State Bank (the infant issue of an amalgamation of the Foreman National Bank, continuing the business of a private banking firm founded in 1882, and the State Bank), the city's third largest bank which was about to collapse. The same banking troubles which had forced the Foreman State Bank to disappear induced the two next largest institutions to combine under the name of the Central Republic Bank and Trust Co. The Central Trust Co. of Illinois, headed by General Dawes, had heavily increased its resources by absorbing in 1924 the Bank of America; the National Bank of the Republic had merged the National City Bank in 1924, the Standard Trust and Savings Bank in 1928, and the Chicago Trust Co. in 1929. The new bank, subject to heavy withdrawals almost from the beginning, was saved from closing its doors in the summer of 1932 only by immense emergency credits, and had to transfer its current business to the new City National Bank shortly afterwards. While the two amalgamated institutions had had total resources

of 460 million $ in 1930, the Central Bank of the Republic retained but 210 a year later, and the new City National Bank had only 85 in 1933. There are only two more banks of importance, the Northern Trust Co. and the Harris Trust and Savings Bank, with resources of now nearly 200 and 150 million $ respectively. All other banks in Chicago—there were about 150 of them in 1930, of which only a fraction is still in existence—have to be content with less than one-fifth of total banking resources.

The degree of concentration is, however, still higher in neighbouring Milwaukee, also a branchless city. The First Wisconsin National Bank (most important member of the Wisconsin Bankshares group, which owns banks all over the state), with assets of about 150 million $, holds about one-half of total banking resources of the city. Thirteen medium-sized and small city banks affiliated with the same holding company have assets of nearly 50 million $, so that the group controls about two-thirds of the entire banking business in Milwaukee, leaving the rest to about a dozen independent unit banks.

The situation is not very different in Minneapolis-St. Paul. The First National Bank of Minneapolis, the First National Bank of St. Paul (both belonging to one group), and the Northwestern National Bank in Minneapolis (heading another group) hold between themselves and their affiliated city banks more than three-quarters of the total banking resources of the Twin Cities.

Concentration is slightly less developed in Kansas

City. In March, 1931, the largest institution, the Commerce Trust Co., held 100 out of 312 million $ of total banking resources of the city, the First National Bank, and the Fidelity National Bank and Trust Co., following with nearly 50 million $ each.[1] Consequently resources of the three largest banks amounted to 61 per cent of the total. The rest was divided between 32 small banks, none of which had more than 10 million $ of deposits.

St. Louis is one of the few cities in which concentration has not made marked progress during the last decade. The city had 12 national banks and trust companies with 174 million $ of total resources in 1901, 22 with 435 million $ in 1920, and 32 with 657 million $ in 1930.[2] It is only since 1931 that the number of unit banks in existence has notably decreased, falling to under 20 at the end of 1932. In 1931 as well as in 1933 nearly one-third of the total banking resources of the city were in the hands of the First National Bank, the Mercantile Commerce Bank (result of an amalgamation of National Bank of Commerce and Mercantile Trust Co. in 1929), following with about 25 per cent and the Mississippi Valley Trust with about 15 per cent.

It has thus been shown that in nearly every large city in the United States 60 to 80 per cent of total banking resources are in the hands of two or three banks or bank groups. The degree of concentration is, therefore, not less, but possibly even higher, than it is in Great Britain, Germany, France, or

[1] See table prepared by Prescott, Wright and Snider.
[2] See Table 24.

Canada, where as a rule all the large banks—numbering three in Germany, four in France and Canada, five in Great Britain—and often one or two important regional banks are represented in every major city and where it would be very rare to find more than 40 per cent of the total banking resources concentrated in one bank or group of affiliated banks, as is now the case in Chicago, Boston, Detroit, Cleveland, Akron, Pittsburgh, Milwaukee, Minneapolis-St. Paul, and Los Angeles—not to mention places having a population of under 200,000.

Chapter IX

BEGINNINGS AND GROWTH OF REGIONAL BRANCH BANKING

Banking concentration within the limit of the large cities of the United States began with this century, developed with great rapidity during the period 1924 to 1933, and may, generally speaking, be considered finished by now, except for the regrouping which will be necessary to clear up some debris of the general moratorium in March, 1933. Regional branch banking, on the other hand, had not made great progress before 1928—apart from developments in California,—stopped its march during the depression and is still in its first stages. It has taken two forms. Where the law permitted state-wide branch banking, systems of banks having their head offices in one of the larger centres and a number of branch offices scattered over towns and villages of a smaller or greater part of their state have grown up. Where the law prohibited this clear and outright set-up the method of combining a number of banks by means of common ownership of a majority of their voting stock has been resorted to. If the ownership is in the hands of an individual or a single bank, the system is called a bank chain, if it is vested in a holding company, all the shares of which are exchanged for shares of the affiliated individual

banks, thereby giving the system some co-operative tint, the name bank group is used.

Branch banking is as old as the American banking system itself.[1] The second Bank of the United States, which failed in 1839, had eighteen branches, which covered all the then important mercantile centres of the United States, representing, therefore, a type of branch banking much farther developed than is to be found at present. In the same year 1839 there were in existence in the United States 662 independent banks, but there were not less than 178 branches, predominantly in the South,[2] the ratio of branches to unit banks being much higher than it is to-day. From the fifties on, branch banks begin to disappear and so thoroughly did they do so (owing mainly to the banking difficulties in the South), that not more than 8 were found in the entire United States in 1889.[3] The renaissance of regional branch banking starts around 1905, with the development of the Californian branch systems, while urban branch systems had already begun to show some growth a decade earlier. The total number of branches rose from about 60 in 1900 to over 300 in 1910, nearly 600 in 1914, and nearly 1,100 in 1920 (not quite half of these outside the home city of the parent bank).[4] The growth of regional branch banking was sharply accelerated during the following decade, the number

[1] See *HR.* 141, p. 433.

[2] See Lawrence, *Banking Concentration*, p. 44; and Staines, *Sixty Years of Branch Banking in Virginia*.

[3] See Moulton, *Financial Organization of Society*, 3rd ed., p. 716.

[4] See *Federal Reserve Bull.*, 1924, p. 935.

of outside branches exceeding 1,100 in 1931. Chain banking dates back to pre-war days, too, examples are provided by the Witham-Manley group in the South-east, and the very loose Bremer group in the North-west. The decisive developments have been experienced only since the war. Banking groups, controlled by a single city bank are not a brand-new development either. They have, however, made such progress since about 1922, being very often closely bound up to intra-city concentration, that their rise is to all intents an affair of the last ten years. The type of quasi-co-operative group banking to be found in the North-west can even be said to be a complete innovation, none of these groups dating back farther than 1927.

In the middle of 1921 there existed only about 300 banks out of a total of 29,000 which had branches outside their home city, the total number of their outside branches barely exceeding 700. Ten years later the number of banks with outside branches was still roughly the same, but the number of outside branches had increased to 1,105. Progress, therefore, has not been at all rapid in this field. Most of the branch offices were located in towns and villages having less than 2,500 inhabitants, and had been instituted as *de novo* branches. The average size did not exceed 4 branches per system. How far outside branch banking still lagged behind intra-city branch banking will be shown by two comparisons: There were about 1,100 outside compared with nearly 2,500 home city branch offices; urban banks with branch systems had

about 22 billion $ of earning assets, while the assets of banks having branches outside their home city probably did not exceed about 3 billion $.[1]

Owing to legal obstacles, state-wide group and chain banking is still more important than outside branch banking. In 1929 about 2,000 unit banks and 119 branch banks with 1,400 branches and over 11 billion $ of total resources were listed as members of bank chains or groups.[2] The share of groups and chains confined to a single city is not known; probably, however, quite an appreciable part of the totals just given is to be classed as extra-city. Most of the chain and group systems (particularly the urban ones) are directly or indirectly controlled by a large city bank, which in turn may be under the control of a few individuals, or, if shareholders are numerous and inactive, practically autocratically governed by the executive officers of the day. Some of the most important extra-city group systems are, however, controlled by a holding company, the shares of which are very widely and evenly distributed; this is particularly true of the banking groups of the North-west, where holdings of more than 1 per cent of total capital are rare.[3] Bank chains, which are cemented by nothing but common stock ownership of an individual or a family are very numerous, but as a rule of small size. In 1929 an investigation listed 190 chains of this type—most of them represent an extra-

[1] The total of 25 billion is known with certainty (see Table 19), the splitting-up, however, is not more than a very rough guess.

[2] See Table 19.

[3] See *HR.* 141, pp. 799, 917.

city branch system masked—while groups controlled by banks or by holding companies numbered barely 100.[1] Total assets of extra-city chains have probably never exceeded about half a billion $. Their two largest representatives, the Manley chain and the Caldwell chain both confined to the South Atlantic states, have failed and dissolved in 1929 and 1930 respectively. Usually chains of this type do not have more than a dozen members and a few million $ of resources.

One of the main forces affecting the development of regional branch banking is to be found in legislation. This does not mean that legislation very materially affected the growth of the movement as a whole, but that it moulded the form which it has taken to a great extent. The rather chequered history of branch banking legislation has occupied a wholly unproportionate room in the American discussion of banking topics, so that a casual glance through what has been said by bankers, is likely to give the impression that the legislative regulation of branch banking had been the most important problem in American banking up to the present crisis, which, of course, is very far from being the case. In 1922 branches outside the home city of the parent bank were expressly prohibited by law in twenty states, while twelve other states put unsurmountable administrative difficulties in their way. During the next years, a great number of minor changes were put on the statute books without appreciably

[1] Loc. cit., p. 141; somewhat different figures are given by Mr. Hecht in *The Great Web of Chain Banking*.

altering the actual situation.[1] In 1930 the law prohibited the creation of outside branches in 32 states (10 of these permitting, however, intra-city branch offices, the most important being New York, New Jersey, Massachusetts, Pennsylvania, and Ohio); 7 states had not framed express provisions about the question (Kentucky, Michigan, New Hampshire, North Dakota, Oklahoma, South Dakota), while outside branches—within state limits of course—were legally sanctioned in the 9 remaining states (Arizona, California, Delaware, Maryland, North Carolina, Rhode Island, South Carolina, Vermont and Virginia). Branches outside the home state are prohibited without exception.

State laws do not bind National Banks as they do State Banks, Trust Companies and Savings Banks, even if they are members of the Federal Reserve System. The National Bank Act had, however, taken a most radical attitude and barred any branch development whatsoever, irrespective of what the law of the state, in which the bank was located, said. This proved to be a great disadvantage to National Banks working in states permitting branch banking, and led to an increasing number of withdrawals from the National System. The McFadden-Pepper Act, of 1927, tried to effect a compromise between the obvious necessities of the situation and the unabated opposition of the majority in Congress as well as of the large body of public opinion adverse to branch banking, which

[1] See *HR.* 141, pp. 422–4, 435–6, 463, and the current reports in the *Federal Reserve Bull.* for a detailed account of legislative changes.

was imagined to be the trail blazer of the Money Trust and the slayer of American individualism. The Act accordingly permitted National Banks to open branches in their home city in places where state laws allowed them (subject, however, to the approval of the Comptroller of the Currency and to certain limitations in places having less than 100,000 inhabitants). But it did not allow extra-city branches even where they were permitted by state law and went so far in its endeavour to stamp out regional branch banking that it debarred actual or future member banks of the Federal Reserve System from opening any outside branch office after the passage of the Act, even if these banks were chartered under the law of a state permitting state-wide branch banking.

As a result of this legislation state-wide branch systems are practically confined to two districts, the state of California and the Middle Atlantic region, comprising Delaware, Maryland, Virginia, Kentucky, and the Carolinas, while nation-wide branch systems do not exist at all. Banking law has, however, failed to take any steps against the formation of groups and chains. This is partly due to the fact that legislators were not keen enough to anticipate these forms of circumventing the statutory provisions. It is to be explained as well by the very great legislative and administrative difficulties, which any regulation of holding companies and multiple ownership had to encounter in a country split into forty-nine law-areas. Groups and chains have therefore arisen in

practically every state in the Union, being however, concentrated in those states which prohibit extra-city branch banking, i.e. the Middle Western and North-western states, New York, Massachusetts, and Pennsylvania. No law prevents the creation of a chain or group system covering the entire United States. As a matter of fact groups which go beyond the limits of one of the forty-nine states of the Union are very rare. The North-western groups have member banks located in half a dozen states (although practically confined to two or three of them) and some of the Southern groups stretched over three to five neighbouring states. There has been only one instance, however, in which a group reached from the Pacific to the Atlantic as the Trans-America Corporation did for the short time between March, 1929, and September, 1931, and even then it left the whole continent between the sea borders unoccupied.

There is but little doubt that the most important single force making for extra-city branch banking (including, for brevity's sake group and chain banking under this broader term) in the post-war period is to be found in the precarious situation of the smaller rural bank. An analysis of the factors bringing about this situation will be given when the problem of bank failures is discussed.[1] Joining a group or changing into a branch of a city bank could not of course, suddenly cause the forces, which curtailed the range of activities of the small rural bank, to disappear or do away with

[1] See Chapter IX, pp. 210 ff.

all its difficulties. There were three things, however, the connection with a group or branch system could do: It could better management, it could spread risks and it could improve the profit ratio.

Improvement of the profit ratio was more or less bound to take the form of a decrease in costs. Simplification and standardization of accounting methods, of forms, and of the technique of individual transactions were the weapons used, all of them resulting in reduced labour costs per unit of work. An appreciable saving was possible in many cases by replacing the president of the independent bank by the branch manager, who worked according to instructions and advice received from the head office and could, therefore, obtain equal results if he was a less qualified and worse paid man, or better results with equal qualifications. The practice of analysing individual accounts, hitherto unknown in smaller banks, led to the abandonment of unprofitable accounts or to the imposition of adequate service charges. Expenses were reduced too, by borrowing at lower rates at the parent bank or group head, using its own or other members' surplus deposits than would have been possible at a correspondent bank. All these savings can not, however, amount to very great sums—the branch's or member's share in the expenses of the head office must, moreover, be regarded as a partial set-off—and are not sufficient to provide an explanation of the trend towards regional branch banking.

Spreading of risks has, in fact, been one of the most important incentives. The small bank is

inextricably bound up with the fate of its town or county, since it is practically forced to loan all its funds, not held as liquid assets or invested in securities, to local borrowers. This means an extraordinary accumulation of risks, as American industry and American agriculture (producing more or less exclusively for the market and not for home consumption) are highly specialized, concentrating county-wise or city-wise on the production of a very few articles or crops to a higher degree than is the case in most European countries. Therefore, most of the depositors of a small bank will pay in and withdraw money at the same time, and demand for credit in the community will be highest when deposits fall off. A branch or group system is able to avoid a great part of these difficulties, provided it extends far enough to include economic regions of different character. The Californian branch banks and the North-western bank groups do more or less satisfy these requirements. Both of them encompass agricultural regions of varying character yielding different staple products (fruit, wine, oranges in California; wheat, oats, linseed, sugarbeet, dairy produce, meat in the North-west), and several industrial centres specializing in different types of manufactures. The requisite diversification is, on the other hand, lacking in the territory covered by some of the Southern branch and group systems; agriculture is here centred on the rearing of one crop—either cotton or tobacco—so far as production for the market goes, and industry is nearly completely absent over wide stretches.

The improvements of management, which the head office or the group head offer, have however, probably been the most important single factor in the trend towards extra-city branch banking. The touchstone is: losses on loans and investments. Losses on loans are reduced by substituting credit analysis for personal impressions and neighbourly contacts, which had hitherto been the sole basis of the small banks' loan policy. Credit analysis means that the debtor has to submit regularly balance-sheet and profit-and-loss account and that the bank has to base the decision about credit lines on facts and figures. Credit analysis means, moreover, a constant control of the debtors' financial situation and the necessity of sticking to dates of repayment fixed beforehand. It is by credit analysis, based on information gathered over the whole territory of the banks' activities and supplemented by the findings of the economic department, that the formulation and the realization of a definite loan policy, which ought to diminish losses and misapplication of credits, become possible. Not all the branch and group systems have progressed far enough with their organization to reap the full benefits of credit analysis intelligently applied. There is, besides, always the danger, although avoidable, that credit analysis may lead to officialism and routine work in the credit department. The fact, moreover, that branch and group banks are prevented by the application of credit analysis from making as many individual mistakes in granting loans as small independent banks would probably

make, does not make excessive loans of one type or to whole groups of borrowers impossible; it would seem, e.g., that some of the Californian branch banks have gone decidedly too far in loaning on urban and on farm real estate, not to mention the banks of the Manley chain, which were brought down by speculative real estate commitments in Florida.

The advantages which the branch or group system has over the small independent bank are clearer still when it comes to building up the investment portfolio and administering liquid funds. The small banks' purely local point of view may be an advantage in some types of credit business, where thorough knowledge of local conditions or of borrowers' personalities are important; it is fatal when the complicated problems of investment in securities and of money market operations come to the fore. The consequences of these shortcomings have differed according to the ability and the temperament of the small banks' management. Where prudence and the realization of the difficulties involved prevails, investments are limited to United States Government securities and liquid assets to cash and deposits with banks regarded as absolutely safe; it ought to be added in defence of the small bank that quite a number steered this course. A small or medium-sized bank can, however, afford to follow this course only if it is able to charge high rates on safe loans and if its expenses are lower than the average. Where, on the other hand, the necessity of earning high average rates on

total assets or speculative inclination led to abandon this course of safety, the small bank inevitably became a victim of security salesmen's offers and selling talks, lacking sufficient judgment and discrimination of its own. The rule, that the smaller the bank the worse the quality of the investment account is, therefore, very often quite to the point. It is here that the head office of the group or branch system could and did act most quickly and most thoroughly. Nearly all the groups have now centralized the administration of the member banks' investments accounts at the head bank, and have effected additional investments as well as switching operations for the whole system through a special department, using the advice of statisticians and economists. It is clear that even this system is not an insurance of the small bank against losses on investment accounts at the head bank, and have additional investments as well as switching operations effected for the whole system through a special of investments into better agreement with the position of the capital market.

The state-wide branch banks and, still more, the regional group banking systems are not yet old enough to permit an unambiguous judgment to be passed on the question whether they actually do possess the higher earning power and the greater stability, which is often attributed to them and which was granted them as a possibility in the preceding pages. Experience in the last decade would, however, suggest a favourable decision. From 1921 to 1929 a total of 41 branch banks with

deposits of 49 million $ and 80 branch offices—i.e. an average of 1·2 million $ and 2 branches per bank—have been forced to suspend operations,[1] nearly all of them small rural systems. Failures amount to about 12 per cent of the number, but only to about 1½ per cent of total deposits of extra-city branch systems, favourably comparing with a death-rate of about 20 per cent (number) and about 10 per cent (deposits) for rural independent unit banks. The same comparison yields similar results when carried through for bank groups[2]: The failure of 50 groups with 226 member banks and 102 million $ of deposits, i.e. 4½ banks and 2 million $ of deposits per group, is equivalent to a death-rate of about 10 per cent (number of banks affiliated) or 1 per cent (deposits) against about 20 per cent and 5 per cent for all independent banks in the United States. These figures are far from conclusive, but they at least rule out the theory that regional branch banking has fared worse than rural unit banking.

The real test, however, has been provided by the experiences of the present crisis. Up to the end of 1932 not more than 12 of the larger branch and chain systems with 283 branches or affiliated banks were listed as victims[3] but only 7 of these systems with 186 branches or affiliated banks may be regarded as regional branch systems,

[1] See *HR*. 141, p. 462.

[2] Statistics do not permit a distinction of urban from rural groups. It is, however, certain that up to 1929 failures were almost entirely confined to rural systems.

[3] See a list prepared by Mr. R. O. Byerrum and reprinted in the *Commercial and Financial Chronicle*, 1933, i, p. 51.

5 with 97 branches confining activities to their home city. This would not seem excessive when compared with the total of somewhat over 3,500 unit banks in places of less than 5,000 inhabitants, out of a total of about 18,000, which failed during the three years 1930 to 1932. Moreover, not less than 114 out of the 186 rural affiliated banks that failed belonged to the type of chains controlled by identical individual ownership, which is admittedly the most unstable of all forms of regional branch banking. The crisis has demonstrated, that the principle of regional branch banking as such is no absolute safeguard against difficulties or against failure. It seems to have established, however, that it really is a very powerful stabilizing and saving force if properly applied. The most conclusive fact is that only one larger regional branch banking system has failed so far, the Peoples State Bank in Charleston with 44 branches and about 25 million $ in deposits, which came to grief in 1931, because it continued its expansion during the crisis and had the misfortune that every district of its home-state, South Carolina, was very severely hit by the depression in this year. Difficulties have been experienced by the largest of the Californian branch banking systems making temporary credits by the Reconstruction Finance Corporation and some degree of reorganization necessary, but these difficulties have finally been more or less overcome. The North-western groups, on the other hand, have weathered the storm of the crisis with apparently unusual success,

although they worked in a territory severely affected by the agricultural depression and rich in bank failures. They have even been strong enough to continue their expansion during the last two years.

Regional branch banking undoubtedly possesses advantages from the point of view of stability and of safety. It could, however, not have risen to its present extent if these worthy causes had not been supplemented by incentives more appropriate to the system of free enterprise—promotion profits and the race for big figures—and aided by the easiness with which the development of overland branch-bank and group-bank systems could be financed thanks to the nearly insatiable demand of the public for bank shares. The great stock exchange boom has been the midwife if not the father of regional branch and group banking. It was perhaps unavoidable that very high prices should have been paid for institutions absorbed by branch banks or affiliated to groups and chains, the more so because most of the groups were built up in the years of the peak values (1928–9) and competitive buying of suitable banks was clearly noticeable in some districts. The result is that many of the branch or group systems are heavily over-capitalized, if present values are used as a basis—a remark which could be made at the present moment with the same justification about intra-city group and branch banks—and the prices of their shares have diminished very heavily. Since, however, these purchases have, as a rule, been financed by the issue of common shares (partly to the public for cash, partly to the shareholders of the banks absorbed or

affiliated in exchange for their holdings) no serious consequences have arisen for the banks themselves and their regular activities. It is true, that many of the regional branch and group banks would show capital and surplus at an impossibly low level if they had to make up their balance-sheets to-day, but this is a fact which is common to all types of banks in the United States, and will have to be remedied in ways not peculiar to the one or the other group.

By far the largest, the most extensive, and the most discussed of all overland branch systems is represented by the Transamerica Group.[1] Its nucleus and backbone, the Bank of Italy (rechristened Bank of America N.T. & S.A. in 1928) was founded in 1904, in San Francisco, by a small group of Italian immigrants engaged in the fruit trade. The little bank started the new practice of opening branch offices in San Francisco as well as in neighbouring territory, and had increased slowly but steadily to a 20 million $ institution by 1915. The next decade saw its rise to one of the leading financial institutions on the Pacific coast, increasing its resources to 300 million $, and the number of its branches to seventy-seven at the end of 1923, about 40 per cent of its resources and 70 per cent of its branches being the result of a large series of mergers.[2] Up to this time the bank, although of large size, confined most of its activities to commercial banking in Middle California. For the next six years it expanded with

[1] The main source of information about the group is to be found in the testimony of its guiding spirits, Messrs. Giannini and Bacigalupi before a House Committee (see *HR.* 141, pp. 1399 to 1567).

