THE PHILOSOPHY OF BANK CAPITALIZATION

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1. Introduction

Every time a representative of the Federal Deposit Insurance Corporation appears before a banking group it is expected that somewhere in the course of his talk he will put in a plug for higher bank capital. This morning you won't need to wait for the plug, for I propose to devote my entire time to that subject. I have no apologies. Even though statements about bank capital recur with monotonous regularity in the reports of the Corporation, we have not done our job until all bankers appreciate the importance of maintaining an adequate equity in their business.

Discussion of the bank capital problem thrives on confusion and needless complications. Every textbook in the field of money and banking pays its respects to the problem. The periodical literature has reviewed the different facets of the matter, and bankers themselves have contributed from their store of practical experience. As a matter of fact, the subject has been discussed with such exhaustive attention to detail that, in my judgment, students have almost lost sight of the central problem. This morning I propose to reduce the problem to its simplest terms and, as I see them, to clarify the basic issues.

2. Conflict of Interests Concerning Bank Capitalization

In no small part the difficulties encountered in developing an adequate philosophy of bank capitalization result from the conflicting interests which must be reconciled. Merely to list these divergent interests shows the inevitability of the conflict.

To start with, there are the owners of the bank, the stockholders, who typically aim to get along with as small capital as feasible in order to maximize the return on their investment. Then there are the supervisory authorities, both State and national, whose statutory responsibilities ordinarily require them to insist that stockholders have a greater equity in their banks than the owners would prefer to maintain. It is from this standpoint that the Federal Deposit Insurance Corporation, as insurer of bank deposits, has spoken from time to time. Finally, the monetary and fiscal authorities, namely, the Federal Reserve and the Treasury, have sometimes been concerned with bank capitalization in pursuit of entirely different objectives, such as the provision of liquidity in the banking system or a market for Government obligations.

Each of these interest groups can, and most of them have, developed a rationalization of their position. This is a perfectly respectable and, in its context, a natural thing to do. This tactic, of course, greatly complicates the development of a consistent and generally acceptable philosophy of bank capitalization. Before we try to ferret out the common principle in these diverse positions, however, let us examine the premises and implications of the different rationalizations.

We can understand why shareholders rationalize the type of capital structure which will give them maximum earnings per dollar invested. The very nature of banks as creators of credit gives them an opportunity not enjoyed by other corporate enterprises that likewise are able to trade on a thin equity. Judicious use of this privilege can often be most advantageous to the owners of banks. There were times when banks turned this arrangement entirely to their own advantage, with no thought of their responsibilities to their depositors, their community, or their country. Fortunately, those times seem to be past, and I believe that people both in and out of banking look upon banks as responsible going concerns which are basically non-speculative in character. To be sure, events of the past two decades have encouraged bankers to greatly expand their asset volume on a given capitalization in order to sustain the rate of earnings on the investment. That, however, is an accommodation to events and not a warrant for a basic change in philosophy.

Public authorities that are obliged to examine banks in the course of their duties as regulators or insurers are forced to develop a philosophy of bank capitalization which can be defined very specifically. The reason is clear enough. Not infrequently these authorities are obliged to enforce statutes with respect to the relationship between assets and liabilities. When they are called upon to take administrative action, some rules concerning the adequacy of the capital margin must be employed. Just what percentages of capital to assets might be deemed adequate for these purposes I do not propose to discuss here. But the point is, some rule must be used in order to assure uniformity of treatment.

Let us imagine one hypothetical rule. It would be possible for the Federal Deposit Insurance Corporation to develop a philosophy of bank capitalization adapted to and consistent with its own objectives alone. It could devise a rule, for example, that each insured bank should maintain a margin of capital adequate to absorb any losses which might reasonably be anticipated, the sole justification for such margin being the avoidance of loss by the Corporation. Merely to state this canon is to reveal its inadequacy. The rule would, of course, enable the Federal Deposit Insurance Corporation to save its own skin, but subservience to particular interests can never be the basis of a workable philosophy of bank capitalization.

Finally, I want to make a few remarks about the general subject of bank liquidity rather than to comment narrowly about risk assets and their relationship to the bank capitalization problem. This matter has been the source of considerable confusion. Indeed, much of the discussion of bank capital seems to be premised on the idea that capital is something held in the bank till to meet demands of depositors. Nothing could be farther from the truth.