[2] See Table 26.

unique rapidity in every direction, local and national, finally becoming a not inconsiderable factor in American finance. First it invaded Southern California by absorbing in 1924 the Bank of America and the Commercial National Bank, two important Los Angeles institutions. During the following years the circle of branches and affiliations throughout the whole of California was further enlarged, with the result that at the peak (end of 1930) total resources reached nearly 1,200 million $ (since fallen to under 900 million $), and the army of branches finally numbered over 400—a quintuplication since 1923. The bank then reached out to the North, acquiring the majority of the First National Bank of Portland (Ore.) and, what is by far more important, to New York. The Bank of Italy, as a matter of fact, had taken an interest in the East River National Bank, an old but not very important institution, as far back as 1918. It now acquired in 1924 the Commercial Trust Co. and in 1925 the Bowery Bank, both smaller banks too, amalgamating all three early in 1926 under the name of Bowery and East River National Bank. What had been but a minor branch of activity without close connection to commercial banking in California and unable to give the group a voice in New York banking was now charged with the task of becoming a major and vital part of the group, destined for great things, when in 1928 the Bancitaly Corporation security affiliate to the bank, acquired the majority of the Bank of America (absorbing the Bowery and East River National Bank), one of the oldest New York banks,

with resources of over 400 million $ and thirty-five branches. The group thus secured a direct connection with the metropolitan money and capital market, and was able before long to occupy the dominating position in transfer, cheque clearing, and similar activities between the East and the Pacific coast.

At the same time the group had been extending its activities into an increasing number of fields more or less—and the less the further the years went on—closely connected with commercial banking.[1]

The group had, to begin with, close connections with investment banking. Originating, underwriting, and distributing business in the United States and abroad was originally done by the Bancitaly Corporation, the Corporation of America, the Ameritalia Corporation, the American Investment Co., and others, any outsider being unable to discover what each company really did. The group in 1928 set up, moreover, the Commercial Holding Co. with resources of 81 million $ in 1929, described as an "active trading company",[2] i.e. a speculator in securities. The investment activities of the group witnessed a further expansion in 1929, when the security affiliate of the Bank of America was amalgamated with the large old private investment banking house of Blair & Co., forming the Bancamerica-Blair Corporation, with twenty-seven branches all over the United States

[1] See tables giving set-up of the group in *HR.* 141, facing p. 1350.

[2] Loc. cit., p. 1432.

and five offices abroad, one of the largest security distributing organizations of the country.

The group further possessed, to enter remoter fields, an agricultural credit corporation, a mortgage company with resources of 25 million $, two realty companies, a joint stock land bank having resources of 17 million $, a large branch banking organization in Italy (the Banca d'America e d'Italia with thirty-seven offices and 1,670 million lire of resources), and two smaller insurance companies (one fire, one life).[1]

The extraordinary development of the Transamerica group may be attributed to three main causes: the consequent building up of a closely knitted regional web of branch banks; the exceptionally rapid economic development of the banks' home territory during the last quarter of a century; and the unbounded possibility of financing any degree of expansion by means of the issue of common shares at high prices filling the corporate treasury with money available for every purpose. The development was so rapid, that the necessary solidification lagged behind in many places of the giant structure. The expansion multiplied the number of shareholders, leaving the inner group of founders finally with but a minority interest; this led to serious differences in the management, since

[1] The whole maze of these companies was inter-related in many direct and indirect ways, connecting links running forwards and backwards, holding companies being interposed and subsidiaries of the second or third degree being numerous. A general simplification was effected in 1928, and the new Transamerica Corporation was made the holding company for all the corporations belonging to the group.

a large block of shares had passed to Eastern interests after the absorption of the Bank of America of New York and Blair & Co. Success—maybe the origin of the dominating group, too—created many enemies. The political activities of the big Californian banks of the group—possibly nearly unavoidable under the American type of state government—and the fear that a new financial octopus was in the being swelled their ranks. The depression, therefore, found the bank already somewhat past its zenith and created new difficulties, which were much more dangerous than the old enemies had been. The structure proved particularly vulnerable on two points: the Californian branch banks had loaned very large amounts on mortgages—justified to some extent by the savings character of a majority of deposits—which became frozen and undercollateralized through the fall of estate values, particularly severe in California. Some members of the group had, moreover, as rumour has it, loaned large sums to speculators and investors on the security of Transamerica shares, which were now depreciating at a speed higher even than that with which they had risen, falling from $67 in 1929, to not more than $2 in 1931. It was not, however, until the fall of 1931, that the group did experience serious difficulties, accentuated by heavy withdrawals and accompanied by a struggle for control, in which the Eastern interests prevailed for a few months, only to be thrown out of their position by the old Giannini group early in 1932. During this period the Bank of America of California was

forced to have recourse to huge emergency credits given by the Reconstruction Finance Corporation and other agencies,[1] while the Transamerica Corporation had to retrench the range of its activities quite considerably, selling in October, 1931, its interest in the Bank of America of New York to the National City Bank and divorcing the Bancamerica-Blair Corporation. The group is consequently now again more or less [2] confined to the field it started from, and which it never ought to have left, commercial and savings banking in California, having buried all plans for developing a nation-wide system embracing every type of financial activity. It has apparently weathered the further phases of the depression not too badly in its new and less ambitious form.

California has seen the rise of two large branch banking systems besides the Bank of America group during the last twenty years. Both of them are, however, rather of the intra-city type doing the bulk of their business in their home town. The American Trust Co. (controlled for some time by the New York investment banking house of Goldman Sachs & Co.) with well over 200 million $ of resources and about 100 branches, is confined to the city of San Francisco and the neighbouring Bay district. The Security-First National Bank of Los Angeles does not work outside Southern California, and has about three-quarters of its resources of half a billion $ and nearly one-half of its 130 branches concentrated in Los Angeles City.

[1] See *Commercial and Financial Chronicle*, 1933, i, p. 611.

[2] The investment and trading subsidiaries having probably lost any importance by now.

Large regional branch banks are confined more or less to California. Regional bank groups of large size, on the other hand, are a feature of banking organization in the continental North-west. Their history and their structure diverge rather widely in some points from that of their branch-banking relatives. All these groups have only been formed very recently, 1927 or 1929 being the birthdate in every case. They all have one (or two) large urban bank as a nucleus and include as a rule chiefly medium-sized banks in smaller cities or towns. All of them are modelled after the same corporative pattern: A holding company owns all or most of the shares of every bank belonging to the group, the shares of the holding company in turn being predominantly owned by the former shareholders of the group banks, who have exchanged their holdings; new member banks are acquired either for cash or by way of offering shares of the group holding company to its shareholders. Finally, the motive forces, which have led to the formation, are nearly the same for all the groups: The difficulties experienced by independent small and medium-sized banks outside large cities and the advantages of the affiliation with a large urban bank. Regionalistic sentiment, always very active in the United States, coupled with fear of domination by Wall Street, and strengthened by the desire to keep money at home,[1] have played an important role too.

That these tendencies have resulted in the formation of bank groups and not of branch banks is

[1] See e.g. *HR.* 141, pp. 792, 794, 802.

partly a consequence of the emotional importance of formally independent local banks and of the farmers' antipathy to any centralized system of finance, and partly the result of the head bank's desire to preserve a higher degree of independent judgment and of direct contact with customers, using as medium the board of directors of the member banks, which contain the economic or political leaders of the communities served. By far the most important reason leading to the choice of the group system, however, is the prohibition of branch banking in most states in this part of the country. The difference between a branch bank and the groups is, as a matter of fact, not more than a gradual one by now, since control of the group head over member banks' activities has become much closer and much more detailed in the last years; daily reports, weekly balance-sheets, and regular audits by employees of the head office are all the rule now; accounting procedure and forms have been more or less standardized for all affiliated banks; the final decision as to every credit of importance is now given in the head office; the investment portfolio as well as money market transactions and relations with correspondent banks are in general administered centrally. It is therefore to be expected that most of the groups will be transformed into branch systems, having the advantage of simplicity and clarity, as soon as legislative barriers are removed.

Group banking in the United States is best represented by the three North-western groups

(the holding companies of which bear the names of First Bank Stock Corporation, Northwest Bancorporation, and Wisconsin Bankshares Corporation), the Marine Midland Corporation in upper New York State, and the Guardian Detroit group in Eastern Michigan.

The Northwest Bancorporation group, formed in January 1929 as the first of the three groups in this region, centres around the Northwest National Bank in Minneapolis, a unit bank with about 100 million $ of resources. At the beginning of 1930, the group included about 100 banks with assets of nearly 450 million $, increasing its membership to 127 up to the end of 1932, while resources fell to nearly 350 million $. Most members of the group are located in Minnesota, the minority working in the neighbouring states of Nebraska, the Dakotas, Iowa, and Wisconsin. The head bank holds about 20 per cent of the group's total resources, while eight large member banks in Minneapolis, Duluth, Des Moines, Omaha, and Fargo hold another 40 per cent, leaving about 40 per cent for the 113 smaller members of the group.[1] This group is the least centralized of the five.

The First Bank Stock Corporation, combining about 80 banks in 1929, almost 100 in 1930, and 114 banks at the end of 1931, with total resources of about 350 million $ (end of 1932), covers a wider area, but is more highly concentrated nevertheless. It is a double-star system, having as nuclei the

[1] See *HR.* 141, p. 787, and Annual Reports of the Northwest Bancorporation.

First National Bank in Minneapolis and the First National Bank in neighbouring St. Paul, with fully 100 million $ of assets each. Since the group includes fifteen more banks with something like 80 million $ in Minneapolis and St. Paul, about 70 per cent of its total resources are in the Twin Cities. The outside member banks are spreading from Montana via the Dakotas and Minnesota to Michigan.

Still higher is the degree of concentration in the Wisconsin Bankshares and the Guardian Detroit groups. The Wisconsin Bankshares group has total resources of about 250 million $ in nearly fifty affiliated banks. Not less than 60 per cent of the group assets are held by the group head, the First Wisconsin National Bank in Milwaukee. Another 15 per cent is in the hands of a dozen of smaller member banks in Milwaukee, while the rest of the members, having only about 25 per cent of group assets, are all located within the boundaries of the State of Wisconsin.

The Guardian Detroit group was the first one of the large group systems to appear (being formed in September, 1929, out of a merger of two smaller groups dating back to 1927), and the first one to dissolve. Total resources of the nearly thirty banks belonging to the group were 476 million $ early in 1930, falling to 433 million $ at the end of 1931. The head bank, the Guardian National Bank of Commerce in Detroit held nearly 50 per cent of total group resources, the Union Guardian Trust well over 10 per cent, and half a dozen smaller

member banks in Detroit another 10 per cent, so that not quite 30 per cent of the business of the group was conducted outside the city of Detroit, being practically confined to the eastern part of Michigan. The group was thus inextricably connected with the situation in Detroit, and had, moreover, loaned an excessive part of its resources on urban real estate. Unable to stand a prolonged run in February, 1933, the chief constituents of the groups had to close, originating a banking moratorium for the whole state and thereby precipitating the general moratorium over the entire area of the United States early in March, 1933. Current business of the Detroit banks of the group was then taken over by the new National Bank of Detroit. The group is presently in the process of dissolution.

The Marine Midland group, formed in October, 1929, comprises twenty banks only. The Marine Trust Co. of Buffalo which had taken up intra-city branch banking in 1916, and acquired an interest in about half a dozen banks in the neighbourhood, holds nearly one-half of the about 500 million $ of the groups' total resources. Another 20 per cent are held by the New York representative of the group, the Marine Midland Trust Co. acquired in 1930 as the Fidelity Trust Co. The other members are medium-sized banks, usually having more than 5 million $ of resources, situated in the northern part of New York State.

CHAPTER X

BANK FAILURES

FROM the beginning of 1921 to the end of 1932, out of 31,000 banks in existence at the opening of the period, over 10,500 (or deducting the banks which have been able to reopen later, nearly 9,500) have failed.[1] Another 3,000 had not been in a position to resume full operations after the general banking moratorium of March, 1933, up to the middle of the year. Since a great part of these banks will probably remain closed, the total death roll may amount to about 12,000, i.e. nearly one out of two banks existing at the end of 1920. Deposits in failed banks up to 1932, totalled 4½ billion $ (excluding banks reopened), while capital amounted to over half a billion $. Assuming that shareholders lost nearly their entire equity and that depositors were or will be paid to 70 per cent,[2] total losses by bank failures up to 1932 would represent a sum of at least 2 billion $. How large the losses arising out of the failures of the spring of 1933 will be, can not yet be estimated; they will surely come near to another billion $. Such a record has probably not been

[1] See Table 27.

[2] In the case of National Banks completely liquidated between 1865 and 1930 depositors' losses amounted to 22 per cent, while shareholders lost 84 per cent of their capital, and had, moreover, to shoulder assessments of more than half the amount of their capital invested in shares of failed banks (see *Annual Report of the Comptroller of the Currency for* 1930, p. 30).

duplicated anywhere in the world,[1] and does appropriately form the centre around which all discussions on American banking turn.

Failures may be divided into three great epochs of diminishing length but increasing scope and severity. The first period begins in 1921, and extends until the autumn of 1930. It is an era of failures among small rural banks. While it lasted, about 5,500 banks with total deposits of about 1,700 million $—i.e. only about $300,000 per bank—closed their doors, about 85 per cent of their number being located in places having less than 5,000 inhabitants. The second epoch covers nearly two and a half years, starting in the autumn of 1930, and coming to an end early in 1933. Rural bank disasters continue and even increase. It is, however, the failure of large urban banks all over the country, which gives this period its characteristic tint. Out of nearly 4,000 banks (reopeners excluded) with more than 2½ billion $ of deposits—making the average per bank over $600,000, or double the amount of the previous period—which closed during this time, nearly one-quarter with the great majority of deposits affected was located in places having over 5,000 inhabitants, and a group of a few dozen large banks may account for about half of the total assets involved. Moreover, a great number of emergency amalgamations representing additional banking difficulties, which were stopped just before

[1] Except perhaps in Germany, if the events of July, 1931, are regarded as the breakdown of practically every large bank, reorganized afterwards with Government assistance.

a closing of doors became unavoidable, took place during this period and many of them involved banks with resources of 50 to 100 million \$. Finally, a still greater number of banks was saved only by emergency credits from the Reconstruction Finance Corporation, which lent 850 million \$ to about 4,000 banks during the year 1932, about half of these credits going to one or two dozen of large urban banks.[1] It may, therefore, be said that nearly every third bank in the United States in existence when the prosperity era ended, had got into serious difficulties for a longer or shorter time by the end of 1932. The third period of bank failures lasted for only two months—February and March, 1933. It was more serious than any previous period, however, in so far as it forced every bank to suspend operations for about a week early in March, and closed about 3,000 of them with some 2½ billion \$ of deposits[2] for a prolonged period or *ad infinitum.* The average of \$800,000 of deposits per bank shows that urban institutions

[1] See the list published in *Commercial and Financial Chronicle*, 1933, i, pp. 763–772. The largest items in 1932 (giving in some cases only part of total credits granted) are :—

Central Republic Bank, Chicago . .	90 million \$
Bank of America, San Francisco . .	65 „ „
First Central Trust, Akron . . .	18 „ „
Union Trust Co., Cleveland . . .	14 „ „
Guardian Trust Co., Cleveland . .	12 „ „
Union Guardian Trust Co., Detroit .	13 „ „
Atlantic Nat. Bank, Boston . .	10 „ „

[2] See *Federal Reserve Bulletin*, 1933, p. 209. These data refer to banks not reopened up to 30th June. Another 2,000 banks with deposits of 1¼ billion \$ had not reopened immediately after the moratorium, but were salvaged or reorganized during March, April, May, and June.

form the most important group among the victims. The fact that the percentage of deposits in banks not reopening after the general moratorium was lowest—excepting New York—in the agricultural Middle West (Federal Reserve Districts of Minneapolis, Kansas City, and St. Louis) in the South-west and on the Pacific coast,[1] seem to reinforce this assumption.

It will, therefore, be necessary to study bank failures as a double problem: The plight of the small rural bank, most astonishing in the years of national prosperity, and the troubles of the medium-sized and large city bank, developing as a corollary to the later phases of the present depression.

Out of about 22,000 rural banks (defining them as banks in places with less than 5,000 inhabitants) in existence at the end of 1920, well over 4,000 have had to close during the period of national prosperity lasting until 1929, while fully 3,000 more have failed during the depression years 1930 to 1932, and nearly equal a number has been brought down by the spring gale of 1933. In striking contrast to these developments failures among rural banks (as well as among urban institutions) have been exceptional for half a century before 1920. From 1865 to 1903, an epoch comprising three major crises, only 408 National Banks, equal to 4½ per cent of their total number, collapsed[2]; in the seventeen years 1904 to 1920, not more than 1,170 banks—an annual average of 69, with a maximum

[1] Loc. cit., p. 216.

[2] *Statistics for the United States* 1867–1901, pp. 40–1.

of 156 in 1908—have been forced to close their doors.[1] Many criticisms abusing the pre-war banking system of the United States may be well founded, but an especially unsafe structure it obviously was not. From 1921 on, however, no year has passed with less than 350 bank failures, irrespective of the position of the business barometer, the average over the twelve-year period (i.e. excluding 1933) being nearly 900. Which are the reasons for this complete change in the fate of rural banking in the United States?

The first reason is usually overlooked, because it goes back to pre-war days: the bank promotion boom of the first decade of the century continuing, although at a slackening rate, until 1920. The increase in the number of banks between 1900 and

30. VI	Population[2]	Banks[3]	Population	Banks	Banks per mill. inhab.
	Mill.	Number	1899 = 100		
1879	49·1	5,443	66	44	111
1889	60·8	9,614	83	78	156
1899	74·8	12,280	100	100	164
1909	90·7	23,671	121	193	261
1919	105·0	29,123	140	237	277
1929	121·5	25,330	162	207	208
1932	124·8	19,046	167	155	153

1920 exceeded the rate of growth of the preceding decades, the increase in population, the rise in the

[1] See *HR.* 141, p. 79.

[2] *Statistical Abstract of the U.S.*, 1932, p. 3.

[3] 1879 to 1909: Barnett, *State Banks and Trust Companies since the passage of the National Bank Act*, p. 201. 1919 and 1929: *Statistical Abstract*, 1930, p. 262. 1932: *Federal Reserve Bulletin*, 1933, p. 225.

volume of production, or the expansion of national income. Moreover, the new banks were more or less confined to the agricultural South and West; from 1900 to 1909 the number of banks in the Southern states jumped from 1,600 to 5,000, in the Mid-western states from 3,500 to 7,100, and in the Far West from 2,100 to 5,600, whereas the increase was only from 2,200 to 3,100 in the industrial East.[1] This development was induced by the apparent profitability of banking (a corollary to rising land values and general prosperity), and fostered by a lowering of the minimum capital necessary for starting a bank. Rural bank failures since 1921 are to a large extent nothing more than a reaction to this era of bank promotion, hitting those parts of the country hardest where the multiplication of banklets had been most pronounced in the two decades preceding. This reaction was probably due as far back as about 1915. The rise of agricultural prices and of farm-land values during the war did nothing but postpone it for a few years and intensify it greatly. The rural population of the United States is not very much larger to-day than it was in 1900. It is improbable, therefore, that more rural banks can be kept in existence now than flourished then (i.e. 10,000 to use very round numbers)—the more so because the competitive position of the small rural bank has been seriously impaired, as will be shown presently. It so happens that 10,000 is probably nearly exactly the number

[1] See *Statistical Abstract*, var. numbers; the figures are less comprehensive than those given on p. 210.

of rural bank offices in operation after the crash of March, 1933, indicating that the reaction has run its course now, or even somewhat overshot its natural goal.

The second major force responsible for rural bank failures, the cause that is usually put far in front of all others and not so rarely treated as if it was the only one of importance, is the agricultural depression of the twenties. It is, of course, evident that a fall of agricultural income from an average of 15 billion $ (1918–20) to between 10 and 12 billion in the years 1922 to 1929, and down to 5 billion in 1932,[1] and a shrinkage of farm land values from 170 per cent of the pre-war level in 1920 to 124 in 1926 and to 89 in 1932,[2] was bound to have grave effects on institutions, which were lending more than half of their total resources to farmers, and were likewise receiving a great part of their deposits from agriculturalists. The number and the percentage of bank failures was, therefore, highest in those states which were most exclusively dependent on agriculture and in which the types of agriculture hardest hit by the depression dominated. From 1920 to 1929, 57 per cent of all the banks in the State of South Dakota failed, 50 per cent in New Mexico, 49 per cent in South Carolina, 48 per cent in North Dakota, 47 per cent in Montana, 43 per cent in Georgia, and not less than 72 per cent in Florida, where they had experienced the double scourge of an agricultural depression and an exploded

[1] *Yearbook of Agriculture*, 1933, p. 703.
[2] Loc. cit., p. 733.

real estate bubble. All of the eight other states which have lost over 20 per cent of their banks are also predominantly agricultural. None of the industrial states has a failure-ratio of more than 6 per cent (Rhode Island), while the ratio for New York and Pennsylvania is down to 2½ per cent, and for Massachusetts even as low as 1¼ per cent.[1] It is, therefore, true that banks in the agricultural areas had a much more difficult task before them than urban banks or banks in the industrial East. But the difficulties that faced them and over-powered about one-quarter of their number during the era of national prosperity and about one in every two up to 1933 are, to a large extent, not simply corollaries of the agricultural depression as such, i.e. losses on loans to farmers or seepage of farmers' deposits, but tendencies which developed more or less independently of the agricultural depression, and reflect changes in the whole structure of American economic life and particularly in the rural credit machinery. The fact that they too affected financial conditions in rural districts has led superficial observers to mistake their consequences for effects of the great agricultural depression.

All these difficulties can be summed up under the title: curtailment of the rural banks' range of possible and profitable activities. For the bank in the village or the very small town, the paved road and the cheap automobile, ending the quasi-isolation of the American farm and shortening every distance, were the factors chiefly responsible for this loss of

[1] *HR.* 141, pp. 83–4.

business. The rural general store and the rural bank have both come to feel the attractive power, which the next market-place or small town gained over the automobilized farmer, a power based on a wider range of goods to choose from as well as on lower prices, and reinforced by church and cinema. The ride from the farm to the bank in the next town is not longer to-day than the walk to the village bank twenty years ago. " The automobile has killed the rural bank " is the text on which one witness after the other preached to the Congressional Committee on Banking, sitting in 1929.