The essence of liquidity is the ability to "liquidify" assets; and that is something quite different from drawing upon capital. In order to keep its doors open and its control undisturbed, a bank must be able to convert its assets into cash at a rate which will satisfy the demands of depositors. Its ability to do this depends on the kind of assets it has; that is, it depends on the bank's ability to obtain repayment of its loans, sell its securities or other assets, or borrow from a lender of last resort, such as a Federal Reserve bank. Assets can thus be turned into cash, depending upon their quality and the institutional arrangements, and not upon the capital margin.

This is not to say, of course, that bank capital and bank liquidity are completely independent of each other. Variations in the size of the capital margin do have some effect upon the kind of assets which a bank can hold without imperiling the position of management. In time of trouble, for example, the control of owners representing a thin capital margin will be undisturbed if the bank's assets are primarily cash or near cash items, whereas even a wide capital margin may be inadequate protection if assets are frozen or of inferior quality. Thus the need for liquidity and arrangments for turning assets into cash must be considered among other factors in determining the adequacy of bank capital. Solution of the liquidity problem, however, would not by itself provide a sound philosophy of bank capitalization.

3. Capital Margins and the Unit Banking System

These divergent views of the function of bank capital which we have just touched upon appear to present a firm barrier to development of an intergrated philosophy of bank capitalization. There is running through them, however, a unifying thread of interest. It is this common principle which I intend to seek out and emphasize, and in so doing try to develop a workable philosophy of bank capitalization.

In this country we have long been committed to a system of banking composed from the most part of rather small, privately owned and operated institutions. Of the 14,200 commercial banks in the United States less than 200 can be considered as giants. Another 1,500 would definitely be large, but the remainder are clearly entitled to be classified as small bussinesses. This preponderance of small banks contrasts sharply, as you doubtless realize, with the general shape of banking activity in other countries which equal ours in economic maturity. Elsewhere the tendency has been for the banking business to become concentrated in an extremely small number of huge institutions operated through an elaborate system of branches.

This is not the place to discuss the advantages and disadvantages of the unit banking system. For various reasons integration and consolidation of the banking system has made considerably less progress here than in other fields of corporate activity. The present banking organization works. In my judgment, this empirical test is sufficient vindication of the American unit banking system. It is extremely difficult to marshal convincing arguments that greater centralization of everyday banking activities would be a material advantage to the country. On the other hand, there are a number of considerations which suggest that the existing system is preferable.

The present unit system of privately owned banks in the United States can exist only as long as the owners maintain an equity in these establishments which is sufficient to justify their position as owner-managers. This, as I see it, is the central problem in any consideration of bank capitalization. As long as the owners of banks have a substantial capital investment, their control is justified. To the extent, however, that the equity has been attenuated, the whole question of control is opened for discussion.

Serious questions are bound to be raised as soon as it becomes evident that the legal owners of a bank have permitted their equity in the enterprise to shrink so drastically that they have little at stake in sound banking. In that event they have degenerated to the level of self-appointed allocators of a large and vital segment of the nation's resources. If the enterprise happens to be profitable, the returns to the bankers in these circumstances are undeservedly large. If, on the other hand, losses are incurred, they are limited to the amount of the small investment. To stretch this situation to, but not beyond, the breaking point appears to be the fond hope of bank owners who are disposed to view complacently the decline in the capital ratio. This position, I submit, contains the seeds of its own destruction.

There is nothing essentially new in this situation, except perhaps the degree of dilution of bank capital. Nor is our realization of the seriousness of the impairment a new element. The problem has long been recognized. Sixteen years ago, back at the time of the banking crisis, my friend and teacher, Professor William A. Paton, whom all of you know and love, was aiming some of his sharpest shafts at what he called "shoestring banking". Writing in the Certified Public Accountant in 1933, his words have the timeliness of eternal truth.

"The fundamental object of business statesmanship", he wrote, "is the continuity of the enterprise, survival. And business experience has amply demonstrated that a conservative capital structure is one of the most essential of the conditions necessary to the attainment of this object. As applied to the typical banking company this means that the funds contributed or accumulated by the stockholders should at all times be ample to assure the creditors that with reasonably good management (not extraordinary or superhuman administration) there need be no anxiety as to the solvency of the bank and the safety of deposits. For this purpose a capital and surplus element of around fourteen per cent of total funds has been demonstrated by experience to be entirely inadequate."

Since the banking disorders of 1933, to be sure we have been able to live with much lower capital ratios. Important changes in institutional arrangements have occurred; but taking the long view, I am confident that we are moving toward another day of reckoning.

As matters now stand, further decline in the capital ratio is likely to call into question the entire ownership structure. Critics will demand the reasons which justify individual owners of banks to perform a function of credit allocation when as a matter of fact they have little or nothing at stake. These critics will point out that banking assets are almost wholly contributed by persons other than the owners. These critics will suggest that the dilution of the private equity in banks requires that the management of banking be socialized.

Thus the very life of our system of unit banking depends upon adequate bank capitalization. This is so because capitalization is the basis of the present system of control. It is my belief that the present system of control is better adapted to the needs of the American economy than any alternatives which have so far been suggested. This is the essential reality in the philosophy of bank capitalization. It is the common bond which unites the otherwise diverse interests of bank owners, the supervisory agencies, and the monetary authorities. If we hang onto this basic fact, we will avoid the pitfalls which develop when discussions of bank capitalization stray into the bypaths of banking technicalities.

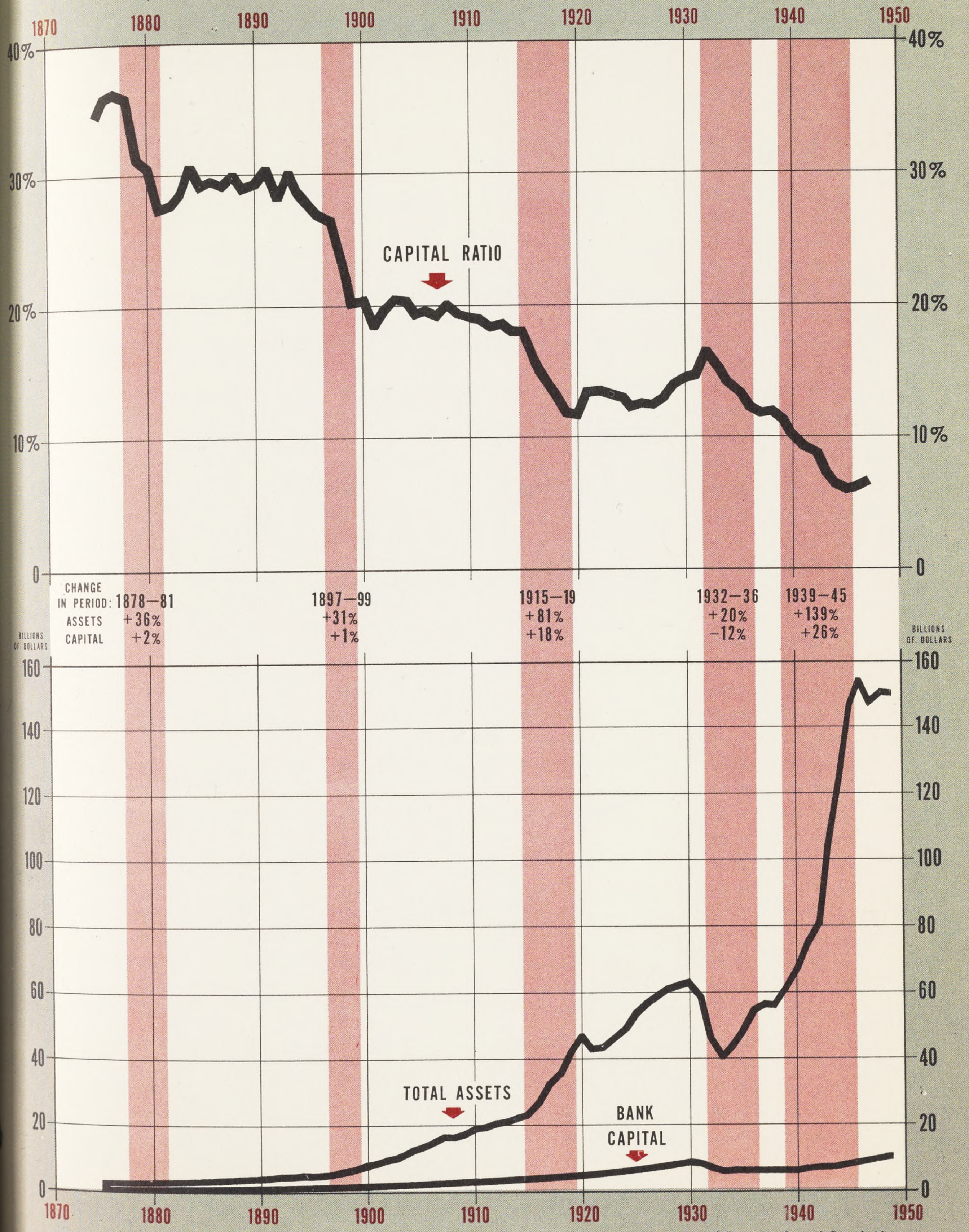
4. Decline of the Capital Margin Since 1875