But this widening of the area served by banks in small cities (say from 2,500 to 10,000 inhabitants) has not been sufficient to counterbalance the losses suffered in other directions, as witness the nearly 700 bank failures which occurred in these places from 1921 to 1929. The small-town bank has been hit by the loss or the curtailment of two of its most profitable auxiliary activities, the collection of cheques and the placing of rural mortgage loans, and has severely suffered from the decline of one of its best customers, the general store, that old-fashioned combination of provision shop, hire-purchase agency, seed and crop financing institution, produce wholesale business, and pawn shop, which has played so important a role in the economic colonization of the American West. Moreover the financing of a part of the crops formerly done by the rural bank for the individual farmer, has now passed into the hands of large urban banks or government agencies advancing the money necessary for the co-operative

marketing which has attained great importance for tobacco, cotton, citrus fruit, and other crops.[1]

Before the Federal Reserve System was established, cheques had been cleared by the clearing house in the larger cities, and by the mail or by the way of correspondent relationships in the smaller places. It had been usual for banks outside larger cities to charge a small fee on every cheque paid in this way (deducting a few cents from its face value), and to pay not in cash but by a draft on one of their correspondent banks in a financial centre, thereby gaining interest for the time this pay cheque was in process of collection.[2] The Federal Reserve Act instituted the system of clearing cheques through the Reserve Banks and bound participating member banks to pay every cheque presented at their counter or at the Federal Reserve clearing without deduction (par-collection system).[3] When it was seen that only a small number of banks joined the par-collection system the participation was made obligatory for member banks in 1916, while indirect pressure was used to induce non-member banks to join, e.g. the sudden presentation of whole batches of cheques for payment at the recalcitrant bank's counter. The desired results followed quickly after the Supreme Court sanctioned these tactics (the constitutionality of which had been questioned in

[1] The sales of farmers' co-operatives were estimated at 2½ billion $ in 1929–1930, against not much over 600 million $ in 1915 (see *Yearbook of Agriculture*, 1931, p. 1080).

[2] See Gregory, *The Present Position of Banking in America*, p. 16.

[3] See Watkins, *Bankers' Balances*, pp. 113–126.

1918); the number of banks in the no-par list fell from over 10,000 at the end of 1918 to 1,755 two years later. In 1921 the Supreme Court more or less reversed its decision of 1918, making participation in the par-collection system optional for non-member banks, and several agricultural states passed laws expressly permitting their banks to make deductions when paying cheques. By this time the par-collection had, however, become popular, and proved its advantages—there are no charges for the collecting or the paying bank—so that only about 2,000 banks availed themselves of their right to withdraw (there were 3,970 banks on the no-par list in 1925, and 2,979 in February, 1933, equal to 38 per cent of non-member banks and 20 per cent of all banks at the later date). At present the par-collection system is nearly complete in the East, and predominant in the Middle West and on the Pacific; it is only in the South and in the Northwest that an appreciable part of the banks remains outside the system. Most rural banks, therefore, have had to renounce all or most of the income derived from collection charges, an item which counted heavily in many cases.

Up to 1918, most banks in rural districts acted at the same time as agencies for placing mortgage loans on farm land or on small-city real estate for account of a correspondent bank, a finance company, an insurance company, or a lawyer administering client's funds in the East. The marked difference in interest rates in the Eastern states and in the territory South of the Potomac and West of the

Alleghanies,[1] was sufficient to compensate for the difference in risk and to leave room for a small commission for the rural bank acting as agency, collecting and remitting interest, etc. This source of income has been sensibly diminished by the rise of the Federal and the Joint-Stock Land Bank systems in the last decade. These banks have issued bonds to an amount of about 1¾ billion $, the sale of which has been greatly facilitated by the tax-exemption privilege they enjoy and the wide-spread but erroneous idea that they bear a government guarantee. The land banks have been enabled in this way to grant their loans at rates relatively low and not very widely varying for the different parts of the United States. As a result of tapping this new source of cheap long-term capital, of the decrease in regional differences in interest rates, and last but not least of the uncertain prospects of agriculture, the flow of private funds into farm mortgages has greatly diminished. As a matter of fact the only institutions that continued to increase their farm mortgage holdings after 1921 were the life insurance companies, and they only did so up to 1924.

The position of the general store has been subject to a bilateral attack; its cash business was assailed by chain stores and mail-order houses, its credit business entrenched upon by hire-purchase financing institutions. Better organization, rationalized inventory policy, lower prices paid on purchasing

[1] In 1920 mortgages on owner-operator farms in the East bore an average interest rate of 5½ per cent, while the rates stood at 6 to 7 per cent in the Middle West, at 6 to 7½ per cent in the South, and at 6½ per cent on the Pacific (data from Census of Agriculture).

large quantities, better adaptation to price changes, standardization of shop-outfit, of accounting, of forms, and of correspondence, lower salaries for the branch manager, the principle of trading for cash only, and particularly the possibility of providing the necessary capital funds at very low rates (by common shares or commercial paper) have enabled the chain stores [1] to offer their goods at prices so low and in a variety so great that the general store has been forced to leave the battlefield in many places and to give up many lines of goods, although the latter were sold on credit if necessary and although local sympathies and in many cases state legislation as well were on the general store's side, trying to hinder the development of chain stores by taxes or otherwise. Now, the chain store does not borrow at the local bank—if it has any need of banking accommodation it can get it at cheaper rates in a financial centre—and does not keep more money on deposit with the bank than is absolutely necessary for transacting the current business of the local branch. Since most of the purchases of the branches are paid for by the head office and all business is done on a cash basis, the local bank will, moreover, lose an appreciable part of the collecting and transfer business to which the general store gave rise. All these tendencies will be felt more severely still in so far as the general store's business is not taken by the local branch of

[1] The number of chain stores has been estimated at 24,000 for 1914, while the Census of Distribution of 1930 counted 160,000. Volume of sales was under 1 billion $ in 1914, against 10·8 billion in 1929 (see *Recent Social Trends*, p. 870).

a chain-store system, but by a mail-order house in a distant city. The hire-purchase financing company will beat the general store more easily still in the lines in which it specializes (i.e. agricultural machinery, automobiles, large household implements, gramophones, radios, etc.) than the chain store could. No competition is feasible for the small general store with the low prices, made possible by close affiliation with the manufacturer, and with the liberal terms of payment, resulting from the opportunities for rediscounting customers' paper and promissory notes at favourable rates, offered by these organizations.

The effects of these tendencies curtailing the rural banks' business as well as of many minor influences not analysed, are focussed in their profit-and-loss statements. Since statistics of earnings covering the entire United States, running over several consecutive years, and separating banks of different dimensions and banks located in places of different size are lacking, we have to be content with samples. The largest of these is a statistic covering the operation of the 1,239 member banks in the Chicago Federal Reserve district during the year 1928.[1] Since this sample contains nearly 5 per cent of all banks in the United States, covers a territory comprising banking points of every size in agricultural as well as industrial sections and refers to a nearly normal year, it may be taken as highly representative. There are two very important rules to be read off from these statistics:

[1] See Table 21.

(1) Costs are diminishing in relation to earning assets as earning assets increase; there seems to be no marked tendency in costs to fall off with the increasing size of the town the bank is located in. (2) Losses on loans and investments are quickly becoming smaller as the funds of the banks or the life of its home-town grow; write-offs amount to 1½ per cent of earning assets for banks located in places with less than 1,000 inhabitants and having assets of under a quarter of a million $, while they do not exceed one-quarter per cent for banks with over 15 million $ of earning assets located in cities having over 100,000 inhabitants—to take the extreme values. The combined result of these two rules is, that net earnings in relation to earning assets grow as total assets or size of home-town increase. While banks with assets under $250,000 could not show any net earnings, banks with assets between ½ and 1½ million $ managed to earn about three-quarters per cent net on their earning assets, and banks having more than 2 million $ of assets reported net earnings averaging 1¼ per cent. These ¾ or 1¼ per cent on total earning assets, which the medium size and large banks earn while the small ones do not, make, however, all the difference representing about 4 and 7½ per cent on the banks' own funds respectively.

Statistics are not detailed enough to allow us to decide to what causes the lower cost and loss-ratios of larger banks have to be attributed. It might be submitted, however, that the lower cost ratio is the effect of a more efficient organization in larger banks, due to lower real costs per unit of transaction

(since their nominal wages tend to be higher and their hours of work to be shorter) and a smaller proportion of unoccupied working time of the staff. The lower loss ratio of the larger banks, which is fully as important as any difference in cost ratios, is probably the result of better management and particularly of the opportunity of spreading risks over a wider area.

The small banks might have been able to withstand the effects of one of these drawbacks. They were, however, not in a position to work profitably so long as total assets did not reach approximately 2 million $, if they did not succeed in reducing one or both of the ratios far below the average. This again was possible only if they had an exceptionally capable management and such a contingency remained a matter of chance, since the salary they could afford to pay their president was inadequate to attract any outside talent really trained in banking, and their board of directors was more or less restricted to residents of the immediate neighbourhood. The result of the lack of banking experience in officers and directors and of the constant pressure to earn the highest possible gross rates of interest in order to avoid a loss on current operations, the more dangerous because capital and surplus were often entirely inadequate, resulted in the accumulation of bonds of high face yield but doubtful intrinsic value and a small proportion of gilt-edged securities and liquid funds. As these statistics show small banks in agricultural areas were unable to earn any profit or to make any allocation to reserves in a

year of general prosperity. It is, therefore, no wonder that they got heavily into the red when a depression set in, and were entirely unable to withstand the large losses on loans and investments which the crisis necessarily engendered.

Statistics relating to banks in other parts of the United States show the same picture so far as the dominant lines are concerned. Everywhere rural banks up to a level of about a quarter of a million $ of total assets were making no profits or only very inadequate ones,[1] the possibility of their continuous existence being thus very doubtful. In 1929, about 17,000 out of the total 25,000 banks then in existence in the United States belonged to this category,[2] the life of which was rather precarious. It could be safely predicted that a large part of these small banks would disappear as independent institutions within a few years, and a detailed investigation carried through in 1931 [3] forecast the number of disappearances at about 50 per cent within the next three years. As a matter of fact this percentage may have been nearly reached now as a result of the run leading to the general banking moratorium in March, 1933, compressing a development which would otherwise have taken several years to work out into the space of as many weeks. Many places which had two, three, or four banks will have to be content with one—surviving the attacks by its own forces or emerging as an amalgamation from the

[1] See e.g. statistics given in *HR.* 141, pp. 616–17.

[2] Assuming banks with a capital of under $50,000 (see *HR.* 141, p. 1032) to have assets of no more than about $250,000.

[3] See *Commercial and Financial Chronicle*, 1931, ii, p. 2553.

debris of all the failed banks in the place—some others will have to renounce altogether the convenience of possessing a bank office, and in many others a way will have to be found to satisfy the demand for bank services and bank credit without indulging in the luxury of an independent bank with president and board of directors.

Up to the middle of 1930, not more than 300 banks in cities having over 25,000 inhabitants had been forced to close their doors, and the number of failures of even medium-sized banks in urban centres did not amount to one dozen, criminal conduct of officers and directors being responsible for most of these few disasters, particularly in the best-known case, the crash of the City Trust Co. in New York, a bank working among Italian immigrants.[1] There were indeed no difficulties preventing an honestly and not entirely recklessly managed urban bank from prospering so long as the total volume of bank credit increased, insolvencies in business were few, urban real estate values rose, stocks constantly gained in value, and bonds at least maintained their price level, so that pressure from deposits withdrawn or adverse clearing-house balances was absent, and loans and investments remained fully collateralized and even highly liquid from any individual bank's point of view. The situation changed basically from the autumn of 1929, when the trend of all values turned definitely downward. It looked, however, at first as if the radical scaling-down of prices would be

[1] See *Report of the Investigation of the Department of Banking in relation to the City Trust Co.*, 1929.

confined to the stock market, and could be borne easily by the banking community. The "false start" in the spring of 1930, induced by official and unofficial propaganda and fostered by a deliberate increase in the volume of Federal Reserve credit outstanding, added to the delusion that the depression was of the character of the minor recessions of 1924 and 1927, and had run its course within six months. This may explain why there was a complete absence of withdrawals or uneasiness among depositors, although quite a number of bank boards had to face the necessity of large write-offs and the fall of values and the illiquidity of the urban real-estate market had already attained a really dangerous degree by that time. It required the shock of the sudden crash of several large banks near the end of 1930 to dispel the idea that urban banking was without its danger spots. It took, however, nearly another year until deposit withdrawals, hoarding, and urban banking difficulties assumed really nation-wide scope and dangerous extent. The first of these nation-wide waves of urban bank failures occurred in the summer and early autumn of 1931, the second (a minor one) in the first months of 1932, and the third and largest early in 1933. Out of the total bank failures, which took place between November, 1930 and April, 1933, about 7 per cent (as measured by deposits involved) were registered in November and December, 1930, 15 per cent from June to October, 1931, 7 per cent in December, 1931 and January, 1932, and 57 per cent in March and April, 1933,

leaving 14 per cent for the other nineteen months of the period.

The failures of late 1930 were such that banking authorities and the public were able to regard them as exceptional cases, having no representative value whatever for the situation of urban banking in general.[1] The first group of failures was restricted to banks having intimate connections with one rather new and very expansive investment banking house—the firm of Rogers Caldwell, in Nashville—working in a part of the country (the States of Arkansas, Tennessee, and Kentucky) which had been hit with special severity by the depression. This firm, led by an enterprising politician and cultivating financial regionalism—its slogan being " We bank on the South "—was brought down by generally reckless and sometimes even criminal business methods, and the buying up of large newspaper properties in Memphis, Nashville, and Knoxville with borrowed money at inflated prices. The spectacular crash of Rogers Caldwell led to runs on the affiliated Bank of Tennessee in Nashville (total resources nearly 20 million $), and on the forty mostly smaller banks with total resources of about 30 million $ forming the chain built up by A. B. Banks which Rogers Caldwell had taken over in 1929. All attacked banks had to close, their own situation being far from satisfactory or liquid. The same fate overcame the oldest and largest bank in Louisville, the National Bank of Kentucky (resources

[1] The story of bank failures given in the following pages is mainly based so far as the published material goes, on the current reports in the *Commercial and Financial Chronicle* and the *New York Times*.

55 million $), and four smaller affiliated institutions. This bank had been in an unsound and dangerous condition for years chiefly on account of credits to the Caldwell group and loans on shares of its own holding company.[1] The closing of these two large institutions inaugurated a wave of failures among small banks in the district, which were faced with heavy withdrawals, and many of whom were unable to fall back on their second line of defence, which had consisted in balances with the Bank of Tennessee or the National Bank of Kentucky. Within a fortnight 143 banks in the three states Arkansas, Kentucky, and Tennessee, with deposits of 178 million $, had to close their doors (129 of them having a more or less direct connection with the Caldwell group), depriving these states in a few days of 10 per cent of their banks holding about one-seventh of their total deposits.

The second series of urban banking failures of late 1930, centres around the Bank of United States in New York City, a bank with 60 branch offices and with over 200 million $ of resources, which had to close on 11th December, after a slow seepage of deposits since October, growing into a run since 5th December. The bank had started as late as 1913 among the Jewish and Polish immigrants of the East Side and Brooklyn, and had grown since the war with unusual rapidity aided by its cleverly chosen name and helped by a great number of mergers. Total resources were 5 million $ in 1918, 40 million $ in 1923, and 254 million $ in September,

[1] See *SR.* 71, pp. 631–5.

1930. There was more than sufficient reason for this bank's downfall, the management having violated nearly every written or unwritten law of banking, for which it had to answer in the Courts. The economic causes of the bank's failure were relatively simple: extensive credits on New York real estate based on fanciful valuations and loans to subsidiaries used in the unsuccessful attempt to keep up the price of the banks' own shares bolstered to unreasonable levels by similar methods. The spectacular failure of the Bank of United States led to heavy withdrawals of deposits estimated at about 300 million $ as well as to a transfer of deposits from banks considered endangered to institutions believed safe, all over the city of New York. Most banks were able to meet every demand without difficulty. One smaller institution (the Chelsea Bank and Trust Co., with total resources of 21 million $), however, had to close temporarily, while two larger banks, the Public Trust Co. and the Manufacturers Trust Co.—attacked on account of earlier plans of a merger with the Bank of United States—experienced serious difficulties and had to change ownership and management.

For nearly half a year following these first eruptions the volcano of urban banking difficulties kept nearly quiet. The basic situation, however, continued to worsen, making the inside pressure higher and higher, and more and more dangerous. The decline of urban real estate values continued, and the activity of the market became so low that it could not be counted upon to absorb any larger

block of properties. The prices of second-grade bonds began a distinct downward movement, the distance from the level of gilt-edged bonds seriously widening. From about the middle of 1931, the public could no longer be kept in ignorance of the difficulties many city banks would have to face. The public thereupon did just what made the possible and future difficulties actual and present: It began to withdraw deposits from those banks, the position of which was believed to be particularly weak, guided of course more by rumours than by correct information, and thereby forced banks which were relatively healthy and might have been reorganized quietly, to suspend operations nearly as often as institutions which were already beyond the financial doctor's help. It is noteworthy that this whole movement was—up to 1933—a local one. The spark of distrust, lighted for one reason or another among the depositors of an individual bank, would almost certainly touch every other bank in the community too, and would not be quenched until the experiences of the run had shown which institutions were fire-proof and which were not. The fire would not, however, spread immediately to other communities, except to those in the close neighbourhood. This was due to the relative financial independence and self-sufficiency of most of the larger cities in the United States as well as to a lack of large regional or nation-wide branch banking systems. The American banking system, therefore, had nearly two years, after the turn of the business tide, to set its house in order. A large number of

banks did, but too many of them failed to appreciate the seriousness of their own situation or the possibility that the general business situation would experience a further set-back. The moment the public saw that nearly every bank attacked was so impaired in strength that it had to surrender, the tide could not be stopped any more.

The first trial occurred in June, 1931, in Chicago, and began with the failure of a number of smaller banks outside the financial district, which came to grief on account of their excessive real-estate loans. In the first half of June about thirty of these institutions (twelve of them belonging to the Bain chain) with something like 60 million $ of deposits had to close. Their difficulties spread, however, to one of the large down-town banks, the Foreman-State Bank, which was interested in about half a dozen of the institutions attacked, but not able to give them the necessary assistance since its own position was made highly precarious by the possession of large real estate loans, taken over from the State Bank on the occasion of a recent merger. It was, therefore, decided to have the Foreman-State Bank absorbed by the First National Bank, in order to avoid the imminent run, which the bank could not have weathered. The public was informed at the same time of the merger effected between the Central Trust Co. and the National Bank of the Republic, ranking fourth and fifth among Chicago banks, destined to be a further step in the process of strengthening the banking structure of the city. These reorganizations had in fact the result that

banking difficulties in Chicago were stopped for nearly a year, as withdrawals tapered off quickly. They did not, however, radically remove the weak spots, so that exactly the same spectacle was offered just a year later, when another forty of the smaller banks outside the financial district failed—it may be noted that there had been no less than 231 unit banks in Chicago in 1928, while 119 had sufficed ten years earlier [1]—while the new Central Republic Bank could only be saved from sudden if not from slow death by immense emergency credits.

The next centre of disturbances was Toledo (Ohio) a manufacturing town of 300,000 inhabitants, in which separate savings institutions are absent (as is usual in the whole Lake region) and commercial banks had placed a large proportion of their funds in urban mortgages. Here five out of the eight local banks, holding about 70 per cent of the total banking resources of the community, had to close as a consequence of a general run in the middle of June. It was not until November that four of their number could reopen after having been reorganized and amalgamated into a new institution, while the fifth was able to resume operations under its own name.

The movement ceased to be an addition of isolated difficulties in September, 1931, and grew into a wave of distrust, deposit withdrawals and bank failures sweeping over the whole of the Middle Atlantic states, without, however, touching the rest

[1] See *Bull.* 33 *of the Bureau of Business Research of the University of Illinois*, pp. 25–6.

of the country except in the form of occasional breakers. It came to an end about the end of October after having smashed several hundreds of banks, and after having led to dozens of emergency amalgamations. The area most seriously affected was the Pittsburg district, one of the most highly industrialized parts of the United States. In the city of Pittsburgh three of the larger banks had to close (particularly the Bank of Pittsburgh with total resources of over 60 million $), leaving the field more or less completely to the Mellon group and the Peoples-Pittsburgh Bank. In Youngstown, steel manufacturing centre, two of the largest banks failed, a third one was forced to suspend operations temporarily and the two remaining institutions had to amalgamate. In Dayton, it was the largest banking institution that failed. In Akron, tyre city, the two leading institutions had to amalgamate with the help of local merchants and industrialists in order to avoid a complete breakdown of the banking structure. In all these cases frozen loans on urban real estate, often forming one-third to one-half of total earning assets, were given as major cause of the difficulties and of the lack of liquid funds. The same wave of distrust and insolvencies made a first inroad on one of the centres of financial conservatism, Philadelphia, and caused a second series of minor banking difficulties in New York. In Philadelphia building societies and small suburban banks provided the chief victims, the difficulties, however, extending to two medium-sized banks. In New York half a dozen smaller banks getting into

trouble were absorbed by the Manufacturers Trust Co., acting more or less for the entire banking community. The Federation Bank, largest of the much heralded but not too successful Labour Banks,[1] failed after having paid out about one-half of its 25 million $ of deposits. The most important effect of these banking difficulties, however, was the merger of the Chatham Phenix Bank (having but 217 million $ of resources at the end of 1931 against 344 million $ a year ago) with the Manufacturers Trust Co., although this was not officially consummated until December.

This first wave of widespread difficulties of urban banks was stopped by the psychological effects emanating from the creation of the National Credit Corporation in October, 1931, a sort of co-operative institution backed by large banks all over the United States, which was to grant emergency credits to banks temporarily embarrassed by withdrawals of deposits. The psychological effects did not, however, last for more than about six weeks, bank failures again reaching dangerous proportions as the year 1931 drew near its close and totalling nearly 500 million $ (deposits involved) during December and January. This time New England, hitherto the only part of the country practically untouched by the rising tide of bank failures, was one of the centres of unrest and bank failures, while two minor centres were located in the Carolinas

[1] See *The Labor Banking Movement in the U.S.* (prepared by Ind. Relations Section, Princeton Univ.), 1929. Total resources of all Labour Banks were 1 million $ in 1920, 127 million in 1926 (peak), 79 million in 1929, and 31 million $ at the end of 1931 (*Recent Social Trends*, p. 838).

(failure of the Peoples State Bank in Charleston with branches) and in the Pacific Northwest, both districts which had suffered relatively little from banking troubles until then, and a new crop of less important failures was registered in the Lake district. This time a more powerful organization was necessary to stop the tide, even if only temporarily, and psychological effects had to be supplemented by emergency credits in huge amounts.

The Reconstruction Finance Corporation, created late in February, 1932, provided with an initial capital of 500 million $, subscribed by the Treasury, and empowered to issue bonds up to more than 3 billion $, undertook the task of ending the era of massed bank failures. Up to August, 1932, the R.F.C. had provided banks in need with 780 million $ of additional liquid funds (about 150 million $ of the total represent emergency credits taken over from the National Credit Corporation), and added another 170 million $ until the close of the year, 256 million $ of which had been repaid when the year ended. A great part of these funds went to innumerable small rural banks (more than 5,000 banks received credits from the R.F.C. making the average about $200,000). The majority, however, was claimed by urban banks, a dozen of whom needed not less than about 250 million $ to be saved from failure, even if only for a short time. The loans were given to any bank in need if it could put up some sort of collateral. While the high ratio of repayments shows that the R.F.C. credits were in many cases used only to strengthen the banks

against withdrawals expected but not realized, and against temporary withdrawals of funds redeposited shortly afterwards, there can be no doubt that they have often been entirely frozen—particularly the credits given to small rural banks and some of the largest credits to urban banks in Chicago and the Lake Erie district—and that neither the collateral nor the own funds of the borrowing bank will suffice to repay the credits in full in quite a number of cases.