So far we have taken for granted the basic statistics of our discussion--the persistent decline in the capital ratio. In order, however, to get an idea of the relative magnitudes involved, and to assay the economic factors at work at different periods in the decline of the ratio, it is desirable to trace the trend of the ratio during recent decades.

The long-term decline in the capital ratio is brought out quite strikingly in Chart 1. You will note that 75 years ago capital accounts amounted to about one-third of total assets; today the corresponding ratio is one-fourteenth of total assets. In other words, during these 75 years the average commercial bank has multiplied almost five times the extent of its trading on the equity. The persistent trend which has produced this situation is a proper cause of concern to those of us who see in the diluted equity a threat to our unit banking system. We must not allow the simple story told by this chart to become hidden in the confusion and refinements of banking polemics.

No one can tell just when the capital margin will shrink to a point which fails to justify individual enterprise in the banking system. Some years ago the banking literature was filled with discussion suggesting that a minimum capital ratio of 10 percent was an appropriate rule for sound banking. Obviously that was not the critical point for, as you can see here on the chart, banks on the average have operated for years with a capital margin far less than the traditional 10 percent. With a present ratio of around 7 percent, it appears that this too is not the critical point, at least under present conditions when a large

BANK CAPITAL RATIO
ALL COMMERCIAL BANKS, 1875-1949



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part of bank assets consists of cash balances and U. S. Government obligations. Whether we are close to the critical point, or even below it, if the composition of bank assets should change, remains to be seen. The essential point is, however, that somewhere, if we are not careful, the owner-managers of the unit banking system will be pushed out of control. If bankers intend to remain in the banking business and to run their enterprises as independent unit banks, they must face up to the fact that they need to maintain a substantial investment in their institutions. They must call a halt to the persistent decline in the capital ratio and, in view of the present quasi-public position of banks, that action should not be delayed.

There is, perhaps, some cause for wonder that the capital cushion of banks has fallen as far as it has without more disastrous effects upon our banking system. Part of the reason for this may be found in the economic conditions which prompted and permitted the decline in the ratio as it descended in a cascading series of steps, resting awhile on each step before continuing to the next lower level. Close inspection of the Chart shows five rather well-defined bands of rapid decline in the capital ratio since 1875.

The first band on the chart covers the years 1878-81. According to our history books, the 1870's were to our grandfathers about what the 1930's were to us. It was a period of bad times. As for banks, they lost some of their capital in the wave of failures following the panic of 1877. By the end of the decade, their assets picked up and business began to stir, causing the capital ratio to fall from 36 percent in 1878 to 27 percent in 1881. The business revival which coincided with the resumption of specie payments continued through most of the 1880's and 1890's, aided by converts of Horace Greeley and the widening net-work of railroads. During this period of westward expansion preceding the Spanish-American War the growth in bank capital nearly kept abreast of the growth in assets, permitting only sidewise movements in the capital ratio.

The second band covers the period of our war with Spain. This was a puny war compared with our later experiences. Yet even it was marked by the rapid growth in bank assets which seems to accompany all wars. As the chart indicates, the capital ratio fell from 26 percent in 1897 to 20 percent in 1899, almost entirely because of the increase in bank assets.

At the turn of the century the economy of the country had reached a point of reasonable stability. Establishment of the gold standard in 1900, which called a halt to the silver controversies, symbolized this new period of responsible adolescence. Following the rapid railway expansion of the 80's and 90's, and the improved communication facilities, we had a more closely-knit nation. This development process had its banking counterpart in a steady growth in both assets and capital. You will note on the chart that assets expanded from $8 billion in 1900 to $19 billion in 1910. Capital accounts increased at an approximately equal rate during this period, maintaining the capital ratio on a plateau of 19-20 percent.

Important events were in the offing, however, destined to make the decade after 1910 a momentous one. Between 1915 and 1919 the capital ratio fell from 18 percent to 12 percent. Two events were preponderantly responsible for this third downward step: the establishment of the Federal Reserve System in 1913 and, of course, the first World War. We know from recent experience what wars do to bank assets. At such times banks necessarily adjust their policies to the preeminent financial needs of the Government, whether by expanding loans as in the first World War, or by purchasing government obligations as in the last war. This growth occurs so rapidly that it is impossible for bank capital, proceeding at its steady pace, to keep up.

Just how establishment of the Federal Reserve System contributed to and helped to justify the decline in the capital ratio during this period is partly obscured by the overwhelming effect of the war. But it was doubtless a factor. First of all, it reduced legal reserve requirements and fostered more efficient use of reserves by making it easier for banks to draw upon funds when and where needed. Accordingly the growth in bank assets was facilitated without changing the capitalization of the system. Establishment of the Federal Reserve affected the capital situation in another way too. The competitive chartering of new banks produced some relaxation of capital standards. Banks were told, in effect, that they didn't need so much capital.

These factors spilled over into the golden age of the twenties. Total capital accounts continued their steady growth, as did assets, after momentary decreases in 1921-1922. At the end of the decade of the 1920's the capital ratio was actually higher than at the beginning; and interestingly enough, in the black year of 1932, the capital ratio rose to 16 percent, the highest level since 1915. I point this out as an example of the pitfalls which await the blind devotee of statistics. The obvious reason for this 1932 paradox was, of course, the sharp decline in bank assets accompanying the fall in business and industrial activity. Bank capital as given on call reports was disappearing too, but not so rapidly, as a result of numerous bank failures. Certainly there was nothing healthy about the rise in the capital ratio in 1932. This statistical freak proves once again that we must look at a situation whole, and not dwell too much on limited aspects of it. It is an appropriate place for me to interject that we in the Federal Deposit Insurance Corporation look upon bank capital as but one of a number of measures of the health of our banking system.

Now let us look at the fourth band on our chart. As you may note, the capital ratio fell steadily from 16 percent in 1932 to 12 percent in 1936. Both assets and capital accounts reached a low point in 1933. The rest of the decade was a period of slow, painful rebuilding. With the aid of capital furnished by the Reconstruction Finance Corporation the banks were able to replenish part of the capital lost during the crisis of 1931-33. But only a part. With capital remaining stagnant, the growth in assets during the recovery period caused the capital ratio to continue its long run decline.

Thus, at the beginning of the war in Europe the capital ratio stood around the once hallowed 10 percent. But it was not destined to stay there long as shown on the final part of our chart. The war brought with it the traditional expansion of bank assets. During the war bank assets doubled and continued upward to a peak of $154 billion in 1946. High earnings during this period enabled banks also to add substantially to their capital accounts. Even so, however, the decline in the capital ratio persisted, falling to a low of under 6 percent in 1945.