The readiness of the R.F.C. to loan to banks in need on approved collateral does not mean that no bank failures occurred so long as it existed—the machinery did not work quickly enough to prevent sudden collapses—nor that such an outcome was desired, banks in too hopeless a position being denied help from the outset. The liberal provision of emergency credits, together with a certain concomitant decrease in public unrest did, however, succeed in keeping the number and the size of bank failures on a moderate level for most of a year, and in restoring many banks, previously closed, to solvency, even if only for a limited time. Thus, deposits in banks closed (deducting deposits in banks reopened) totalled only somewhat over 700 million $ in the 13 months ranging from February, 1932, to February, 1933, while they had risen to about 2,300 million $ in the not much longer period beginning with November, 1930, and ending with January, 1932.[1]

[1] Banking failures and difficulties were fairly evenly distributed over the whole country, and over the entire period of action of the R.F.C.,

In this way large failures and widespread banking disturbances were avoided during a period in which all the basic factors, which decided the fate of the individual bank, showed a further decidedly unfavourable trend. Withdrawals of foreign balances and domestic hoarding narrowed the basis on which the total volume of credit rested. Widespread unemployment and an all-round shrinkage of consumers' income created a tendency towards living on capital, meaning a constant pressure on banks' time deposits. Unrest and distrust made all classes of deposits subject to sudden and heavy withdrawals. A further decline in business activity brought new classes of commercial credits hitherto safe into the danger zone. The decline of the values behind urban real estate loans and their immobilization, continued and became more pronounced still. Finally bond values reached unprecedented depths around the middle of 1932, from which they did not completely recover. The R.F.C. thus worked against the tide. It could keep on so long as unrest and distrust among depositors was more or less local, shifting its centre from month to month. The game was lost when it became general early in 1933.

This last wave of banking failures started in Detroit (for reasons still to be explored in detail), a city, the banking system of which had withstood the depression up to that time in a fairly satisfactory way, although heavily burdened with real estate

with the exception of a cluster of bank failures in the Chicago area in June, 1932, which happened despite large credits poured into some of the regional key institutions by the R.F.C.

loans. The fact that the local authorities were unable to deal swiftly and energetically with the difficulties which beset the two groups dominating Detroit banking, but were finally forced to declare a week's banking moratorium for the State of Michigan on 14th February, accentuated the distrust in the quasi-stability of the banking structure, which had been maintained for about one year, to such an extent that heavy withdrawals of individual deposits and bankers' balances started in one district after the other. Up to 3rd March no less than twenty-nine states had to declare more or less complete temporary banking moratoria, in every case restricting withdrawals to a few per-cent of deposits. Banks all over the country now naturally fell back on their city correspondents, and these in turn drew on their balances with New York banks. New York City banks transferred about one billion $ of bankers' deposits to the interior between 1st February and 8th March, and had, moreover, to pay out large sums to their own individual depositors, who had again begun to get disturbed. When it became clear that they, too, who had up to now weathered the crisis without difficulties and kept extremely liquid, would not be in a position to satisfy the unprecedented and unabating demands of the whole country, a national banking moratorium or a general government guarantee of deposits became unavoidable.

The first alternative was chosen, and every bank in the United States practically closed from 6th to 12th March. During the moratorium

bank supervisory authorities carried through a rapid survey of the position of each institution in order to ascertain if it could be allowed to reopen unconditionally or only under restrictions after the national moratorium was lifted, or if it had to be put into the hands of a liquidator. These drastic measures together with a policy stopping the internal flight from the dollar and the hopes which the advent of a new administration aroused changed public sentiment so completely that the national moratorium could be lifted after a week's duration, hoarded money flowed back in a broad stream into bank vaults,[1] and a large part of the banking system could at once resume operations. Up to the end of March nearly 13,000 out of a total of about 17,500 banks had resumed operation in full, while another 3,000 were still working under certain restrictions. At the end of June the number of banks closed or working on a restricted basis only had fallen to a little over 3,000, with about 2½ billion $ of deposits, i.e. 17 and 6 per cent of the respective totals.[2] The percentage banks reopened bear to total banks in the different districts is a good indicator of their banking position. On 26th July 98 per cent of deposits of commercial banks in the New York, Dallas, and San Francisco districts were in banks able to resume operations in full. The percentage was 94 to 95 in the Atlanta, Minneapolis, and Kansas City districts, and 90 to 92 in the Boston, St. Louis,

[1] Money in circulation, which had risen from 5·6 billion $ in January to 7·5 billion in the week ending 11th March, fell to 5·7 billion in June.

[2] See *Federal Reserve Bull.*, 1933, 517.

and Cleveland districts, while it fell to 83 in the Chicago district, centre of constant banking difficulties since 1931, and to 87 in the Richmond district (containing Baltimore as well as rural Virginia and Carolina). In three states—Michigan, Illinois, and North Carloina—more than half of all the banks were unable to reopen.

During the moratorium and immediately afterwards, many banks, particularly large urban institutions, underwent a drastic reorganization in order to make reopening possible, so that the banking organization of some cities (notably Detroit, Cleveland, and Baltimore) has been appreciably changed. In the second half of March the number of National Banks alone reorganized amounted to 289.[1] The usual procedure in these cases was to establish a new bank, which took over the liquid assets of one or more of the old institutions, made a correspondent part of deposits immediately available to creditors, and will in future transact the current business of the defunct institution in its former premises, while slow assets remaining in the closed bank were handed over to a receiver with orders to realize them as early as feasible and distribute the proceeds from time to time to depositors. The most notable examples of reorganizations of this type are to be found in Detroit (First National Bank and Guardian National Bank), Cleveland[2] (Union Trust Co. and Guardian

[1] See *Commercial and Financial Chronicle*, 1933, i, p. 2353.

[2] Difficulties in Cleveland are partly the result of large credits to the Eaton and Van Sweringen interests.

Trust Co.), Akron (First Central Trust Co.), Baltimore (Baltimore Trust Co.), Chattanooga (First National Bank), and New Orleans (Hibernia Trust Co.; Canal Bank).

Since April failures have been on a very small scale. The return of confidence—even if far from complete—and the decrees requisitioning gold coin and gold certificates brought large sums of money temporarily hoarded back to the banks, while the Federal Reserve Banks continued to increase bankers' reserves by purchases of Government securities. In consequence, total deposits of reporting member banks increased by about 10 per cent between 8th March and 31st July, 1933. The corresponding expansion of credit was, however, chiefly absorbed by additions to bankers' balances and to Government securities holdings (in so far as the incoming cash was not used to repay nearly the total indebtedness of commercial banks to the Federal Reserve system), while commercial credits grew only by about one-sixth of the total increase in resources. The large increase of production, distribution, and speculation that took place between March and September has not had a counterpart in an increase of commercial credits or loans on securities up to now.

CHAPTER XI

SOME SUGGESTIONS FOR REFORM[1]

THE American people have undoubtedly paid heavily for what defects there were in the nation's banking structure and for what mistakes its bankers have made. It has paid with the failure of nearly every second bank existing in 1920, with the locking up for a longer or shorter time of about 9 billion $ of deposits during the last decade, with the forced liquidation of billions of bank loans, with the withdrawal from circulation of an amount of money corresponding to about 50 per cent of the normal total, with a loss of several billion $ to depositors and bank shareholders, and with the wiping out of many more billions of savings sunk in more or less worthless bonds and stocks through the intermediary of the investment branch of the banking machine. It has paid more heavily than at any previous time of its financial history and more than any other great nation during the present crisis. There is consequently no use in attributing these financial disasters more or less exclusively to the wickedness of the capitalistic system or to the vicissitudes of a world depression or to the usual course of the business cycle or, finally, to the mere fact that an excessive expansion of the total volume

[1] The provisions and the possible or probable effects of the Banking Act of May, 1933, are not treated in detail since it is believed that this Act will be replaced by other legislative measures in the near future.

of credit did take place in the years before 1929. Undoubtedly none of these villains in the piece can be fully exonerated. But the reason why the American crisis has gained anything like its present size are to be found within the system, within its banking organization, within the men who managed that system, and within the spirit in which they were administering it. The remedies are, therefore, to be found within the system, too, and should not be beyond an intelligent effort of the American people. These remedies alone will not, of course, be able to engender or to guarantee prosperity, but they should form an important step in the process of restoring American economic life to something like normality and should have a fair share in any attempt to avoid a repetition of the course of events in the last twelve years. It is to be doubted that the American public, in its present mood, will listen to so unambitious a scheme. But this ought not to deter us from expounding it.

The previous chapters have been devoted to showing, among other things, that the weakness of the American banking system can be attributed to six primary causes :—

1. The absence of a sufficient safeguard against excessive expansion of credit.

2. The existence of forty-nine different banking systems, leading to a competition in laxity and making co-ordination extremely difficult.

3. The legal barriers to the development of a system of branch banks, which are a necessity after economic changes have made the exclusive

existence of unit banks, usually of very small size, an inherent cause of weakness and instability of the banking system in great parts of the country.

4. The excessive use of bank credit in financing urban real estate developments.

5. The close connection of commercial banks with the security markets, resulting, on the one hand, in a dangerous dependence of the value of bank assets on stock and bond quotations, and, on the other, in an equally dangerous influence of investment bankers on the administration of commercial banks.

6. The diminishing role that commercial banking in the strict sense of the word has come to play within the American banking system as a whole and even within the activities of National Banks, State Banks, and Trust Companies.

There would be nearly unanimity in drawing up an enumerative list of this sort. It is only when an attempt is made to allocate the burden of collapse which after three years' struggle befell the American banking system, that opinions are liable to differ. They do so to a still greater extent when it comes to proposing reforms and indicating remedies. But anybody who peruses the very great number of proposals touching merely isolated aspects of the problem and the batch of more or less comprehensive schemes of reform will be astonished how far-reaching a consensus of responsible and authoritative opinion bearing on the most cardinal points has already developed. This might be attributed by cynics to a deplorable lack of ideas in bankers and students of banking. It is suggested, however, that this

relative unanimity might be interpreted in a more benevolent spirit, and with hardly less reason, as a result of the logic of the facts.

Suggestions such as follow are easy to make. To bring them in appropriate form and to get them passed by a legislative body like the House of Representatives and the Senate is much more difficult.[1] To blend the proposed reforms with the existing banking structure in such a way that friction and unnecessary movements are minimized, but the desired results obtained, remains, of course, the most arduous task. Any scheme of reform should therefore be careful to preserve as much as possible of the present banking machinery, but ought at the same time not to be afraid of trespassing on some vested interests, pecuniary or intellectual.

1. The Federal Reserve System

The Federal Reserve System, conceived as a co-operative of twelve rather independent regional banks of issue, has shown marked centripetal tendencies from the very beginning. The necessities of centralized war finance and the increasing

[1] Such an achievement has been performed recently by Senator Glass, aided by the mass production method then prevalent in both Houses of Congress and by the public acquiescence in anything which looks like action. It will become evident, however, from the discussions which follow that the Banking Act of 1933 (full title : An Act to provide for the safer and more effective use of the assets of banks, to regulate interbank control, to prevent the undue diversion of funds into speculative operations, and for other purposes) can be regarded only as a first step, not even always pointing in the right direction, in banking reform.

importance of international relations for the System have played their part in strengthening this movement. It is, indeed, absolutely necessary that the main lines of banking policy be laid down for the entire country by one and only one authority, and that this authority have the power necessary to enforce its decisions. The international aspects of banking policy are likewise best administered centrally.

The regulation of the total volume of credit, therefore, ought to be exclusively within the compass of the Federal Reserve Board in Washington—as it, in fact, is now, so far as it is at all under the influence of the Reserve System. The control—if any—of the uses bank credit is put to, the relations with member banks, and the mass of technical details, on the other hand, can be safely and profitably entrusted to the several Federal Reserve Banks. The legislation enacted during the last months and the various projects for reform saddle the Federal Reserve System with so many duties and invest it with so widely flung powers that it would be unwise as well as impracticable to have them exercised exclusively by a very small group of men possessing but little direct contact with the banking machine. It seems, therefore, advisable to make the individual Federal Reserve Banks as independent as is compatible with the existence of a definite and necessarily uniform general banking policy for the country.

Problems like this are not easily compassed within a set of rules and regulations. It will suffice,

however, if this separation of powers is accepted by the Federal Reserve Board, and proclaimed as its professed policy. Questions of detail will then be easily settled.

Broadly speaking, the Board is now already possessed of sufficient power—even disregarding the emergency powers given to the President by the Acts of March and April, 1933, which he may delegate to the Board—to regulate the total volume of bank credit in the United States either by discount policy or by open-market operations. It is, therefore, not the question of enlarging these powers, but to make sure that they will work as efficiently and smoothly as possible and that they are used in the right direction.

A banking system as a whole has the power to expand credit in a ratio roughly corresponding to the reciprocal of the percentage usually or lawfully held in cash against liabilities, having regard, however, to a possible drain of currency into circulation. Reserve ratios are, therefore, the most important single factor determining the effect of changes in the stock of currency—in the United States primarily monetary gold—on bank credit. If reserve ratios are stable, an increase or decrease of the country's gold stock will lead (other things being equal) to a movement in the total volume of credit showing the same direction, but many times—as things are in the United States, up to ten times—as great. Should reserve ratios become smaller with increasing stocks of money-metal, the rate of credit expansion can be more violent still. This is what actually

happened in the United States. The reserve ratios for member banks of the Federal Reserve System (state non-member banks generally not being subjected to any reserve requirements) have remained unchanged since 1917 at 3 per cent against time deposits and 7, 10, and 13 per cent against demand deposits, having been drastically decreased since 1913, when they stood at 15 and 25 per cent for National Banks (including cash in vault, which is not taken account of when computing the reserve now to be held with the Reserve Banks). The shifting of deposits from the demand to the time category, however, has, in fact, reduced the average reserve ratio of all National Banks combined from 8·1 to 6·9 per cent between 1920 and 1930, i.e. by 15 per cent. In order to check this tendency and to take care of the changes in velocity of turnover of bank deposits associated with the divers phases of the business cycle, a committee has suggested that the reserve requirements of member banks be fixed at 5 per cent of total net deposits (time as well as demand), plus 50 per cent of average daily debits, with a maximum ratio of 15 per cent, irrespective of the location of the bank.[1] The new regulation would make reserve requirements increase faster during a period of business activity and decrease quicker during depression than they do under the regulations now in force. It should, therefore, act as some sort of brake on credit expansion, and ought

[1] See *Member Bank Reserves Report*, 1931. An interesting critique, undoubtedly overshooting the mark, however, is given by Dr. Anderson in the *Chase Economic Bulletin*, April, 1932.

to be incorporated with some minor alteration into a banking reform bill.[1]

This is not the place to discuss possible changes in the general lines of banking policy of the Federal Reserve Board—the less so since major reforms seem not to be necessary and proposals as to a future course of action in circumstances not yet to be foreseen are rather futile. Only this much may be said that the crucial period for the Federal Reserve System will be the early stages of the next upswing. We may rest assured that the fate of the American banking system in the decade to come will depend to a large extent on how the Federal Reserve System will then act. It is to be hoped that the experiences of the twenties will not be entirely lost and that the Board will try to check any undue expansion of credit in its early stages and check it at whatever place of the economic system it will appear, avoiding the mistake of centring attention on the security market. A nearly superhuman dose of fortitude, it is true, will be needed to initiate and to persist in this unpopular policy of "neutral money". Neutral money, correctly defined,[2] means a money economy which behaves like a barter economy in equilibrium. It does not imply a constant volume of money and credit nor—and still less so—a policy of

[1] If all non-member banks had to join the system, the reserve percentages could be lowered to some extent, since member banks at present carry most of the reserves which non-members hold. The same total of reserves could therefore be spread over a larger total of deposits, bringing the reserve ratio down to, say, 4 per cent of net deposits plus 40 per cent of average daily debits.

[2] See Koopmans, *Zum Problem des Neutralen, Geldes in: Beiträge zur Geldtheorie*, 1933, esp. pp. 228, 257 ff.

satisfying every so-called legitimate demand for credit coming from business. It implies, however, avoiding the creation of additional purchasing power not accompanied by additional production, as well as counteracting hoarding or dishoarding movements.

A vital condition for a successful functioning of the enlarged powers of the Federal Reserve System must be seen in its complete separation from the Treasury. The elimination of the Secretary of the Treasury from the Federal Reserve Board ought to be the first step in this direction. Further steps are rather problems of personalities and of internal relations than of administrative changes. What is important is the separation from the Treasury spirit and influence [1] which the Board sometimes has allowed unduly to influence its policy.

The Federal Reserve System, freed from the Treasury influence, should become more and more the central organization of the entire American credit market, membership being compulsory for every institution accepting deposits repayable on demand. As a typical bankers' bank and as the last resource of liquid funds, the accommodation of member banks ought to be kept at a decidedly lower average level than it has been during the last ten years, and the rediscount rate of the Federal Reserve Banks ought to be maintained over—not under—the rates of the open market. Earning assets will then consist mainly of the 2 billion $ of

[1] This does not imply that the Federal Reserve banks ought to divest themselves of their holdings of Government securities which would be impossible as well as detrimental to their faculty of performing open market operations.

Government securities accumulated during 1930–3, which will provide excellent material for fighting any unwanted expansion of credit which may arise on the basis of a utilization of the now large excess reserves of member banks or on the basis of a backwash of notes now hoarded or as the result of a possible gold inflow. Chance—or the crisis—on one side, emergency legislation on the other, have given the Federal Reserve Board authority and possibility of expanding or contracting the American credit volume to any extent which may be practically necessary. It remains to be seen how these powers—much larger than the expansionary or restrictive possibilities possessed during the twenties—will be used.

2. A Unified Banking System

There are in the United States to-day no less than forty-nine different sets of banking regulations—one for all National Banks and one for each state of the Union. These regulations differ as to minimum capitalization, reserves to be held against liabilities, assets admitted and prohibited, valuation of collateral held, permission or restriction of branches, restrictions on individual loans, responsibility of officers and directors, relations with affiliated companies, examinations by public authorities, forms of reports—to mention only the more important points. The attempt made by the National Bank Act in 1863 towards a unified banking system, virtually prohibiting the note issue of banks other than

national by means of a 10 per cent tax on their circulation, failed, because other activities soon became much more important than the business of issuing notes. Even at that early date, however, not many sound reasons for retaining a diversity of state banking codes could be advanced. To-day, what there may have been to be said for decentralized regulation of banking then is no longer valid. The only reason still seriously advanced is the diversity of economic structure in the different parts of the United States, demanding, so it is argued, different types of commercial banks. The correct way to take account of this diversity is, however, the provision of different types of separate financial institutions, which are able to specialize in their field and to adapt their whole structure to its needs, and not the development of commercial banks, who are first and foremost the depositories and trustees for the liquid funds of the community, and therefore necessarily guided by nearly the same principles everywhere, into a sort of financial omnibus.

There is thus a good case to be derived from the diversity-of-economic-structure argument for the introduction of savings banks, building and loan associations, or mortgage credit organizations into regions where they have hitherto been lacking, but there is none to be made against uniform regulation of commercial banking throughout the country. As a matter of fact, the real force behind decentralized regulation of commercial banking in the United States is the sectionalist conception of "State rights", an idea dear to many conservative

citizens but more important still to politicians, and more or less safely anchored in the constitution. The introduction of a unified banking system is therefore a purely political and not an economic problem. The impossibility of quick action in an emergency for an agglomeration of forty-nine different authorities, the difficulty of realizing any considered banking policy without unnecessary evasion and cross-currents, and the process of " competition in laxity " in which the national and state banking authorities are forced to indulge in order to keep their member banks, have been so patent that the case may be considered to be decided so far as economic considerations go. The events of this year seem to have convinced even politicians and state bankers in increasing numbers by hard facts.

It is, therefore, proposed that, as an essential step in any thorough plan of banking reform, all commercial banks in the United States be forced by law to take out national charters within a period of, say, three years.[1,2] Since all National Banks have to be members of the Federal Reserve System, no commercial bank will then be left outside its orbit. The Federal Reserve Board will thus automatically become the one and only centre of American banking

[1] It has sometimes been contended that such a law would be against the constitution. An elaborate opinion of the General Counsel of the Federal Reserve Board seems to have established, however, that this is not the case. (See *Federal Reserve Bulletin*, March, 1933.)

[2] The Banking Act of 1933 tries to achieve this end in an indirect way, which may well prove ineffective: it admits non-member banks to participation in the deposit-insurance scheme (see sub 8), but only until 1st July, 1936. Non-member banks have then either to join the Federal Reserve System or to renounce the deposit guarantee.

policy and the National Bank Act (in revised and enlarged form) the only statutory basis of commercial banking.

This will at the same time do away with the triplication of bank examinations, examiners, and reports as it exists now, the Comptroller of the Currency and his examiners taking care of National Banks, the examiners of the Federal Reserve Board probing into the books of part of the state member banks, and the various State Banking Commissioners with their staff examining the State Banks and Trust Companies. In this way the banks as well as the authorities will be spared a lot of unnecessary work, a uniformity of reporting will be introduced, which may at last make statistics about all banks in the United States more than an object of conjecture—what they are now—and the whole process of bank examination will be increased in efficiency. The examining force of each Federal Reserve District ought to be closely attached to the Reserve Bank in question, whereas the Division of Bank Examinations within the Federal Reserve Board should be confined to laying down the general rules to be followed and to assembling and publishing the statistical results of the examiners' work (in this direction much more could be done than is done now without appreciable increase in expense or trouble), refraining, however, from any detail or routine work. The office of the Comptroller of the Currency, already somewhat out of place since the advent of the Federal Reserve System, which in reality is the authority that controls the currency, would of course, have to be abolished.

There are at present (after the wholesale failures of March, 1933) about 11,000 non-member banks with nearly 10 billion $ of deposits. Reserve requirements of these banks would amount to about 600 million $, according to the percentages now in force, and to not much more if the new reserve plan should become law. Part of these required reserves could be taken out of the surplus vault-cash which non-member banks are now holding, while the rest would probably be procured by drawing on balances with correspondent member banks and by selling Government securities. In order to lessen this additional strain on the banking system, it has been proposed above that reserve percentages for all member banks be reduced by 10 per cent. The then remaining portion of additional reserves might be provided out of excess reserves of member banks (unusually large at the present time). Any difficulty to individual banks could be obviated by permitting a transitional period of one or two years, during which the reserve percentages would be stepped up gradually to the required level.