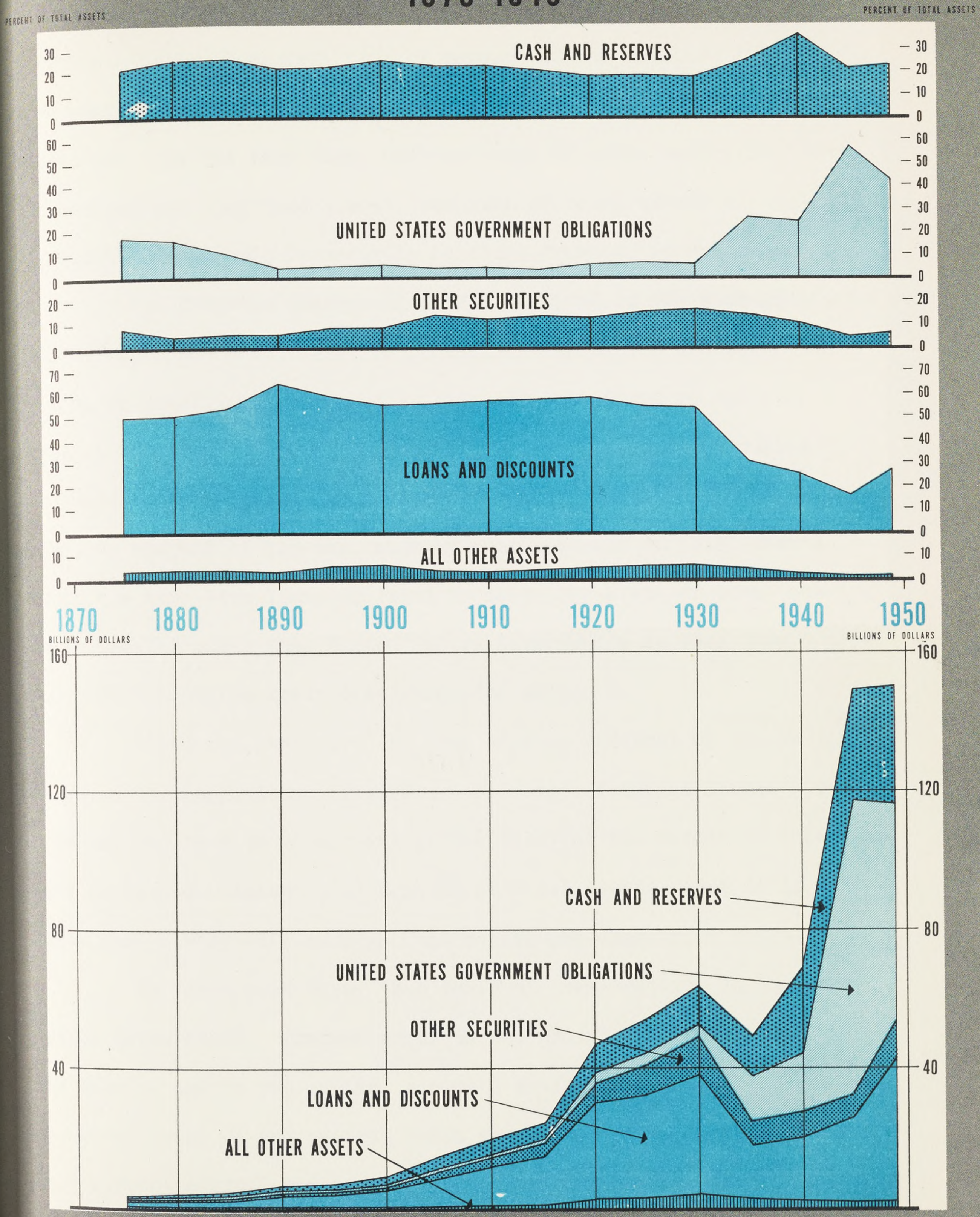
Since the war, as after the first World War, there has been a modest increase in the capital ratio, as capital accounts continued to grow in the face of a decline in assets. On June 30 of this year it stood at 7 percent. If the experience after the last war is a proper basis of forecast, this improvement can hardly be regarded as more than a sidewise movement. The forces which have contributed to the persistent downward trend in the capital ratio are as potent as ever. Bankers are human; and human nature is still inclined to get as much for as little as it can.

Taking a perspective view of the whole period since 1875, it is evident that sharp changes in the total amount of bank assets have been primarily responsible for the decline in the capital margin. Capital funds have increased during most of the period, but at a rather slow rate.

The preeminence of growth in assets requires that some attention be given to changes in the kind of assets banks have held at different times. These changes are shown in Chart 2. At the bottom we have the absolute changes in the major components of bank assets since 1875; the bands across the top express these components in percentage terms.

The main thing that stands out in this Chart is the great change in the kind of bank assets that has occurred since 1930. Up until that time, relatively little change occurred in their composition, even though there was a substantial growth in the total. Throughout the period 1875-1930 loans made up well over half of total assets. It is

ASSETS OF REPORTING COMMERCIAL BANKS IN THE UNITED STATES 1875-1949



particularly interesting to note that bank holdings of United States Government obligations fell from 17 percent of the total in 1875 to 4 percent by 1890, and remained in that neighborhood until the Great Depression. At the same time, bank holdings of other securities were increasing, and comprised almost one-sixth of total assets by 1930. How different these trends in security holdings from our recent experience!

The dramatic changes that have occurred in the kind of assets held by banks since 1930 are the product of depression and war. One took up so readily where the other left off that there is not even a break in the trend. The exigencies of wartime financing accounted for the great increase in holdings of United States Government obligations which, by the end of the war, made up over one-half of total assets. During the same time loans declined to about one-sixth of total assets, and securities other than United States Governments to less than 5 percent, both far below their pre-depression eminence.

Since the war there has been a sharp reversal of the wartime trends in the composition of assets. Holdings of United States Governments had declined to 42 percent of the total at the middle of this year, while loans had climbed to 27 percent of total assets. But it is unlikely that either will soon go back to its pre-depression role.

In retrospect there is a sense of inevitability in the bank capital ratio trend. Changes occur in the amount and composition of bank assets, and in the capital accounts which are explainable, but the historical sweep of the capital ratio assumes an air of unreality. Yet the 7 percent capital ratio which is the current average for the banking system is all too real. It is a point in a long drift of events and, in my judgment, it is a fact which requires something in addition to moralizing. Owners and managers of banks, the bank examining authorities, and everyone with a genuine interest in the continuance of the American system of economic organization should consider seriously what this drift in the capital ratio means, and take steps which lead to positive action. That action, in my judgment, is very clear. Every effort should be made to prevent a further decline in the ratio and to buttress it with additions to the capital account whenever that is possible.

5. The Capital Margin Today

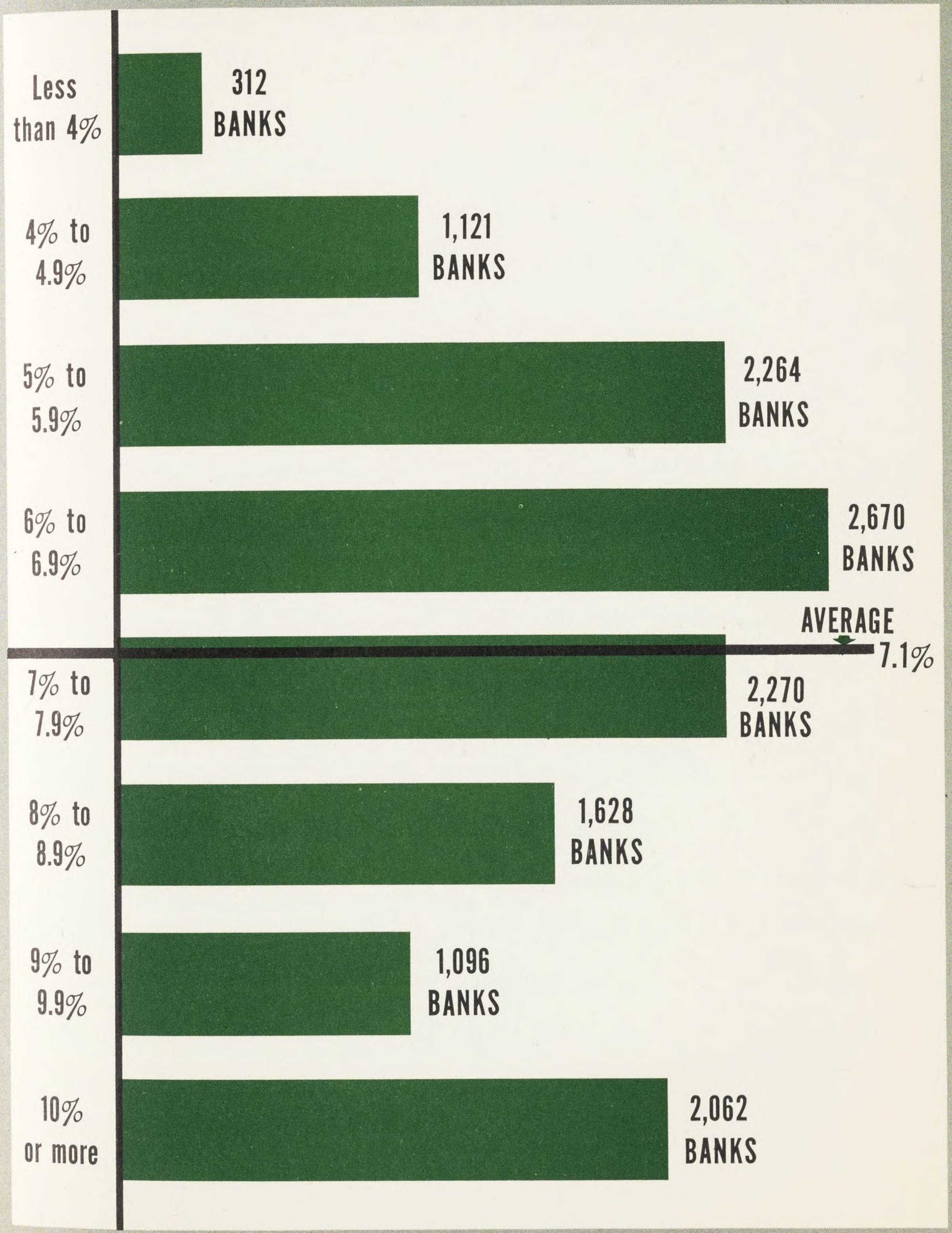
Thus far our discussion of capital ratios has been phrased in averages, for that is the best way of showing the broad historical trend. In terms of the need for current action, however, these figures conceal as well as reveal pertinent information. To give you a better picture of precisely what the situation is now, I have prepared Chart 3 which groups banks by size of the capital ratio and shows the average as a point of reference.