A transitional period will be necessary, too, with regard to minimum capitalization. The Banking Act (Sec. 17) requires a capital of $50,000 for National Banks in places with less than 6,000 inhabitants, $100,000 for banks in towns with 6,000 to 50,000 inhabitants and $200,000 for banks in larger places. In view of the mischief which small banks with insufficient capital funds have done, these requirements still err if anything on the side of

leniency. A great part of non-member banks, however, still work with a capital of $10,000 or $25,000. They will, therefore, have to raise additional capital, which may prove very difficult, since local capitalists are reluctant at the moment to invest in a type of business which has fared so badly during the last years and has not been very remunerative even during the boom. The Reconstruction Finance Corporation may help in a number of cases—a total of up to one billion $ has been allotted for this purpose, a great part of which will be needed, however, for the reconstruction of relatively few large urban banks—but, in general, banks which cannot get the necessary funds together within three years will have to liquidate or to join a branch system for what their net worth will fetch.[1]

More difficulties than in the case of capitalization and reserve requirements will probably be encountered when trying to adapt the non-member banks' earning assets to the National Bank Acts regulation about loans and investments. The possibility of transferring a part of the excess real estate loans to either the Farm Credit Administration or the Federal Home Loan Banks, under the 2 billion $ mortgage refinancing plans for each of those institutions, may, however, do away with a great part of these difficulties. A transitional period of three to five years, within which to get rid of the assets not permitted under the new

[1] A similar problem confronts a number of banks, the nominal capital of which is above the statutory minimum but has become so impaired that it would fall below this standard if assets were written down to actual values.

National Bank Act, will solve most of those which remain.

3. The Question of Branch Banking

The opposition of a part of the American public to branch banking goes back to exactly the same root as the persistent clinging to decentralized banking legislation: sectionalism, the emphasis on "State rights", and the instinctive fear of a financial octopus. It has become much less vociferous and active since the banking developments of 1930–3 have shown conclusively that the unit banking system is not without its grave disadvantages. Branch banks have not been immune from failure either. They have had, however, a remarkably good record exactly in those agricultural regions where most failures of unit banks have occurred, whereas there has been no marked difference between the fate of branch banks and unit banks within cities. Moreover, developments in nearly every large country outside the United States have shown that branch banks properly regulated are a force making for stability of the banking situation, and are not conducive to a concentration of financial power to a degree higher than that attained in the United States, notwithstanding its unit banking system. As events have shown, the Government can, indeed, not let one of the big branch banks go down, but it has to step in as well when unit banks fail in masses, as evidenced in the United States in 1932–3. This

favourite argument of adherents of the unit system ought, therefore, to be disposed of by now.

There is, however, no question of transplanting the European or Canadian system of nation-wide branch banking, concentrated in half a dozen institutions having hundreds of branches each, to the United States. The United States are too large and too diversified for that. What is needed is the possibility of developing—under the proper safeguards—of a rather large number of regional branch banking systems, stretching over an area large enough to give proper diversification of resources, but not too large to be administered centrally, leaving unit banks entirely free to continue their work where this can be done safely and profitably.

The regulation of branch banking has presented great difficulties so long as there were forty-nine different authorities to legislate on the subject. A unification of the banking system would, at last, open a way for a considered line of policy here too. As things are, an appropriate change of legislation pertaining to the (now) National Banks alone would be nearly sufficient to bring about the desired results.

The law would have to do no more than allow National Banks (either in the present restricted or in the wider sense) to establish branches within a prescribed "trade area", subject to the proviso that the capital of the bank is at least as great as the sum total capital of the branches would have to be if they were independent institutions (this is in accord with the regulations of Sec. 23 of the Banking

Act of 1933), and subject, moreover, to the approval of the Federal Reserve Bank of the district, which shall be made dependent on the availability of banking accommodation and the needs for banking service in the locality in question. At present National Banks are allowed branches only where and how state laws expressly permit them. The Vandenbergh Amendment managed to force this principle on the Banking Act of 1933 (Sec. 23), so that no member bank can at present have branches in more than one state (and therefore not, e.g. in Manhattan, Brooklyn, and Newark, which, although parts of Greater New York, are situated in different states), and can in most cases have them only within city limits. This, of course, is just the wrong way, since branch banking is for the time being more needed in rural areas than in urban centres. To put Federal law before and not behind state regulation on this point is absolutely necessary.

Discussions have arisen as to how the " trade areas " ought to be delimited. While there is much to be said for working these areas out on the basis of present conditions of communications, flows of trade, location of industry, and correspondent relations between banks, it is felt that a use of the Federal Reserve Districts, in their present shape, as " trade areas ", is more to be commended. It would be nearly impossible to allocate parts of different Federal Reserve Districts to one trade area, thereby frustrating all efforts towards a co-ordination of banking policy and enlarged independence of the individual Reserve Banks. Most Federal Reserve

districts as they stand now, embrace a territory affording sufficient diversification of borrowers and depositors. A subdivision of one or other of the large districts into two or more trade areas is entirely feasible and could profitably follow the boundaries of the Federal Reserve Branch Territories. In the case of New York the trade area might profitably be restricted to the city and suburbs.

With branch banking within trade areas legalized there is no necessity for the substitutes developed under the forms of group or chain banking. It is nearly universally acknowledged that group and chain banking suffer from all the drawbacks of branch banking without having its advantages, the most notable defects being clumsiness, lack of clarity, opportunity for manipulation of all sorts, and difficulty of supervision by banking authorities. The only advantage sometimes claimed for group and chain banking, i.e. the local board of directors of the several institutions constituting the group, can be had in branch banking, too, so far as it is necessary, as is shown by German experiences (regional committees of directors, who are in most instances not members of the banks' central board of directors, for a group of branches). As a matter of fact, most groups have signified their intention to transform into branch systems as quickly as branch banking is legalized in their territory, so that the law will not have to do more than to accelerate and to expedite this process.

Until this happens a closer supervision and a wider publicity of groups and chains is necessary. The

Banking Act of 1933 has already gone some steps in this direction. It subjects Holding Companies, affiliated with National Banks, in an indirect and possibly not always satisfactory way (Sec. 19) to regular examinations and reports, covering the company as well as all the banks in the group, forces them to hold a reserve in liquid assets increasing to up to 25 per cent [1] of the par value of all bank stocks controlled after about 1944, and prohibits such companies from having any interest in investment banking institutions. With a unification of the banking system these provisions would become applicable to holding companies affiliated with (now) state chartered banks. It would, furthermore, have to be extended to chains controlled by other (non-affiliated) holding companies and by non-corporate bodies. Legislation expressly forbidding the formation of chains and groups seems, therefore, not to be urgent. In order to prevent evasions and back-door practices it would, however, have to be laid down as a rule that the supervisory authorities will not allow a holding company, which is interested in one or more commercial banks to engage directly or indirectly, i.e. via another affiliated company, in any activity which is forbidden to commercial banks.

The most difficult problem which legislation of this sort presents is that of avoiding a run towards branch banking, resulting in competitive buying out of smaller unit banks, and the building up of unsound

[1] If the shares of the Holding Company carry the double liability clause the reserve is reduced to 12 per cent.

new branch systems at inflated costs.[1] This problem will present the least difficulties in those parts of the country where state-wide branch banking is already now permitted or practised under the form of group and chain banking, which is, however, the case only in California, the North-west (Minnesota and Wisconsin), and some parts of the South. The main burden of keeping the branch banking movement on sound lines during its formative stage will therefore fall on the Federal Reserve Banks. It should not be made more difficult by imposing hard and fast regulations. Probably some rules as to the tempo of the movement, the relations between the present size of the bank and its subsequent amalgamations, the territory covered, the price paid for the assets of banks taken over, the character of the business of the banks absorbing and absorbed, avoiding accumulation of similar risks in a single branch system, the opening of de-novo branches, etc., will have to be formulated, but they should be flexible, could vary from district to district, and need not be made public. Likewise some changes in law will be necessary permitting the mergers taking place in the formative process of new branch systems to be effected with greater speed and less formality.

It is, however, not these details that will matter, but the spirit in which the new regulations are administered by the Federal Reserve authorities

[1] Since many banks are showing no net worth at all at the present moment if accounts are made up correctly and others are left with only a fraction of their nominal capital, this danger is smaller now than it would normally be.

and accepted by public and bankers. And here the guiding principle ought to be that branch systems are most necessary in rural areas and small towns, to give them more adequate banking service and greater safety, but that concentration has progressed so far in nearly every large city in the United States that further amalgamations or further expansion within city limits are, barring exceptional cases, undesirable and not likely to improve service or safety. Urban banks ought to look for the next decade outside their city walls for expansion and progress.

Whereas branch banking within Federal Reserve Districts should stabilize the banking situation and help business, there is no necessity at the present stage of development for nation-wide branch banking and no incentive towards that goal but megalomania or the profits to be expected from financial wizardry. There has, in fact, been no trend in this direction visible even in the last boom. It should, therefore, be made unlawful for any person to serve as a director or officer in banks in different Federal Reserve Districts or for any corporation engaged in inter-state commerce, or controlled by or controlling a bank, to hold shares in banks in different districts amounting to more than 5 per cent of the total voting stocks of such banks (banks already being prohibited by the National Bank Act to hold shares in other banks).

4. Real Estate Commitments

If any single cause can be held liable for the breakdown of large metropolitan banks in the Great Lakes region—a movement which more than anything else was responsible for the bank holidays of March, 1933—it is their excessive commitments in urban real estate, chiefly in the form of mortgage loans. The story of how these banks were led, or, rather, misled, by a lack of commercial borrowers, a rapid increase in time deposits, and the comparatively high rates of mortgage loans to invest, 30, 40, and sometimes even 50 per cent of their total resources in the form of real estate loans has been told in Chapter IV. Such a development was only possible because the American banker, at least in that territory, had not been grounded thoroughly enough in the principles of commercial banking, and because the principles of financing real estate developments on sound lines by long-term bonds issued by specialized institutions pooling the risks of many individual developments, are nearly unknown in the United States. Possibly experience will be an efficient teacher. Legislative action on this point, however, seems preferable, the more so since it is easier to work than most other parts of banking legislation.

It should accordingly be laid down by law that a National Bank is prohibited from loaning more than 15 per cent of its total assets or 25 per cent of its savings deposits, whichever is less, on urban or rural real estate, this sum including real estate

bonds based on individual properties, but not covering bonds of supervised mortgage banks (hitherto not yet existing), nor Federal Land Bank bonds, nor short term loans, which may happen to be secured by a mortgage deed. No real estate loan, moreover, is to be allowed to run for more than three years (at present five years) or to exceed 50 per cent of the actual selling value of the property mortgaged as ascertained by an independent appraisal (deducting, of course, any prior charge on the property). Moreover, the practice of renewing real estate loans falling due should be expressly forbidden or, at least, restricted to 50 per cent of the initial loan for every two years, thus forcing the borrower to repay the loan within a relatively short time or to fund it into a long-term loan from a mortgage bank, an insurance company, or a kindred institution.

A transitional period of about three years may be necessary, although the worst offenders have already got rid more or less of a great part of their real estate loans in the process of reorganization which took place in the autumn of 1931 or the spring of 1933, leaving them together with other slow assets in the old banks which had to close their doors, while liquid assets as well as the proceeds of emergency credits were used to start the new institutions designed to replace the failed banks in the financial organization of their communities. In order to facilitate the necessary reduction of real estate loans, the two new Federal mortgage refinancing institutions might reserve a certain portion of their funds to take over excess mortgages held by banks.

5. Restriction of Loans on Securities

It has been a general principle of Central Banking policy to limit attention to the total volume of credit and to the soundness of the paper rediscounted with or bought by the Central Bank. The control of the use to which the Central Bank money obtained by the member banks is put was as a rule deemed outside the province of Central Banking policy—the more so since it is very difficult to ascertain in which way a certain amount of Central Bank money is actually employed by the discounting member bank, or what the effects of such an employment will ultimately be. The Banking Act of 1933, however, tries to single out and to restrict one specific use of Central Bank money: the financing of stock exchange operations. The Act is here pursuing prejudices and sentiments popular in 1928–9.

Sec. 9 empowers the Federal Reserve Board to ask immediate repayment of any money advanced to a member bank on its own promissory notes if the bank increases its loans on securities despite warnings of the Federal Reserve authorities. This clause tries to prevent the need for funds arising out of an increase in loans on securities from being met by the member bank through tapping its Federal Reserve Bank. The provision of Sec. 7, empowering the Federal Reserve Board to " fix from time to time for each Federal reserve district the percentage of individual bank capital and surplus which may be represented by loans secured by stock or bond collateral " upon affirmative vote

of six of its seven members, is more general and much wider in scope. Both provisions (coupled with the prohibition of loaning money on the stock exchange for account of others in Sec. 11*a*) give the Board nearly absolute, but completely flexible, control over loans on securities of member banks. It depends entirely on the discretion of the Board what use will be made of these wide powers.

Some space has been devoted in Chapter V to showing that the ultimate receivers of loans on securities are the sellers, usually corporations and public bodies issuing new securities. The provisions of the Banking Act of 1933 are, therefore, not necessary in order to avoid a starving of industry and trade of credit, nor (as shown above) in order to safeguard the liquidity or the solvency of individual banks loaning on securities. They may, however, be useful if applied wisely, should a situation recur in which increased money rates do not suffice to damp down a wave of widespread stock exchange speculation. Even if so applied, their effectiveness of checking the speculative movement is not beyond doubt. As a matter of fact, it is to be feared that the provisions were inserted as a weapon to keep interest rates down when all-round inflation, as evidenced in speculative activity,[1] tends to increase the level

[1] Dr. Machlup has tried to show in a painstaking analysis of the effects of loans on securities that a general rise of stock exchange values as well as widespread speculative activities of the public are possible only if and in so far as banks are guilty of an inflationary expansion of credit (see Börsenkredit, Industriekredit und Kapitalbildung, p. 95). This thesis rests on a very rigid interpretation of the term "inflationary", and needs minor qualifications. There is, however, no doubt that stock exchange

of interest rates—i.e. to repeat the mistakes of 1928 in a more efficient way.

6. Segregation of Savings Deposits

History, not economics, explains why in great parts of the United States the business of keeping the communities' cash and facilitating the financing of current transactions and the business of safeguarding the people's savings are transacted by the same institutions, while separate institutions take care of these functions in other parts, notably in New England and the Middle Atlantic states, as they do in nearly every country of Europe. It is not probable—nor is it necessary—that separate savings institutions should be set up where they are lacking now, nor is it necessary to check the attempt which commercial banks have made in the last decade to attract an increasing part of the country's savings accounts. It is, however, equitable as well as necessary in the supreme interest of the safety of those savings, still representing for the most part very moderate individual contributions, that the savings accounts kept by commercial banks be safeguarded fully as well as they are in savings banks.

Therefore, every bank holding itself out to accept deposits evidenced by savings pass-books or certificates of deposits, or not repayable on demand,

booms would be very much smaller under a regime of "neutral money". But to will a general expansion of credit and business activity at the same time condemning and repressing a stock exchange boom and an increase in loans on securities is "absurd" as Dr. Machlup remarks frankly but correctly (loc. cit., p. 188).

should be compelled by law to form a separate Savings Department, having its own books and balance-sheets and investing the sums deposited in the same way as savings banks are forced to do at present in most states. The assets segregated for the Savings Department would primarily have to answer to the claims of the savings depositors, only a surplus, if any, belonging to the creditors of the commercial department or the stockholders as the case may be. Taking into account the somewhat different character of savings deposits in commercial banks, the following may be suggested as investment rules for those savings departments:

(*a*) Liquid assets (cash, balances with correspondent or Federal Reserve Banks, bankers' acceptances, commercial paper): at least 10 per cent of savings deposits.

(*b*) United States securities: at least 10 per cent, at most 50 per cent.

(*c*) Bonds: at most 50 per cent, with restrictions as to individual issues, etc., as now in, e.g., New York Savings Bank law.

(*d*) Real estate loans: at most 25 per cent with restrictions as outlined under 4.

(*e*) Short-term or medium-term (up to three years) loans to industry: at most 25 per cent, with restrictions as under 4. In this way some of the problems of smaller firms, which otherwise find it very difficult to provide for additional working capital—and will find it more difficult still in the future on account of the provisions of the new Securities Act—might be solved.

To reduce the chance of losses to depositors still further, a reserve against savings deposits ought to be formed amounting to 5 per cent of the total of deposits held and either segregated from the present surplus of the banks or formed within five years out of profits.

It is difficult to conceive valid objections against this plan of segregation (the details of the investment rules being of minor importance). As a matter of fact, most banks already possess a separate savings department; as far back as 1928 no less than 4,500 out of 7,700 National Banks had one, and most of these probably make up a separate departmental balance-sheet and earning and expense account. Not much trouble or expense would, therefore, be involved in making the separate savings department a compulsory feature for every bank that does not prefer to concentrate on commercial banking proper. Moreover, experience, e.g. in Massachusetts and in California, has proved that such a scheme is feasible and likely to reduce losses to savings depositors.

7. Regulation of Interest Rates on Deposits?

The Banking Act of 1933 has introduced another novel feature into American banking legislation: the regulation of interest rates on deposits. Sec. 11*b* prohibits payment by member banks of interest on deposits repayable on demand "directly or indirectly by any device", and charges the Federal Reserve Board with fixing interest rates on time deposits.

The prohibition of interest on demand deposits

might be interpreted as an acknowledgement of the money quality of those deposits as opposed to the capital quality which time deposits share with other long-term claims, and can therefore be regarded as sound in principle.[1] It will, however, entail important changes in the American banking structure, not all of which are desirable.

These changes will be relatively smaller, even if important enough absolutely, in so far as individual demand deposits are concerned. So long as a part of the commercial banks remain outside the Federal Reserve System there is the possibility that this regulation may lead to an unnecessary and unwanted shift of large demand deposit accounts from member to non-member banks. Much more severe is the danger that prohibition of interest on demand deposits will further strengthen the tendency to shift deposits from the demand to the time category, increasing the amount of sham time deposits and diminishing actual reserve percentages—at least so long as the present reserve requirements remain in force. The new regulation that member banks are forbidden to pay time deposits before maturity would, it is true, partly compensate this tendency if it could be strictly enforced.

Most important and immediate changes will take place in correspondent relationships as a result of the new regulations. It has been argued above that

[1] As a matter of fact, the introduction of this prohibition was probably due less to considerations of this sort than to bankers' fears of not being able to square their accounts at the present low levels of earnings, coupled with the impossibility of reaching a voluntary agreement curtailing rates paid on deposits.

the interest earned on balances with correspondents was the strongest incentive keeping the volume of bankers' balances at a relatively high level even after the introduction of the Federal Reserve System. Prohibition of interest will lead to a severe curtailment of inter-bank balances (a beginning of this movement has already been visible during the last months) and to a noticeable decline of the liquid funds at the disposition of large urban banks, primarily in New York. This will be sooner or later reflected in an actual or virtual decrease of funds employed by these banks in the money market or loaned on securities. It is, however, doubtful if the majority of these funds will be transferred to the Federal Reserve Banks—a great part of the banks withdrawing their deposits are non-members—or invested in liquid form. If they are, nothing but a change from indirect to direct primary reserves—very desirable in itself—will result. If the funds withdrawn are used by the interior banks in the form of loans to customers the liquidity of these banks will be lowered. In any case, the position of the Federal Reserve Banks as bankers' banks is likely to be strengthened—particularly so if the proposed unification of the banking system should materialize. It is improbable, however, that bankers' balances will disappear or even that they will be radically curtailed, so that the dual system of bank reserves will probably persist for some time to come.

The regulation of interest rates on time deposits in its present form can hardly be called an improvement. The text of the bill obviously enables the

Federal Reserve Board to fix different rates for various parts of the country, and it is to be hoped that widest advantage will be taken of this authority.[1] In this case, however, uniformity will be lost and the whole regulation will become very complicated. Experience in Germany shows that a regulation of interest rates of this type is very difficult to work and hardly beneficial so long as the banking system is not fully socialized. The problem of on which market rate of interest, if any, the Board will base its regulated rates is not touched in the Bill; the European practice of taking the rediscount rate of the central bank as base is probably not quite suitable to the United States. As in the case of loans on securities, nearly everything depends on how the Federal Reserve Board uses the authority now conferred. It may be used to curtail the activity of savings departments of commercial banks; this would be unfortunate, since deposits might be shifted to non-member banks (commercial banks in many parts of the country where specialized savings institutions are lacking) or to other financial institutions, particularly building and loan associations and mortgage guaranty companies, all of which have failed to prove their superiority as administrators of savings during the last decade. It may be used in an endeavour to divert funds into investment in securities, notably Government bonds. It may, however, remain not

[1] Latest news is that this has not been done, the rate having been uniformly fixed at 3 per cent as from 1st Nov., 1933 (see *Commercial and Financial Chronicle*, 1933, ii, p. 1853/4).

much more than a dead letter. This contingency—the most probable one if the general economic situation improves—is surely much to be preferred to an unjudicious tampering with the mechanism of interest rates.

8. A Guarantee of Deposits?

The last draft of the Banking Act of 1933 as passed contains a scheme for the guarantee of deposits of all member banks and such non-member banks as care to participate, limited, however, to 75 per cent for balances of over $10,000 and to 50 per cent for balances over $50,000, and starting with 1st January, 1934 (Sec. 8). The scheme is to be administered by the Federal Deposit Insurance Corporation, which procures the necessary funds—styled the capital stock of the corporation—from three sources: A contribution of up to 150 million $ from the Federal Treasury, 50 per cent of the present surplus of the Federal Reserve Banks (adding about 140 million $), and an assessment of provisionally 1–2 per cent of total deposits on the banks participating (somewhat over 200 million $ if all banks do). The Corporation is, moreover, entitled to issue tax-exempt bonds up to three times the amount of its capital, which will total about 500 million $, all the funds to be used to pay off deposits in participating banks failing or to acquire banks in difficulties.

The actual importance of this guarantee scheme will depend entirely on the circle of banks admitted

to participation.[1] If the letter of the Act is strictly adhered to and only banks in a position to pay deposits and stockholders' equity on the basis of present asset values are admitted, participation will be restricted to a small number of banks, mostly large urban institutions, and the whole scheme will be superfluous as well as innocuous. If, however, nearly every bank not manifestly bankrupt is admitted—and that is what will happen as a matter of fact, and what is not more than the real intention of the legislators—the scheme is a very unfortunate one, explainable but not vindicated by the state of panic the American public had been driven to by the apparently endless succession of bank failures. It is unsound in that it penalizes the good bank for the sake of the past or future mistakes of the bad ones (there are, of course, banks which went down without any fault of their own, but for most of them, especially the larger institutions, it may be safely said that the victims of the depositors' attack were at the same time usually the worst offenders against sound banking principles), and it is most dangerous in that it may easily lead to a renewal or even an increase in laxity so far as bank managers are concerned, and to a most deplorable lessening of the discriminative power of depositors as between individual banks.[2] It will be nearly unworkable,

[1] See H. P. Willis, *Commercial and Financial Chronicle*, 1933, ii, pp. 1469/73.

[2] The Act makes it unlawful for any bank to advertise its participation in the scheme. The public will, however, take it for granted that every bank has joined and "run" every bank which has not or is rumoured not to have.

moreover, should another major wave of failures ravage the United States. If the Guarantee Scheme had been introduced in 1929, assessments on participating banks during 1930 to 1933—i.e. contributions exceeding the Treasury contributions to the Corporation's capital—would have amounted to about 75 per cent of capital and surplus of the participating banks, which did not fail on their own account—certainly wrecking nearly every one of them.[1]

A repeal of the deposit guarantee scheme of the Banking Act of 1933 is, unfortunately, very improbable for political reasons. The case for a thorough reform of the American banking system, however, is not weakened but strengthened thereby, it being now more important as well for the sound banks as for the Treasury, which will have to make good an appreciable part of the losses suffered by the Deposit Corporation, to see that unsound banking and bank failures are avoided. Having weakened the responsibility of the individual bank management by introducing the guarantee, more reliance and emphasis will have to be placed on banking legislation and bank supervision.