As might be expected, you will note that the bulk of the banks cluster around the average. From the point of view of the supervisory authorities or others interested in remedial action, this distribution furnishes some basis for optimism in that it shows only a comparatively small number of banks whose ratios are painfully low.

The tabulation covers the 13,400 insured commercial banks in operation on June 30, 1949. On that date, 312 banks had a capital ratio of less than 4 percent. Most of these banks are small, with resources ranging between 1 and 10 million dollars. About one-third of them are

BANKS GROUPED BY CAPITAL RATIOS

ALL INSURED COMMERCIAL BANKS—JUNE 30, 1949



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in towns of less than 2,500 population, and another third in small cities up to 50,000 population. Three of the banks have assets of more than 100 million dollars, and 34 are located in cities with populations above 500,000. Seventeen are new banks opened since the end of the war.

The typical reason for the low capital ratio in these banks is a rapid growth in assets without a corresponding growth in capital. During the war and postwar years much of the phenomenal growth in bank resources occurred in small towns, a reflection of agricultural prosperity and of the nationwide tendency toward decentralization of American life. This growth outstripped the capitalization of many banks caught up on the wave of community growth, even in cases where all of the high earnings characteristic of recent years were put into capital accounts.

There are, of course, some unusual situations among these banks with very low capital ratios. A few are cash depositories, or "payroll banks", subsidiaries of large corporations. Some have relatively large proportions of their assets in cash and United States Government obligations. In a very few cases capital accounts have been reduced because of exceptionally large losses.

Taken all together, the factors responsible for the low capital ratios of these 312 banks seem reasonable and, in a sense, natural. But right there lies the difficulty. Understanding is one thing; correction is another. It is the feeling that all is well, that nothing disastrous will come of the severely diluted equity, that constitutes one of the greatest hazards in the present capital situation.

6. Summary and Conclusion

It is our view that sizable owner equity in banking institutions is imperative if our present system of unit banking is to survive. Maintenance of our present system provides the only common ground for reconciliation of the conflicting interests of bank owners, bank supervisors and the people they serve. In this discussion I have studiously avoided the technical problem of how much capital is appropriate for banks at any given time. My reason for so doing is to emphasize that we should not become so involved in technicalities of the moment as to drift into a situation which will justify capital ratios so low that eventually our present banking system will collapse.