9. The Relations between Commercial Banking and Investment Banking

There is probably no problem more discussed in American banking at present than this. Astonishingly enough, American public opinion,

[1] These are the sums needed to pay off the depositors in banks failed; ultimate losses may amount to thirty to fifty per cent of this total only.

which has been rather shy of thorough reforms of the banking system in other directions, has inclined recently to the most radical solutions of this question.

What is contained under this heading may be easily dissected into two clusters of problems, which are more or less independent of each other. They are the investment banking activities of commercial banks on one hand, the influence of private investment bankers on commercial banks, on the other. "Investment affiliates" is the catchword for the first, "Money trust," the slogan used to designate the second set of problems.

The investment affiliates as administrated in the boom of 1927-9 have involved the parent banks in many cases in heavy losses. They are responsible, too, for some very depreciated bonds held in the portfolio of commercial banks, and for many a heavily under-collateralled loan. But it may be doubted that the banks would have lost much less on investments and loans on securities if they had not had their affiliates, taking into account the spirit and the "valuations" current in those years. The affiliates have, moreover, been used by the parent bank or by its officers in some cases to manipulate the prices of the bank's stock (and some other shares occasionally, too); but this is an activity which is not necessarily inherent in the working of an investment affiliate. They have been further used in other directions, to do things which were not permitted to the commercial bank, the affiliate as a non-banking corporation not being subject to the banking laws,

and being entirely free from supervision and from the necessity of publishing reports. So far as criticisms are directed against these patent abuses, there will be no dissenting opinion.

There is, therefore, virtual unanimity, that investment affiliates ought to be legally forced to submit their books for examinations by the proper authorities and to publish regular detailed reports, preferably for the same dates as the parent bank. (Secs. 19*a* and 28*b* of the Banking Act of 1933 have given the Federal Reserve Board and the Comptroller of the Currency the necessary authority in respect to National Banks.) Moreover, rules prohibiting or severely restricting loans of the parent bank to the affiliate as well as the affiliate's stock exchange activities and regulating the types of securities it may hold, underwrite, or distribute are quite to the point. Some provisions of this type are incorporated in Sec. 13 of the new Banking Act, limiting loans to single affiliates to 10 per cent and to all affiliates of a member bank together to 20 per cent of the bank's capital stock and surplus.

It may, however, be doubtful if the radical proposals to sever every connection between commercial banks and their investment affiliates, which are embodied in Secs. 16, 18, 20, and 32–3 of the Act, are necessary or even that they will reach their goal (commercial banks have to divest themselves of their interest in any investment affiliate within one year, and are not allowed to participate in issuing or underwriting activities after June, 1934; no officer or director of a commercial bank may be

an officer or director of a corporation engaged in investment banking). But since they are now on the statute books and will remain there for some time, care must at least be taken that this divorcement—coupled with the barriers set up by the Securities Act—does not cripple the investment banking machinery in the years to come.

As a matter of fact, what will probably happen is that the security affiliates will be taken over by their officers or by private capitalists, in so far as they possess a distributing machinery still functioning, and that commercial banks will have to provide most of the funds needed in the way of loans on securities, the capital of the new independent investment banking houses being necessarily small. Probably each commercial bank will continue to have specially close connections with one or two investment banking houses—their former affiliate being among them—so that possibly not much will be changed. A real change making commercial banking and investment banking into nearly entirely separate circles as they are in England, would presuppose a profound alteration in the attitude of American bankers, commercial as well as investment, and radical changes in the methods of issuing and distributing securities. Signs of such a development are not entirely lacking at the moment, but it remains to be seen if stern principles will withstand the lure of another period of prosperity.

The second connecting link between investment banking and commercial banking is still much more difficult to cut. Consequently very little has been

done in this direction in the way of legislative action or of proposals for reform. Investment bankers—particularly the house of Morgan—and some financiers have had an appreciable influence over large commercial banks for at least thirty years. The circle of banks so controlled has, however, always been more or less restricted to New York City and Boston, and—in an appreciably lesser degree—to Chicago and Philadelphia. Commercial banks in all other large cities have as a rule been controlled by local interests. In many cases stockholdings were so numerous and scattered that control rested, in fact, with the management.[1] Control of this sort was originally dependent on the possession of an appreciable block of shares and evidenced by the occupancy of one or more seats on the board of directors. In 1913 Mr. James Stillman owned not less than 20 per cent of the total shares of the then largest commercial bank in the United States, the National City Bank; Mr. Geo. F. Baker (and son) possessed 25 per cent of the First National Bank stock; the firm of J. P. Morgan and Co. and its partners held 9½ per cent of the stock of the Bankers Trust Co. (completely controlling the bank by voting trust), 8½ per cent of the Guaranty Trust Co. (controlling majority by voting trust, too), 7 per cent of National Bank of Commerce and 16 per cent of First National Bank.[2] With the increase of the

[1] Mr. Means found that 58 per cent of the 200 largest American industrial, railroad, and public utility corporations were management controlled (*Quarterly Journal of Economics*, xlvi, pp. 94, 100). The percentage is probably higher still in banking.

[2] See *Pujo Report*, pp. 57/60, 66, 72.

capital of large city banks, due mainly to amalgamations on an unprecedented scale, these blocks have lost heavily in numerical importance, and have not been augmented by their owners in the same proportion as total capital increased.

It is, therefore, very improbable that any one of the large banks in the United States—except perhaps the Bankers Trust Co. and the First National Bank in New York—is at present "controlled" by an investment banking house or a few individuals, if possession of a majority or even a large minority—say 25 per cent—be required for that purpose. As a consequence, other ways had to be found which would give control without a correspondent investment of capital.

The first of these dates back to pre-war days, and was probably first used in banking by the house of Morgan: the voting trust, trusteeship being vested in partners of the investment banking firm or in individuals closely connected. The best-known examples of control by voting trust are the Guaranty Trust Co. and the Bankers Trust Co. in New York.

The second way is control by members of the board of directors connected with investment banking firms if such members wield an influence out of proportion to their number on the board and to the shares owned by their firm. This is probably now the usual form of investment bankers' control over commercial banks. Most likely, as may be added, such control is less marked now than it was before the war. The Clayton Act of 1914 and the Kern Amendment of 1916 made it unlawful for any person to be

a director or officer of—roughly speaking—more than two banks doing competitive business and having more than 5 million $ of combined resources. The facts that many large banks do not belong to the National system and that the few investment houses, which would be in a position to control a large group of banks, possess a great number of partners, have practically nullified the intentions of the Act. If this avenue of control is to be effectively barred, the only way would be to make every investment banker ineligible to the board of a commercial bank.

The third way of control—or, at least, of influence—is that of " obliging " the higher executive officers of commercial banks, who, by virtue of the dispersion of ownership and the lack of interest of the average shareholder, actually often completely dominate the institution, either through personal loans for speculative purposes or through participation in transactions offering inside profits without, on the average, entailing an adequate risk. This subtle and often subterraneous way of control is very difficult to bar. A provision prohibiting officers of commercial banks from taking part in any sort of underwriting activities or of borrowing money from other banks or investment houses (strictly regulating the conditions under which they would be allowed to borrow from their own bank [1]) might be tried, although there are undoubtedly ways of evasion.

[1] The Banking Act of 1933 (Sec. 12) prohibits loans to the banks' own executive officers, thus forcing them to seek accommodation at other incorporated or private banks—not very fortunate a solution.

These suggestions for reform are based on the belief that it is in general conducive to the soundness of the banking system and desirable in the public interest to have commercial banks and investment banks as far separated as is compatible with a successful working of both branches—a principle carried to a one-sided extreme in the Banking Act of 1933—and to keep commercial banking independent from outside financial or political influences.

In order to make this separation of functions complete and as an equivalent of the commercial banks' sacrificing investment activities, investment banks (as well as other non-banking institutions) are forbidden by Sec. 21 of the Banking Act to accept deposits subject to cheque or to repayment on demand after June, 1934. This will hit primarily a few large Eastern houses, which have carried very large deposits of corporations or foreign banks and treasuries; they may possibly continue to do so, if these deposits are transferred to the time category. A more commendable middle course would not have prohibited deposit business as such, but would have subjected investment banks who care to continue this activity to the same degree of publicity and of supervision as commercial banks—a course which the Banking Act itself adopts for financial institutions other than investment banks.

The Banking Act of 1933 has thus radically cut one link connecting commercial banking and investment banking, but has nearly completely forgotten to loosen the other link, which is not less liable to

get commercial banks into difficulties. It has, moreover, by its very radicalism coupled with the barriers put in the way of new issues of securities by the Securities Act—a part of them undoubtedly wholesome and necessary—made the long-term financing of the next period of expansion a grave problem. It is to be hoped that a lenient interpretation of the provisions of both Acts (and the repeal of some clauses in the Securities Act) will make it possible to fund a part of the current debts now outstanding and to provide the money for new construction and additional working capital by issuing long-term securities which will have to be carried to some extent and temporarily by the banks.

10. The Government in Banking

Up to 1931 the National Government, as well as states and municipalities, have kept out of the sphere of commercial banking[1] and investment banking more consistently in the United States than in nearly any other large country. This has been changed by the crisis to an appreciable extent. The Reconstruction Finance Corporation, a government-owned organization, has taken over large blocks of preferred shares in a number of reorganized banks—e.g. the leading institutions in Detroit, Cleveland, and New Orleans—and has

[1] The Postal Savings System was completely unimportant, total deposits totalling not much over 150 million $ up to 1931.

made substantial emergency loans to over 4,000 banks, a part of which will have to be consolidated into preferred shares, too. This move has just been followed by an offer of the Corporation to buy up to 1 billion $ of preferred stock of sound banks willing to expand credit but suffering from a lack of capital funds [1] and by another offer to lend up to 1 billion $ to banks for the purpose of relending to borrowers in need of credit on account of the higher prices and wages brought about by the N.I.R.A. These developments have given or will shortly give the United States Government an important minority or even a majority of voting stock in an appreciable part of the nation's banking system outside New York City. It remains to be seen how this power will be wielded. Present trends should favour a gradual selling of the R.F.C.'s holdings to local capitalists in so far as this is possible.

This direct influence of the Government on individual banks may be very helpful during a transitory period if it is used in the right way, i.e. in the process of effecting necessary reorganizations and mergers, and in the building up of regional branch banking systems. In the long run, however, the co-existence of a large number of banks in which the Government is heavily interested as a shareholder with entirely private banks is hardly possible without grave inconveniences. Whatever the respective merits of private banking and of a system of government-owned commercial banks

[1] See e.g. *Financial Times*, 3rd August, p. 5.

may be, that much can be regarded as certain, and proved by experience abroad: it is a question of the one or the other. A hybrid system will not work and will probably develop into a wholly socialized one as time goes on.

In 1912–13 a committee headed by Congressman Pujo and having Mr. Samuel Untermyer for counsel, investigated some problems then believed of urgency in the field of commercial and investment banking. Various circumstances gravely curtailed the committee's contemplated scheme of investigation and various others, among which the world-war ranks first, let the fruits of the committee's work fall to the ground more or less unheeded. A perusal of the findings and the recommendations of the Committee[1] makes most melancholy reading for the student of American banking. The committee sat at a time when the last storm in American banking had subsided as long as five years ago, and the sky was relatively cloudless. Nevertheless, it showed more insight into the problems and more foresight as to where the trends, then just dimly visible, would eventually lead—with restrictions, of course, to the cluster of problems it had chosen to attack—than nearly anyone else who spoke or wrote about American banking in the next twenty years. It is therefore not astonishing to see the report quoted but seldom, and its methods of approach almost never used. The most melancholic reading, however, is

[1] See particularly "Summary of Recommendations," pp. 162–5.

provided by its suggestions for reform, which could be repeated almost unchanged in some parts, on this very day[1] and the acceptance and realization of which would have spared the American people a good deal of the financial excesses of the last boom, as well as of the banking troubles of the present depression.

At the present time all the discussions of reform are overshadowed by the exigencies of the greatest catastrophy in American banking history just passed by, and legislation is enacted hastily and with undue importance attached to the problems of the day. There is, moreover, the danger that the moment acute difficulties in the banking situation have been relieved, the whole movement for banking reform will lose its impetus and will be stopped by the forces of vested interests again rallying to positions they had already evacuated as unsafe and untenable. Should this happen, and banking reform be confined to what Bills chance to have been passed up to the present moment, the American banking structure will not be much safer or less open to misdirection in the new phase of development it is entering now than it has been during the last decade. It would even be in a decidedly inferior position because of four drawbacks: the emasculation of the Federal

[1] These suggestions (see Report, pp. 166/70) included, among others, prohibition of interlocking directorates and stockholdings (direct and indirect) among banks, prohibition of voting trusts and cumulative voting, separation of security affiliates, prohibition of underwriting activities of banks, limitations of investments in bond, limitations of loans to officers and directors, equal publicity and supervision for private banks accepting deposits.

Reserve System as an independent central bank based on the rediscount principle, the government guarantee of bank deposits without adequate supervision over banks, a concentration of banking within large cities entirely out of proportion to the enforced decentralization of rural banking, and the one-sided severance of the connections between commercial banks and investment banking, without providing a substitute for the function of commercial banks in the origination and distribution of new securities made impossible by the Banking Act of 1933. Should banking reform really run this course, it is safe to predict that the next decade will see a repetition of the mistakes made during the last boom and something of a repetition, too, of the banking crisis of 1930–3.

In order to avoid such a possibility, which is fraught with dangers both for the American social system and for international financial relations, a banking reform which is thorough-going but not unnecessarily radical or disturbing, calculated for the long run and not destined to bring back prosperity within a short time, constructive and not purely negative or confined to questions of detail, is absolutely essential. There seems to be some indication that the present Administration shares this view and has the intention of substituting during the next session of Congress something more coherent, more comprehensive, and more positive for the Banking Act as passed in June, 1933. Let us hope that neither political sectionalism, unenlightened self-interest of some parts of the banking

community and the pressure of intellectual vested interests, nor inflationary radicalism born out of despair and fostered by the spirit of crusading against the world depression, will be allowed to wreck what seems the last chance for another decade of a real American banking reform.

TABLES

TABLE 1

Number and Resources of American Financial Institutions [1]

	Number			Resources (m. $)		
	1921	1929	1931	1921	1929	1931
National Banks .	8,154	7,536	6,805	20,518	27,440	27,643
State Banks . .	18,875	14,437	12,259	14,199	16,824	13,110
Loan and Trust Companies . .	1,474	1,608	1,469	8,181	16,155	16,861
Private Banks . .	708	391	284	175	156	82
Commercial Banks .	29,211	23,976	20,817	43,073	60,575	57,696
Stock Savings Banks .	978	747	654	588	1,590	1,321
Mutual Savings Banks	623	611	600	6,040	10,006	11,192
All incorporated Banks	30,812	25,330	22,071	49,671	72,173	70,209
Federal Reserve Banks	12	12	12	5,151	5,458	5,154
Building and Loans Associations .	8,624	12,342	11,432	2,534	8,695	8,412
Life Ins. Companies .	272	331	352	7,320	15,961	18,880
Post Office Savings Bank . .	1	1	1	160	163	356
Federal Land Banks .	12	12	12	474	1,301	1,283
Joint Stock Land Banks . .	24	49	49	96	670	606
Federal Intermediate Credit Banks .	—	12	12	—	115	158
Investment Bankers .	.	.	.	.	.	.

[1] Sources:—
For incorporated banks: *Annual Report of the Comptroller of the Currency*, var. issues.
For Federal Reserve banks: *Annual Report of the Federal Reserve Board*, var. issues.
For others: *Statistical Abstract of the U.S.*, var. issues.
The data refer to 30th June for all incorporated banks, the Federal Reserve Banks, and the Post Office Savings Bank; to 1st January for Life Insurance Companies; to 31st December for Land Banks and Intermediate Credit Banks; and to various data during the year for Building and Loan Associations.

TABLE 2

BANK CREDIT AND ITS FUNDAMENTS [1]

30th June	Individual deposits [2]		Bank debits [3]	Monetary gold stock	Money in circulation	Federal Reserve Bank credit outstanding	Total deposits	Demand deposits
	Total	Demand						
	Million $						% of gold stock	
1914	18,045	9,333	.	1,891	3,459	55	9·5	4·9
1915	18,754	10,580	.	1,986	3,320	55	9·4	5·3
1916	21,989	12,530	.	2,444	3,649	172	9·0	5·1
1917	25,583	15,113	.	3,220	4,066	495	8·0	4·7
1918	28,082	16,547	.	3,163	4,482	1,345	8·8	5·2
1919	32,182	19,142	211,175	3,113	4,877	2,354	10·3	6·1
1920	36,263	20,949	241,596	2,865	5,468	3,183	12·9	7·3
1921	34,451	17,950	191,941	3,276	4,911	2,051	10·5	5·5
1922	36,040	18,461	199,509	3,785	4,463	1,178	9·6	4·9
1923	39,492	19,765	225,330	4,050	4,823	1,202	9·8	4·9
1924	41,413	20,224	228,161	4,488	4,849	832	9·2	4·5
1925	45,431	22,397	256,690	4,360	4,811	1,145	10·4	5·1
1926	47,695	22,999	268,899	4,447	4,885	1,194	10·8	5·2
1927	49,481	23,390	282,303	4,587	4,851	1,082	10·8	5·1
1928	51,647	23,234	306,195	4,109	4,797	1,585	12·6	5·7
1929	52,160	23,942	331,939	4,324	4,746	1,400	12·1	5·5
1930	52,069	23,584	277,316	4,535	4,522	1,018	11·6	5·3
1931	49,835	21,384	217,525	4,956	4,822	943	10·0	4·3
1932	40,982	16,625	154,400	3,918	5,696	2,310	10·5	4·2
1933	.	.	.	4,318	5,721	2,220	.	.

[1] Sources: *Annual Report of the Federal Reserve Board*, var. issues.
[2] Excluding bankers' deposits; adjusted (see Table 4).
[3] Debits to individual accounts by banks in 140 principal cities outside New York City; data refer to calendar years.

TABLE 3

YEAR-TO-YEAR CHANGES IN BANK CREDIT AND ITS FUNDAMENTS [1]

(Million $)

From 1st July to 30th June	Monetary Gold Stock	Money in circulation	Federal Reserve Credit outstanding	Member bank balances with Reserve Banks	Commercial Banks	
					Total earning assets	Demand deposits
1920–21	+ 410	− 557	− 1,132	− 214	− 2,271	− 2,999
1921–22	+ 510	− 448	− 873	+ 210	− 473	+ 511
1922–23	+ 265	+ 360	+ 24	+ 36	+ 2,940	+ 1,304
1923–24	+ 438	+ 26	− 370	+ 94	+ 1,055	+ 459
1924–25	− 128	− 38	+ 313	+ 226	+ 2,915	+ 2,173
1925–26	+ 87	+ 74	+ 49	+ 45	+ 2,097	+ 602
1926–27	+ 140	− 34	− 112	+ 44	+ 2,561	+ 391
1927–28	− 478	− 54	+ 503	+ 62	+ 3,137	− 156
1928–29	+ 215	− 51	− 185	+ 17	+ 194	+ 708
1929–30	+ 211	− 224	− 382	+ 49	− 417	− 358
1930–31	+ 421	+ 300	− 75	− 12	− 3,819	− 2,200
1931–32	− 1,038	+ 874	+ 1,362	− 414	− 8,554	− 4,759
1932–33	+ 400	+ 26	− 90	+ 310	.	.

[1] Sources: Column 1 to 3, see Table 2.
„ 4, *Annual Report of the Federal Reserve Board*, 1931, pp. 96–7
„ 5, see Table 5.
„ 6, see Table 4.

TABLE 4

DEPOSITS [1]
(Million $)

30th June	All Incorporated Banks				Member Banks			
	Capital and surplus	Individual deposits		Bankers' deposits	Capital, surplus, & undivided profits	Individual deposits		Bankers' deposits
		Savings	All other [2]			Time	Demand [3]	
1919	4,619	13,040	19,142	3,890	3,350	4,344	13,161	3,662
1920	5,113	15,314	20,949	3,708	3,853	5,911	14,034	3,486
1921	5,446	16,501	17,950	2,809	4,133	6,367	12,635	2,713
1922	5,641	17,579	18,461	3,244	4,214	7,175	13,278	3,150
1923	5,852	19,727	19,765	3,610	4,367	8,378	13,858	3,217
1924	6,082	21,189	20,224	3,928	4,486	9,204	14,052	3,854
1925	6,343	23,134	22,397	4,371	4,690	10,381	15,365	4,018
1926	6,745	24,696	22,999	4,331	4,832	11,173	15,976	3,980
1927	7,141	26,091	23,390	4,289	5,147	12,210	16,228	4,129
1928	7,671	28,413	23,234	4,081	5,625	13,439	16,351	3,927
1929	8,409	28,218	23,942	3,629	6,345	13,325	16,221	3,608
1930	8,858	28,485	23,584	4,377	6,726	13,812	16,279	4,450
1931	8,463	28,215	21,384	4,829	6,430	13,515	15,562	4,702
1932	7,376	24,774	16,625	3,212	5,661	10,636	12,782	3,109

TABLE 4A

SIZE DISTRIBUTION OF DEPOSIT ACCOUNTS IN 5,500 MEMBER BANKS AS OF 13TH MAY, 1933 [4]

Size of accounts ($)	Number of accounts (000)	Deposits (mill. $)	Number of accounts	Deposits
			% of total	
Less than 2,500	29,482	5,580	96·5	23·7
2,501–5,000 .	570	1,912	1·9	8·1
5,001–10,000 .	270	1,841	0·9	7·8
10,001–50,000 .	187	3,720	0·6	15·8
Over 50,000 .	47	10,489	0·1	44·6
Total .	30,556	23,542	100·0	100·0

[1] Sources:—
Column 1: *Statistical Abstract*, var. issues.
„ 2: *Savings Deposits and Depositors* (ed. by Am. Bankers' Ass.), 1930, p. 7.
„ 3: *Annual Report of the Federal Reserve Board*, var. issues.
„ 4: *Annual Report of the Comptroller of the Currency*, var. issues.
„ 5 to 8: *Annual Report of the Federal Reserve Board*, var. issues.

[2] Total individual deposits adjusted (see note 3)—savings deposits.

[3] Published figures are adjusted so as to include certified, cashiers' and travellers' cheques outstanding, while items in process of collection are deducted (see Currie, *Journ. of Pol. Economy*, 1933, pp. 68–70).

[4] Source: *Federal Reserve Bulletin*, 1933, p. 454.

TABLE 5

LOANS AND SECURITIES[1]
(Million $)

30th June	All Incorporated Banks			Commercial Banks		
	Total earning assets	Loans and discounts	Securities	Total earning assets	Loans and discounts	Securities
1919	37,301	25,071	12,230	31,400	21,957	9,443
1920	42,261	30,874	11,387	35,652	27,305	8,347
1921	40,521	28,866	11,655	33,381	24,946	8,435
1922	40,296	27,749	12,547	32,908	23,694	9,214
1923	43,950	30,277	13,673	35,848	25,734	10,114
1924	45,567	31,339	14,228	36,903	26,260	10,643
1925	49,147	33,748	15,399	39,818	28,200	11,618
1926	51,859	36,042	15,817	41,915	30,008	11,907
1927	54,615	37,360	17,255	44,476	31,164	13,312
1928	58,236	39,464	18,772	47,613	33,020	14,593
1929	58,862	41,512	17,350	47,807	34,615	13,192
1930	58,562	40,618	17,944	47,390	33,696	13,694
1931	55,224	35,163	20,061	43,571	28,351	15,220
1932	46,298	28,075	18,223	35,017	21,342	13,675
1933	(41,500)	(22,500)	(19,000)	.	.	.
			Per cent of total			
1919	100	63·2	36·8	100	69·9	30·1
1920	100	73·1	26·9	100	76·6	23·4
1921	100	71·2	28·8	100	74·7	25·3
1922	100	68·9	31·1	100	72·0	28·0
1923	100	68·8	31·2	100	71·8	28·2
1924	100	68·8	31·2	100	71·2	28·8
1925	100	68·6	31·4	100	70·9	29·1
1926	100	69·5	30·5	100	71·6	28·4
1927	100	68·4	31·6	100	70·1	29·9
1928	100	67·8	32·2	100	69·4	30·6
1929	100	70·5	29·5	100	72·4	27·6
1930	100	69·4	30·6	100	71·0	29·0
1931	100	63·7	36·3	100	65·1	34·9
1932	100	60·6	39·4	100	60·9	39·1
1933	100	(54·3)	(45·7)	.	.	.

[1] Tables 5 and 6 are based on the data published in the Annual Reports of the Comptroller of Currency. The published figures have been corrected in some details to secure comparability. The corrections are limited to figures for State Banks, Trust Companies, and Savings Banks, for which the distribution of loans is given only for a part of the forty-eight States, so that estimates for those not reporting all necessary details are unavoidable in order to get figures covering the entire U.S.A. Figures in Table 6 are, therefore, to be regarded as approximate only.

TABLE 6

BANK LOANS [1]
(Million $)

30th June	All Incorporated Banks				Commercial Banks			
	Total loans and discounts	Real estate loans	Loans on securities	All other loans	Total loans and discounts	Real estate loans	Loans on securities	All other loans
1919	25,071	4,294	5,200	15,577	21,957	1,384	5,200	15,373
1920	30,874	4,960	6,410	19,504	27,305	1,850	6,410	19,045
1921	28,866	5,539	5,750	17,577	24,946	2,069	5,750	17,127
1922	27,749	6,292	5,780	15,677	23,694	2,562	5,780	15,352
1923	30,277	7,202	6,320	16,755	25,734	2,992	6,320	16,422
1924	31,339	8,166	6,750	16,423	26,260	3,396	6,750	16,114
1925	33,748	9,006	8,228	16,514	28,200	3,856	8,228	16,116
1926	36,042	9,946	9,001	17,095	30,008	4,366	9,001	16,641
1927	37,360	10,400	10,036	16,924	31,164	4,580	10,036	16,548
1928	39,464	11,040	11,248	17,176	33,020	4,900	11,248	16,822
1929	41,512	11,290	12,534	17,688	34,615	5,040	12,534	17,041
1930	40,618	11,250	13,026	16,342	33,696	4,970	13,026	15,700
1931	35,165	11,090	10,463	13,612	28,351	4,680	10,463	13,208
1932	28,075	10,650	7,216	10,209	21,342	4,220	7,216	9,906
			Per cent of total					
1919	100	17·1	20·8	62·1	100	6·3	23·8	69·9
1920	100	16·1	20·8	63·1	100	6·8	23·5	69·7
1921	100	19·2	19·9	60·9	100	8·3	23·1	68·6
1922	100	22·6	20·8	56·6	100	10·8	24·4	64·8
1923	100	23·8	20·9	55·3	100	11·6	24·6	63·8
1924	100	26·1	21·6	52·3	100	12·9	25·7	61·4
1925	100	26·7	24·4	48·9	100	13·7	29·1	57·2
1926	100	27·6	25·0	47·4	100	14·5	30·0	55·5
1927	100	27·8	26·8	45·4	100	14·7	32·2	53·1
1928	100	28·0	28·4	43·6	100	14·8	34·1	51·1
1929	100	27·2	29·4	43·4	100	14·6	35·2	50·2
1930	100	27·7	32·1	40·2	100	14·7	38·6	46·7
1931	100	31·6	29·7	38·7	100	16·5	36·9	46·6
1932	100	37·9	25·7	36·4	100	19·8	33·8	46·4

[1] See Table 5.

TABLE 7

BANK CREDITS TO AGRICULTURE[1]
(As per 30th June, 1920)

Region	Short term credits		Mortgage loans
	Million $	Per cent of total loans of banks	Million $
New England States . .	27	4·7	94
Middle Atlantic States .	107	1·1	34
North-East Central States .	656	12·4	335
North-West Central States .	1,563	40·8	531
South Atlantic States .	313	14·3	94
South-East Central States .	186	19·9	101
South-West Central States .	542	34·1	73
Mountain States . .	268	35·6	56
Pacific States . . .	208	11·2	129
United States . .	3,870	13·3	1,448

TABLE 8

COMMERCIAL CREDITS AND LOANS TO AGRICULTURE[2]
(Million $)

30th June	Commercial credits	Short term credits to agriculture	Other commercial credits
1919	15,577	3,140	12,437
1920	19,504	3,870	15,634
1921	17,577	3,580	13,997
1922	15,677	3,290	12,387
1923	16,755	3,000	13,755
1924	16,423	2,840	13,583
1925	16,514	2,680	13,834
1926	17,095	2,520	14,575
1927	16,924	2,360	14,564
1928	17,176	2,200	14,976
1929	17,688	2,100	15,588
1930	16,342	2,000	14,342
1931	13,612	1,900	11,712
1932	10,209	1,700	8,509

[1] Source: *Bulletin of the Department of Agriculture*, No. 1047, p. 3 (mortgages); No. 1048, p. 2 (loans).

[2] For data of commercial credits confer Table 6 (Other loans). Short-term credits to agriculture according to [unpublished] estimates of the Department of Agriculture for 1918, 1920, 1923, and 1928; the data for other years have been interpolated or estimated.

TABLE 9

SOME DATA ABOUT THE FINANCIAL POLICY OF INDUSTRY[1]

Year	Industrial production	Stocks		Due from banks	Due to banks	
		Total manufactured goods	729 large corps.	544 large corps.	544 large corps.	729 large corps.
	1923–5 = 100	1923–5 = 100	Million $	Million $	Million $	Million $
1919	83	90	.	.	.	.
1920	87	84	.	.	.	.
1921	67	97	.	.	.	.
1922	85	87	3,965	.	.	678
1923	101	100	4,538	.	.	757
1924	95	101	4,539	.	.	576
1925	104	101	4,810	.	.	538
1926	108	108	4,975	3,112	391	446
1927	106	113	4,887	3,390	433	464
1928	111	122	5,053	.	.	425
1929	119	119	.	.	.	.
1930	96	120	.	.	.	.
1931	81	108	.	.	.	.
1932	64	97	.	.	.	.

[1] Production: Index of the Federal Reserve Board (Manufactures and Mining).

Stocks: See *Survey of Current Business, Annual Supplement,* 1932; data refer to end of December from 1922 on, and represent yearly averages for 1919–1921.

544 Corporations: Sloan, loc. cit., p. 22.

729 Corporations: Currie, loc. cit., p. 699. " Notes payable " in the statistics given by Mr. Currie usually represent bank credit.

TABLE 10

SOME DATA ABOUT THE REAL ESTATE MARKET [1]

Year	Building activity			Rents	Real Estate activity	Urban Real Estate Loans of			
	Value	Volume	Building costs			Comm. Banks	Savings Banks	Building & Loan Assn.	Life Ins. Co.s
	Bill. $	1913 = 100		1923 = 100	1926 = 100	Billion $			
1919	.	86	198	75	.	1·4	2·9	1·9	.
1920	4·1	47	247	89	.	1·9	3·1	2·3	1·1
1921	3·9	89	200	98	.	2·1	3·5	2·6	1·3
1922	5·6	135	184	96	.	2·6	3·7	3·0	1·4
1923	6·4	157	201	100	.	3·0	4·2	3·6	1·7
1924	6·9	163	202	106	96	3·4	4·8	4·4	2·0
1925	8·7	177	199	104	104	3·9	5·2	5·1	2·5
1926	8·9	180	197	101	100	4·4	5·6	5·9	3·2
1927	8·7	188	200	98	93	4·6	5·8	6·6	3·7
1928	9·0	197	199	94	88	4·9	6·1	7·3	4·3
1929	7·9	197	203	92	84	5·0	6·3	7·8	4·8
1930	5·9	165	200	90	71	5·0	6·3	7·8	5·1
1931	(4·2)	112	196	82	62	4·7	6·4	7·2	(5·2)
1932	(1·8)	.	171	72	54	4·2	6·4	.	5·2

[1] Value of new building: See F. W. Dodge Corp., *Prospects of Building for* 1931 (includes contracts under $5,000).

Volume of new building: See *Survey of Current Business, Annual Supplement*, 1932, p. 36–7.

Building costs: Index of Associated Contractors of America, see *Survey*, loc. cit.

Rents: Taken from the index of Cost of Living of the National Industrial Conference Board; see *Survey*, 1932, p. 23.

Real Estate activity: Activity in sixty-three cities, see *Survey*, 1932, p. 37.

Mortgage loans, Banks: See Table 6; data refer to 30th June, and include farm mortgages.

Mortgage loans, Building and Loan Associations: See *Proceedings of the Annual Conference of U.S. League of Local Building and Loan Associations.*

Mortgage loans, Life Insurance Co.s: See *Proceedings of 24th Annual Conference of Life Insurance Presidents*, p. 102. Data refer to fifty-two large companies (end of year), having between 92 and 98 per cent of total assets of all life insurance companies.

TABLE 11

LOANS ON SECURITIES [1, 2]

30th June	Total loans on securities	Loans granted by: member banks	other commercial banks [3]	other lenders	Price of common shares	Total loans granted to: members New York Stock Exch.	other borrowers
	Million $				1926 = 100	Million $	
1919	5,620	4,000	1,200	420	78	.	.
1920	6,912	4,900	1,510	502	67	.	.
1921	6,099	4,400	1,350	349	49	.	.
1922	6,276	4,500	1,280	496	66	.	.
1923	6,914	4,950	1,370	594	63	.	.
1924	7,352	5,350	1,400	602	67	.	.
1925	9,108	6,718	1,510	880	87	.	.
1926	9,997	7,321	1,680	996	99	2,926	7,071
1927	11,382	8,156	1,880	1,346	116	3,569	7,813
1928	13,732	9,068	2,180	2,484	148	4,898	8,834
1929	16,778	10,094	2,440	4,244	197	7,071	9,707
1930	14,492	10,656	2,370	1,466	141	3,728	10,764
1931	10,804	8,563	1,900	341	97	1,391	9,413
1932	7,291	5,916	1,300	75	35	244	7,047
1933	.	.	.	.	78	780	.

[1] Member banks: Data for 1921–4, see *S.R.* 71, p. 138; data for 1919–1920 are estimated according to reporting member banks; data for 1925–1932 are taken from the current numbers of the *Federal Reserve Bulletin*.

Other Commercial Banks: Loans on securities estimated at 20 per cent on total loans and discounts for 1919–1924; for 1925–1932 the proportion of loans on securities of country member banks has been used as a basis of estimate.

Other Lenders: Brokers' loans to others of New York City reporting member banks plus loans to members of the New York Stock Exchange by others than New York banks (see *Annual Report of the Federal Reserve Board*).

Share Prices: 401 shares according to Standard Statistics Corporation (see *Standard Statistical Bulletin, Base Book*, 1932, p. 121; the data are averages of June and July).

[2] After these calculations were made a detailed estimate of loans on securities has become available (see Livermore, "Loans on Securities, 1921–1932," in *Review of Economic Statistics*, 1932, pp. 191–4), giving totals which are lower by a half to one billion $. The difference is accounted for mainly by a lower estimate for loans on securities of "Other Commercial Banks". A substitution of Mr. Livermore's figures for those given would, however, not change any of the major movements.

[3] Includes small amounts lent by savings banks on securities.

TABLE 12

INVESTMENTS[1]
(Million $)

30th June	All banks, total	National Banks											
		Total	American securities									Foreign securities	
			Bonds					Shares					
			U.S. Government	States and municipalities	Railroads	Public utilities	Other	Fed. Reserve Banks	Other	Claims, warrants, etc.	Collateral trust notes, etc.	Government	Other
1919	12,230	4,993	3,176	323	412	276	307	250				194	54
1920	11,387	4,187	2,270	338	416	283	310	65	49	68	146	180	61
1921	11,655	4,025	2,019	394	405	277	352	69	63	83	160	140	64
1922	12,547	4,563	2,286	414	487	319	423	71	59	88	168	162	88
1923	13,673	5,070	2,693	402	503	337	521	72	70	90	135	154	91
1924	14,228	5,142	2,482	506	574	398	576	72	75	91	106	180	85
1925	15,399	5,730	2,537	595	674	495	698	74	79	91	125	241	122
1926	15,817	5,842	2,469	648	631	545	773	79	91	79	155	226	147
1927	17,255	6,393	2,596	744	657	649	911	82	93	80	156	238	189
1928	18,772	7,147	2,891	841	681	743	1,028	91	105	83	136	297	253
1929	17,350	6,656	2,804	757	592	694	881	93	100	121	119	244	250
1930	17,944	6,888	2,754	792	661	784	892	101	112	144	123	268	260
1931	20,061	7,675	3,256	997	720	828	887	98	119	147	146	231	245
1932	18,223	7,197	3,353	1,031	653	684	686	90	115	121	118	168	177

[1] For column 1 see Table 5; the other figures are taken from various Annual Reports of the Comptroller of the Currency.

TABLE 13

INTEREST RATES [1]

(Per cent)

Yearly Average	Call Money	Bankers' Acceptances	Commercial Paper	Rates charged customers New York City	Yield of Treasury notes and certificates	Yield of Liberty bonds	Yield of 60 American bonds	Mortgage Loans
1919	6·27	.	.	5·50	.	.	5·25	5·90
1920	7·78	6·08	7·46	6·25	.	5·45	5·88	6·08
1921	5·98	5·24	6·56	6·32	4·83	5·37	5·79	6·27
1922	4·29	3·51	4·48	5·07	3·47	4·35	4·94	6·47
1923	4·85	4·10	5·01	5·21	3·93	4·45	4·98	6·35
1924	3·08	2·97	3·88	4·60	2·77	4·09	4·85	6·19
1925	4·20	3·29	4·03	4·47	3·03	3·99	4·72	6·07
1926	4·50	3·59	4·35	4·66	3·25	3·95	4·60	5·55
1927	4·06	3·45	4·11	4·53	3·11	3·46	4·47	5·63
1928	6·04	4·09	4·86	5·15	3·97	3·44	4·49	5·49
1929	7·61	5·04	5·85	5·88	4·38	3·65	4·70	.
1930	2·94	2·48	3·59	4·69	2·24	3·40	4·52	.
1931	1·74	1·65	2·63	4·22	1·15	3·46	4·70	.
1932	2·05	1·27	2·73	4·60	0·78	3·75	5·95	.

[1] Most of the data are taken from the *Survey of Current Business, Annual Supplement,* 1932.

Mortgage loans: Average yield of mortgage loans of life insurance companies; see *National Real Estate Journal,* 1929, p. 68.

TABLE 14

AMERICA'S BALANCE OF SHORT TERM INTERNATIONAL INDEBTEDNESS [1]

(Million $)

	31st December					
	1927	1928	1929	1930	1931	1932
Due from Foreigners						
Deposits	233	199	210	294	113	150
Outstanding liabilities on unmatured bill drawn and credits granted by American banks to foreigners and accepted by American banks	402	509	884	879	449	366
Advances and overdrafts	185	255	205	212	521 (Advances and overdrafts and Other short term loans combined)	383 (Advances and overdrafts and Other short term loans combined)
Other short term loans	383	319	278	323		
Short term investments	33	24	40	94	156	159
Total	1,236	1,306	1,617	1,802	1,239	1,058
Due to foreigners						
Deposits	1,938	1,580	1,662	1,640	1,025	734
Bankers' acceptances held by foreigners	406	565	865	702	298	113
Call loans and other money market investments	101	333	281	168	55	25
Treasury bills held by foreigners	444	166	62	86	41	2
Undiscounted foreign-drawn acceptances held for collection by American banks	118	99	105	90	20	8
Total [2]	3,100	2,896	3,037	2,737	1,465	913

[1] *The Balance of International Payment of the United States*, 1932, pp. 30, 75–6; 1931, p. 62; 1929, pp. 57–8; 1928, p. 48.

[2] Includes some unspecified minor items.

TABLE 15

SOME DATA ABOUT THE AMERICAN ACCEPTANCE MARKET[1]
(Million $)

30th June	Total acceptances outstanding	Based on			Acceptances held by F.R. banks		Acceptances held by accepting banks	
		Imports to and exports from U.S.	Goods stored at or shipped between domestic points	Goods stored at or shipped between foreign points	For own acc.	For foreign acc.	Own Bills	Bills bought
1919	.	.	.	.	305	.	.	.
1920	.	.	.	.	399	.	.	.
1921	.	.	.	.	40	.	.	.
1922	416[2]	.	.	.	161	.	.	.
1923	524[2]	393[2]	.	.	206	.	.	.
1924	618[2]	465[2]	100[2]	.	37	.	.	.
1925	608	474	87	8	254	.	53	72
1926	622	491	69	33	249	54	26	41
1927	751	555	100	58	198	146	32	57
1928	1,026	690	117	174	216	308	27	44
1929	1,113	692	88	264	80	422	36	48
1930	1,305	649	145	442	127	470	64	141
1931	1,368	551	254	494	95	341	196	357
1932	747	270	193	271	36	98	200	318
1933	687	248	217	213	41	36	201	287

[1] *Federal Reserve Bulletin*, var. issues.
[2] 31st March.

TABLE 16

EARNINGS AND EXPENSES OF MEMBER BANKS [1]

(Million $)

	1923	1924	1925	1926	1927	1928	1929	1930	1931
Earnings.									
Interest received on loans and balances . .	1493	1515	1616	1713	1291	1405	1596	1385	1102
Interest received on investments					458	498	473	472	480
Collection & commission charges					20	23	38	31	21
Foreign exchange department .					32	23	26	25	26
Trust department	226	272	302	317	53	66	68	80	75
Profits on securities sold .					107	90	75	71	70
Other earnings .					159	179	188	165	138
Total earnings.	1719	1787	1918	2030	2120	2284	2474	2229	1912
Expenses.									
Interest paid .	590	619	669	706	738	798	823	771	600
Salaries and wages	336	355	373	397	420	440	464	452	413
Taxes . .	307	306	102	106	110	114	113	113	86
Other expenses .			223	235	248	262	284	268	236
Total expenses.	1233	1281	1367	1444	1516	1614	1684	1604	1335
Net Earnings .	487	506	551	586	605	670	790	624	576
Losses charged off on—									
Loans and discounts. .	143	133	129	125	124	119	140	195	295
Securities .	36	33	35	36	37	45	96	109	264
All other .	28	32	29	47	48	53	60	62	61
Total losses charged off .	207	198	193	208	209	217	296	366	620
Recoveries on charged off assets . .	57	53	62	53	51	51	62	47	57
Net additions to profits . .	338	361	420	432	447	504	557	307	12
Dividends declared . .	258	258	273	285	313	327	409	372	336

[1] Source: *Federal Reserve Bulletin*, var. numbers.

TABLE 17

BOND ISSUES, 1927 TO 1930 [1]
(Million $)

Originations

	1927	1928	1929	1930
National Bank affiliates .	592	650	715	1,279
Other bank affiliates .	163	321	489	531
Commercial banks .	541	259	115	249
Private bankers . .	4,567	2,924	1,586	2,557
Total . .	5,863	4,154	2,905	4,616

Participations [2]

	1927	1928	1929	1930
National Bank affiliates .	1,661	909	1,238	4,303
Other bank affiliates .	1,051	1,175	1,906	2,676
Commercial banks .	2,131	1,191	441	878
Private bankers . .	8,310	6,957	3,427	4,992
Total . .	13,153	10,232	7,012	12,849

[1] Source: *SR.* 71, p. 299. Data refer to firms only having issued bonds of at least 20 million $ face value in each of the four years.

[2] Every issue is entered with full value for each participating firm; there are, therefore, numerous duplications.

TABLE 18

BRANCH BANKING 1924 TO 1931 [1]

	Number of banks			Number of branches		
	Total	All banks having branches	Banks with branches in home-town only	Total	In home-town	Outside home-town
30. XII. 1919	29,123	.	.	857	481	376
30. VI. 1924	28,996	714	391	2,293	1,508	785
31. XII. 1925	28,257	785	.	2,642	1,810	832
31. XII. 1926	27,377	796	.	2,779	.	.
30. VI. 1927	26,781	792	.	2,994	.	.
30. VI. 1928	25,950	835	526	3,230	2,214	1,016
30. VI. 1929	25,115	818	518	3,440	2,362	1,078
30. VI. 1930	24,079	817	512	3,618	2,470	1,148
30. VI. 1931	22,071	796	.	3,577	.	.

	Number of banks with				Number of branch banks located in places with			
	1 to 2	3 to 10	11 to 30	Over 30	Under 25,000	25,000 to 50,000	50,000 to 100,000	Over 100,000
	branches				inhabitants			
25. II. 1927	573	159	35	12	300	61	65	353
30. VI. 1928	619	161	41	14	316	66	81	372
30. VI. 1929	596	167	38	17	305	70	84	359

	Number of branches of					Number of branches		
	National Banks	State Banks		Savings Banks	Private Banks	instituted *de novo*	acquired through mergers	origin unknown
		Member	Non-Member					
30. VI. 1924	248	1,137	908	.	.	.	.	.
25. II. 1927	390	1,560	863	76	11	1,996	735	169
30. VI. 1928	941	1,220	973	86	10	2,214	853	163
30. VI. 1929	993	1,298	1,046	96	7	2,329	958	153

[1] H.R. 141, p. 472; *Federal Reserve Bulletin*, var. numbers.

TABLE 19

BRANCH BANKS, GROUP BANKS, AND UNIT BANKS [1]
(As per end of 1929)

	Number of		Earning assets m. $
	Banks	Branches	
(1) Banks without branches belonging to a group .	1,984	—	4,913
(2) Banks with branches belonging to a group .	119	1,415	6,264
(3) Banks with branches not belonging to a group .	703	2,132	18,839
(4) Banks without branches not belonging to a group .	21,839	—	28,445
All banks . .	24,645	3,547	58,461
Branch banks (2 and 3) . .	822	3,547	25,103
Banks without branches (1 & 4)	23,823	—	33,358
Group banks (1 & 2) . .	2,103	1,415	11,177
Independent banks (3 & 4) .	22,542	2,132	47,284

TABLE 20

BANK MERGERS [2]

Year	Number of		
	Bank mergers	Banks affected	Member banks affected
1919	189	368	80
1920	197	377	77
1921	306	575	104
1922	351	638	125
1923	353	649	120
1924	364	723	124
1925	365	667	120
1926	432	826	164
1927	558	993	259
1928	501	919	204
1929	561	1054	343
1930	607	.	473
1931	(812)	.	.

[1] See H.R. 141, pp. 464–5, 472.
[2] Sources: From 1919 to 1929: *Banker*, 1930, p. 146 (figures of L. M. Chapman).
1930: *The Situation that Confronts Banking* (ed. Am. Bankers Ass.), p. 8.
1931: *Annual Report of the Federal Reserve Board*, 1931, p. 20 (number of banks absorbed by other banks).

TABLE 21

EARNINGS AND EXPENSES OF MEMBER BANKS IN THE CHICAGO FEDERAL RESERVE DISTRICT, 1928[1]

Earning assets (in 000 $)	Gross earnings: Earning assets						Expenses: Earning assets					
	Per cent											
	Size of home-town:											
	A	B	C	D	E	Av.	A	B	C	D	E	Av.
Under 250	7·13	7·20	—	—	—	7·15	5·59	5·91	—	—	—	5·65
250– 500	6·79	6·82	8·20	—	—	6·85	5·21	5·27	6·29	—	—	5·26
500– 750	6·60	6·66	6·38	—	—	6·63	4·99	5·03	4·96	—	—	5·03
750– 1000	6·86	6·40	6·53	6·84	6·97	6·47	5·39	4·89	5·03	5·07	6·00	4·95
1000– 1500	—	6·27	6·49	6·35	6·42	6·37	—	4·77	4·95	4·82	5·32	4·88
1500– 2000	—	6·58	6·39	6·95	—	6·54	—	4·74	4·68	5·12	—	4·79
2000– 3000	—	6·68	6·47	6·79	6·96	6·71	—	4·87	4·73	4·92	5·50	4·93
3000– 4000	—	—	6·60	6·46	6·90	6·56	—	—	4·94	4·78	5·25	4·89
4000– 5000	—	—	—	6·70	6·16	6·53	—	—	—	4·88	4·82	4·86
5000– 6000	—	—	—	6·47	6·33	6·37	—	—	—	4·87	4·85	4·82
6000–10000	—	—	—	6·46	6·90	6·59	—	—	—	4·70	5·25	4·86
10000–15000	—	—	—	6·73	6·74	6·74	—	—	—	4·88	4·94	4·91
Above 15000	—	—	—	6·30	6·53	6·52	—	—	—	5·22	4·69	4·71
Average	6·83	6·52	6·50	6·55	6·55	6·55	5·26	4·93	4·86	4·86	4·73	4·79

Earning assets (in 000 $)	Losses: Earning assets						Net earnings: Earning assets					
	Per cent											
	Size of home-town:											
	A	B	C	D	E	Av.	A	B	C	D	E	Av.
Under 250	1·48	1·18	—	—	—	1·42	0·07	0·11	—	—	—	0·08
250– 500	1·07	1·29	0·60	—	—	1·16	0·52	0·25	1·31	—	—	0·42
500– 750	0·64	0·92	0·56	—	—	0·82	0·97	0·72	0·87	—	—	0·78
750– 1000	0·25	0·71	0·71	0·91	0·28	0·70	1·23	0·80	0·80	0·85	0·70	0·82
1000– 1500	—	0·66	1·12	0·50	0·26	0·76	—	0·84	0·42	1·02	0·84	0·74
1500– 2000	—	0·49	1·02	0·49	—	0·77	—	1·35	0·69	1·33	—	0·97
2000– 3000	—	0·25	0·49	0·64	0·35	0·52	—	1·56	1·26	1·23	1·11	1·26
3000– 4000	—	—	0·32	0·63	0·37	0·54	—	—	1·34	1·05	1·29	1·13
4000– 5000	—	—	—	0·47	0·47	0·44	—	—	—	1·35	0·86	1·24
5000– 6000	—	—	—	0·59	0·47	0·53	—	—	—	1·01	1·00	1·03
6000–10000	—	—	—	0·68	0·09	0·51	—	—	—	1·08	1·56	1·22
10000–15000	—	—	—	0·35	0·80	0·60	—	—	—	1·51	1·00	1·23
Above 15000	—	—	—	0·51	0·25	0·26	—	—	—	0·57	1·59	1·56
Average	0·98	0·77	0·72	0·57	0·28	0·41	0·60	0·82	0·92	1·12	1·54	1·35

A = places with under 1,000 inhabitants.
B = „ „ 1,000 to 5,000 inhabitants.
C = „ „ 5,000 to 15,000 inhabitants.
D = „ „ 15,000 to 100,000 inhabitants.
E = „ „ over 100,000 inhabitants.

[1] Source: H.R. 141, p. 631.

TABLE 22

BANKING CONCENTRATION IN NEW YORK [1]

30th June	Total assets				
	All banks [2] in U.S.A.	5 largest banks in New York City	10 largest banks in New York City	5 largest banks in New York City	10 largest banks in New York City
	Billion $			Per cent of total U.S.A.	
1900	10·8	0·5	0·8	4·6	7·4
1914	26·4	1·1	1·6	4·0	6·2
1919	47·6	2·9	4·0	6·0	8·4
1924	57·1	3·1	4·4	5·4	7·7
1928	71·6	5·0	6·7	7·1	9·4
1929	72·2	6·2	8·3	8·6	11·5
1930	74·0	8·5	11·1	11·4	15·0
1931	70·2	7·8	10·5	11·2	14·6
1932	57·2	5·8	7·9	10·1	13·8
1933	54·0	6·0	8·5	11·1	15·7

TABLE 23

TOTAL ASSETS OF THE TEN LARGEST NEW YORK CITY BANKS [3]
(Million $; ranking as per 1930)

30th June	1914	1919	1924	1928	1929	1930	1931	1932	1933
1. Chase Nat. Bank	166	560 [4]	542	1,104	1,116	2,649	2,429	1,732	1,727
2. Nat. City Bank	352	904	1,027	1,624	2,062	2,078	1,973	1,568	1,476
3. Guaranty Trust Co.	296	821	650	912	1,556	2,038	1,863	1,241	1,445
4. Bankers' Trust Co.	184	407	429	734	699	879	841	684	822
5. Irving Trust Co.	66	167	412	666	743	807	731	527	566
6. Central Hanover Bank	116	257	252	392	604	800	756	616	751
7. First National Bank	164	409	393	507	458	528	539	459	509
8. Bank of Manhattan	.	166	276	274	398	507	536	399	465
9. Chemical Nat. Bank	41	118	161	222	355	481	520	376	445
10. Corn Exchange Nat. Bank	.	191	252	313 [4]	298 [4]	302 [4]	290	289	277
Total 1–5:	1,064	2,859	3,060	5,040	6,176	8,451	7,837	5,752	6,036
„ 1–10:	.	4,000	4,394	6,748	8,289	11,069	10,478	7,891	8,483

[1] Sources: —
Column 1: *Statistical Abstract*, var. issues; *Commercial and Financial Chronicle*, 1933, ii, p. 2029.
Columns 2 and 3: For 1900, *Banks and Trust Companies of New York and Brooklyn*, 1901, p. 22. For 1914 to 1932, *Moody's Manual, Economist, Banking Supplement, Commercial and Financial Chronicle*.
[2] Including savings banks.
[3] Sources, see Table 22.
[4] 31st December.

TABLE 24

BANKING CONCENTRATION IN SEVERAL LARGE CITIES [1]

End of year	Boston		Philadelphia		Baltimore		Washington[2]		St. Louis	
	No. of banks	Total resources (m. $)	No. of banks	Total resources (m. $)	No. of banks	Total resources (m. $)	No. of banks	Total resources (m. $)	No. of banks	Total res'rces (m. $)
1900	54	376	76	451	.	.	15	33	12[3]	174[3]
1913	38	615	88	773	25	181	17	109	22	223
1920	41	1,000	96	1,308	25	323	21	186	22	435
1924	29	1,287	113	1,689	24	391	21	221	30	585
1929	31	1,625	93	2,074	19	456	19	274	30	640
1930	27	1,544	76	2,006	15	434	18	277	32	657
1931	21	1,213	49	1,397	14	401	17	291	27	554
1932	17	1,178[4]	49	1,287[4]	14	382[4]	17	275	17	516[4]

TABLE 25

BANKING CONCENTRATION IN CHICAGO [5]

31st Dec.	All banks	Two largest banks		Two largest banks	
		a[6]	*b*[7]	*a*[6]	*b*[7]
	Total assets in million $			Per cent of total	
1914	1,185	375	587	32	50
1919	2,272	663	1,008	29	44
1924	2,931	750	1,342	26	46
1928	3,559	1,111	1,622	31	46
1929	3,584	1,636	1,784	46	50
1930	(3,700)	1,745	1,921	(47)	(52)
1931	(2,800)	1,555	1,779	(56)	(64)

[1] The data include National Banks (see Reports of the Comptroller of the Currency) and Trust Companies (see statistics of the *Commercial and Financial Chronicle*, 1933, i, p. 1267) only; as state banks are, however, not very important in these cities (and non-existent in Washington), the picture is a roughly correct one.

[2] Data refer to 30th June.

[3] 1901.

[4] 30th September for National Banks.

[5] Sources:—
Column 1: 1914 to 1929, Bureau of Business Research of the University of Illinois, *Bull.* 33, pp. 25–6; 1930–1, estimated.
Columns 2 and 3: *Moody's Annual*, *Economist*, *Banking Supplement*, var. issues.

[6] Continental National Bank (later Continental Illinois) + First National Bank.

[7] (Continental National Bank + Illinois Merchants Trust Co.) + (First National Bank + First Trust Co.)

TABLE 26

DEVELOPMENT OF BANK OF ITALY (AFTERWARDS BANK OF AMERICA N.S. & T.A.)[1]

31st Dec.	Total assets	Deposits			Branches		
		Total	Natural growth	Purchased growth	Total	Through absorption	Established *de novo*
	Million $				Number		
1904	0	0	0	0	0	0	0
1915	22	20	16	4	.	.	.
1920	157	141	97	44	26	21	5
1921	194	178	116	62	41	32	9
1922	254	230	142	88	64	46	18
1923	302	277	171	106	77	56	21
1924	359	329	213	116	89	64	25
1925	423	389	268	121	100	71	29
1926	461	417	295	122	100	71	29
1927	765	645	322	323	291	243	48
1928	848	698	340	358	293	243	50
1929	1,055	894	470	424	293	243	50
1930	1,162	995	.	.	.	.	.
1931	925	747	.	.	.	.	.
1932	876	700	.	.	.	.	.

TABLE 27

BANK FAILURES[2]

Year	Total number of banks in existence 30th June	Banks closed			Banks reopened		
		Number	Deposits	Capital	Number	Deposits	Capital
			Million $			Million $	
1919	29,123	50	17	.	.	.	.
1920	30,139	119	51	.	.	.	.
1921	30,812	501	196	23	60	17	2
1922	30,389	354	111	14	65	36	4
1923	30,178	648	189	22	37	12	2
1924	29,348	776	213	28	94	22	3
1925	28,841	612	173	24	62	17	2
1926	28,146	956	272	33	149	61	5
1927	27,061	662	194	25	95	36	4
1928	26,213	491	139	20	39	16	2
1929	25,330	642	235	32	58	26	3
1930	24,079	1,345	865	112	147	62	7
1931	22,071	2,298	1,759	208	271	158	19
1932	19,163	1,456	730	.	290	276	.

[1] Sources:—
1904 to 1929: *HR.* 141, pp. 1351, 1360–1.
1930 to 1932: *Moody's Annuals.*

[2] Sources:—
Column 1: *Statistical Abstract*, 1932, p. 245.
Columns 2–7: For 1919–1920, *Statistical Abstract*, 1930, p. 320. For 1921–1930, *Annual Report of the Federal Reserve Board*, 1930, p. 311. For 1931–2, *Federal Reserve Bulletin*, 1933, p. 44.

TABLE 28

BANK FAILURES AND AGRICULTURE [1]

Region	Population 1930		Persons employed in agriculture (% of total) 1920	Number of banks			Failure 1921–9 % of bar in existe	
	Total (mill.)	per sq. m.		in existence on 30th June, 1920	failed 1921–9	in existence on 30th June, 1929	30th June, 1929	3 Ju 19
New England States	8·2	132	8	1,362	15	1,100	1·4	
Middle Atlantic ,,	26·3	263	7	2,990	69	3,297	2·1	
N.E. Central ,,	25·3	103	19	5,472	449	5,561	8·1	
N.W. Central ,,	13·3	26	37	9,083	2,620	6,477	40·6	2
South Atlantic ,,	15·8	59	41	3,289	953	2,453	38·8	2
S.E. Central ,,	9·9	55	55	1,836	235	1,746	13·5	1
S.W. Central ,,	12·2	28	49	3,303	695	2,648	26·2	2
Mountain ,,	3·7	4	34	1,592	474	944	50·0	2
Pacific ,,	8·2	26	21	1,394	130	1,034	12·6	
U.S.A. .	122·8	41	26	30,321	5,640	25,260	22·4	1

TABLE 29

BANK FAILURES BY FEDERAL RESERVE DISTRICTS [2]
(Million $ of deposits involved)

F.R. District	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1
Boston . .	15	2	2	2	1	—	1	1	—	36	126	
New York . .	16	1	0	2	—	—	0	1	19	187	161	
Philadelphia .	2	0	3	1	3	1	—	0	3	43	158	
Cleveland . .	1	1	3	1	10	5	17	8	8	42	407	
Richmond . .	8	15	10	6	13	14	13	13	20	86	122	
Atlanta . .	19	6	8	5	6	66	34	35	62	91	54	
Chicago . .	18	7	17	37	34	60	44	22	36	111	445	2
St. Louis . .	10	11	8	14	12	23	15	13	9	182	71	
Minneapolis . .	18	16	73	86	45	66	27	17	15	24	60	
Kansas City .	25	31	46	35	29	23	21	16	39	29	52	
Dallas . .	28	7	14	20	12	9	7	7	2	16	53	
San Francisco .	35	14	6	7	8	6	14	5	20	16	49	
U.S.A. .	196	111	189	213	173	272	194	139	235	865	1759	7

[1] Sources:—
Columns 1–2: *15th Census*, vol. i, pp. 10, 13.
Column 3: *Statistical Abstract*, 1930, pp. 52–3.
Column 4: *SR*. 113.
Column 5: *Annual Report of the Federal Reserve Board*, 1932, p. 123.
Column 6: *Annual Report of the Comptroller of the Currency*, 1930.

[2] Source: *Annual Report of the Federal Reserve Board, Federal Reserve Bulle* var. numbers.

TABLE 30

BANK FAILURES BY SIZE OF TOWN OR CITY [1]
(Number)

Inhabitants	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931
Under 500 .	181	120	331	335	226	372	266	207	240	442	666
500– 1,000 .	99	75	104	158	130	204	142	93	128	278	702
1,000– 1,500 .	47	23	58	71	67	115	61	48	77	128	202
1,500– 2,500 .	39	44	55	75	56	88	65	52	63	137	225
2,500– 5,000 .	33	30	35	55	60	79	53	33	35	119	214
5,000–10,000 .	32	18	24	28	32	30	22	18	35	60	140
10,000–25,000 .	21	12	14	22	18	22	30	17	24	57	134
Above 25,000 .	49	32	27	32	23	46	23	23	40	124	315
Total . .	501	354	648	776	612	956	662	491	642	1,345	2,298

TABLE 31

BANK FAILURES BY SIZE OF CAPITAL OF BANKS FAILED [2]
(Number)

Capital ($)	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	Banks in existence on 30th June, 1929
Under 25,000 . .	194	117	295	319	234	384	247	191	223	466	548	5,468
25,000. . . .	104	85	151	191	135	230	165	106	143	296	513	5,357
25,001– 50,000 .	31	39	49	55	46	100	60	38	67	140	220	6,031
50,001–100,000 .	78	53	91	130	133	164	122	94	120	221	457	1,073
100,001–200,000 .	47	24	32	61	43	46	47	46	58	131	285	3,895
200,001–1,000,000	12	15	16	15	18	16	13	11	19	70	227	2,239
Over 1,000,000 .	4	—	—	—	—	—	—	—	5	11	32	849
Unknown . . .	31	21	14	5	3	16	8	5	7	10	16	—
Total . . .	501	354	648	776	612	956	662	491	642	1,345	2,298	24,912

[1] *Annual Report of the Federal Reserve Board*, 1931, p. 127.
[2] Source for columns 1–12 : *Annual Report of the Federal Reserve Board*, 1931, p. 127. Column 13 : *HR*. 141, pp. 1031–2.

TABLE 32

BANKS IN PLACES WITH LESS THAN 25,000 INHABITANTS [1]

Region	Number of Banks		Deposits (million $)	
	Total	in places with less than 25,000 inhabitants	Total	in places with less with 25,000 inhabitants
New England States	1,100	750	6,444	1,787
Middle Atlantic ,,	3,297	2,375	21,538	3,701
North-East Central ,,	5,561	4,726	9,848	2,971
North-West Central ,,	6,477	5,955	3,860	2,268
South Atlantic ,,	2,453	2,093	3,045	1,308
South-East Central ,,	1,746	1,598	1,307	777
South-West Central ,,	2,648	2,513	2,019	1,143
Mountain ,,	944	881	884	619
Pacific ,,	1,034	851	3,980	654
United States .	25,260	21,742	52,923	15,229

TABLE 33

LOANS AND INVESTMENTS OF MEMBER BANKS, 1929–1932 [2]

	Loans							Investments		
	Total	Loans on securities		Real estate loans	Other loans	Bankers acceptances and commercial paper	Loans to banks	Total	U.S. Government securities	Other investments
		to brokers	to customers							
1929: 29. 6.	25,658	2,946	6,813	3,164	11,618	447	670	10,052	4,155	5,89
4. 10.	26,165	2,824	7,170	3,152	11,988	391	640	9,749	4,022	5,72
31. 12.	26,150	2,463	7,685	3,191	11,515	583	714	9,784	3,863	5,92
1930: 27. 3.	25,118	3,050	7,024	3,169	10,595	753	527	9,937	4,085	5,85
30. 6.	25,214	3,184	7,242	3,155	10,349	748	535	10,442	4,061	6,38
24. 9.	24,738	3,246	7,090	3,163	9,982	790	466	10,734	4,095	6,63
31. 12.	23,870	2,173	7,266	3,234	9,831	736	631	10,989	4,125	6,86
1931: 25. 3.	22,840	2,205	6,848	3,220	9,298	823	446	11,889	5,002	6,88
30. 6.	21,816	1,732	6,602	3,216	8,922	886	457	12,106	5,343	6,76
29. 9.	20,874	1,449	6,321	3,149	8,722	634	599	12,199	5,564	6,63
31. 12.	19,261	966	5,899	3,038	8,244	327	790	11,314	5,319	5,99
1932: 30. 6.	16,587	5,570		2,894	7,081	469	573	11,414	5,268	5,78
30. 9.	15,925	5,500		2,885	6,527	556	457	12,121	6,366	5,75
31. 12.	15,175	5,214 [3]		2,865	6,152	498	446	12,261	6,540	5,72

[1] Sources: Columns 1 and 3: *Statistical Abstract*, 1930, p. 263.
Columns 2 and 4: HR. 141, p. 753.
The data for all banks refer to 30th June, 1929, those for banks in places with less than 25,000 inhabitants to about the end of 1929.

[2] Sources: *Annual Report*, 1931, pp. 98/99; *Federal Reserve Bulletin*, 1933, p. 73.

[3] Out of this total about 500 to brokers, 4,700 to customers.

TABLE 34

FEDERAL RESERVE NOTES IN CIRCULATION [1]

District	30th June: 1923	1929	1930	1931	1932	1933
Boston	214	141	148	135	200	223
New York	546	282	173	305	596	667
Philadelphia	210	146	130	146	252	240
Cleveland	235	206	195	201	289	305
Richmond	79	65	66	72	88	141
Atlanta	133	126	124	120	112	120
Chicago	409	308	200	359	727	790
St. Louis	74	56	73	73	93	141
Minneapolis	55	62	54	49	76	90
Kansas City	60	67	69	62	83	112
Dallas	29	38	32	27	37	36
San Francisco	210	161	160	175	242	227
Total	2,253	1,658	1,424	1,723	2,795	3,094

TABLE 35

SOME DATA ABOUT THE REGIONAL STRUCTURE OF AMERICAN BANKING (as of 1929) [2]

Region	Area 000 sq. m.	Population mill.	Number of: commercial and savings banks	their offices	investment bankers and brokers	their offices	Demand depos of commercial and savings banks (million $)	Time depos of commercial and savings banks (million $)	Assets of building and loan associations (million $)
New Eng. States	62	8·1	1,100	1,350	412	776	1,690	4,754	638
Mid. Atlantic ,,	100	26·0	3,297	4,251	1,903	2,784	10,177	11,362	2,974
E. N. Central ,,	246	25·0	5,561	6,271	800	1,289	4,743	5,103	2,488
W. N. Central ,,	511	13·2	6,477	6,485	272	607	2,023	1,837	598
S. Atlantic ,,	269	15·7	2,453	2,834	235	460	1,437	1,612	548
E. S. Central ,,	180	9·8	1,746	1,883	67	132	681	626	177
W. S. Central ,,	430	12·0	2,648	2,759	150	271	1,439	580	512
Mountain ,,	859	3·7	944	966	121	173	476	408	151
Pacific ,,	319	8·0	1,034	1,901	367	705	1,573	2,407	610
U.S.A.	2,974	121·5	25,260	28,700	4,327	7,197	24,239	28,687	8,695
Per million of inhabitants									
New Eng. States			136	167	51	96	208	586	79
Mid. Atlantic ,,			127	164	73	107	391	437	115
E. N. Central ,,			224	251	32	52	190	204	100
W. N. Central ,,			491	492	21	46	153	139	45
S. Atlantic ,,			156	180	15	29	93	103	35
E. S. Central ,,			178	192	7	13	69	64	18
W. S. Central ,,			221	230	12	23	120	48	43
Mountain ,,			255	262	33	47	130	111	41
Pacific ,,			129	238	46	88	197	301	76
U.S.A.			208	236	36	59	199	236	72

[1] See *Federal Reserve Bulletin*, var. numbers.

[2] Sources: Columns 1 and 2 : *Statistical Abstract of the U.S.* 1929, pp. 2, 4.
,, 3 : See Table 32.
,, 4 : HR. 141, p. 473; data refer to 30th June.
,, 5 and 6 : Special investigation based on data in *Investment Bankers and Brokers of America*.
7, 8 and 9 : *Annual Report of the Comptroller of the Currency* 1929 :

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[1] This bibliography contains only publications which have been used more or less extensively; references to other sources are given in the notes.

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