Fluctuations of Member Bank Deposits

Bankers are always concerned about the future volume of deposits at their institutions. To the individual bank, the amount of banking resources available depends largely upon the extent of its deposit liabilities. One major problem facing commercial bankers, therefore, arises from deposit fluctuations, both those which represent normal seasonal movements and those which are associated with the business cycle. In periods when there is some concern about the possibility of a decline in business activity, bankers are particularly interested in what is likely to happen to the volume of their deposits.

Deposit fluctuations are of particular interest in the Sixth District, where the memory of the severe decline from 1919 to 1921 has long colored banking practices. From the end of 1919 until the middle of 1921, demand deposits at District member banks declined 29 percent, in comparison to only 11 percent for all United States member banks. Although the liquidation of bank credit following the post-World War I boom and the resulting decline in deposits were nation-wide, the situation was more difficult in the Southeast because bank deposits and resources actually flowed away to other sections of the country.

A brief look at banking statistics since World War I indicates that changes in the volume of deposits in the District have nearly always been in the same direction as changes in the volume of deposits in the country as a whole. Accordingly, the subject of deposit fluctuations in the District involves primarily the question of whether District deposits are relatively sensitive or relatively insensitive to movements of deposits in the nation. Will a decline of 5 percent in bank deposits in the nation be accompanied by a 7-percent decline in deposits in the District or by only a 3-percent decline? This is a question of the degree of sensitivity of the District economy and banking system to general changes in business conditions and is one which may be explored by statistical analysis.

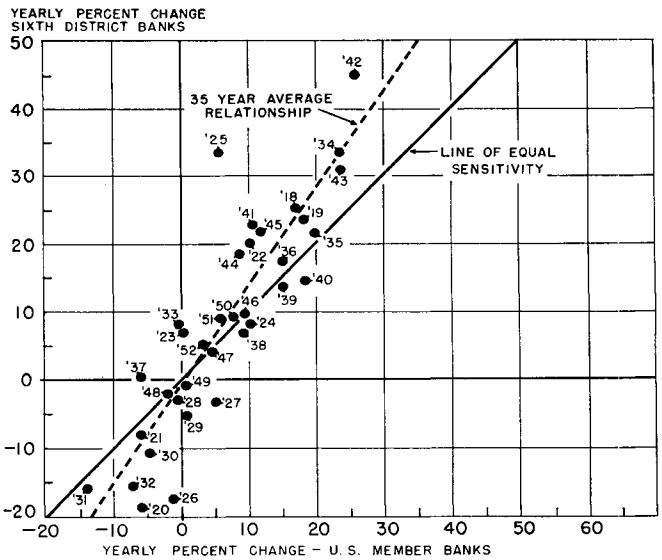
Measuring Deposit Sensitivity Chart I depicts the average degree of sensitivity of District deposits to changes in national deposits for the period 1918-52. The chart is based on the yearly percentage changes in demand deposits at District member banks and at all United States member banks. The dot representing each year is located opposite the horizontal scale, according to the percentage change in demand deposits of all United States banks for that year. Opposite the vertical scale, placement of the dot for each year is determined by the percentage change in demand deposits of District member banks for that year. Thus, for the year 1942, the dot is located opposite plus 26 on the horizontal scale, representing the 26-percent increase in demand deposits adjusted of all United States member banks in that year, and opposite plus 45 on the vertical scale, representing the 45-percent increase in demand deposits adjusted of District member banks. The heavy 45-degree line represents the line of equal sensitivity, or the line upon which all the dots would be found if the yearly percentage changes in deposits at District banks were just equal to those at all United States banks. The line of equal sensitivity, thus, provides a convenient reference point from which to judge the behavior during any one year or group of years.

It will be noticed that most of the dots for the years to the right of the zero point on the horizontal scale lie above the line of equal sensitivity. This indicates that in years when deposits in the nation have increased, deposits in the District have increased more than proportionately. In like fashion, most of the dots lying to the left of the zero point on the horizontal scale lie below the line of equal sensitivity, which indicates that in years when deposits have fallen in the nation, they have fallen more than proportionately in the District. The dotted line through the entire series of yearly readings expresses the average degree of sensitivity for the entire 35-year period. Based on the calculated slope of the dotted line, the percentage changes in deposits at District banks, either during a period of general deposit increase or decrease, have been significantly greater than those at United States banks. For the period as a whole, a 5-percent rise in member bank deposits throughout the country was accompanied by a 7-percent rise in the District, and a 5-percent fall in deposits throughout the country was accompanied by a 7-percent fall in the District.

Experience has confirmed that deposit fluctuations are somewhat greater in the District than in the nation. The fall in deposits in the District, both in the early twenties and the early thirties, for example, was greater proportionately than in the nation, whereas the rise was greater in 1918 and 1919 as well as during World War II. The

Chart I

Sensitivity of Deposits at District Member Banks to Changes in Deposits at all U. S. Member Banks



(Calculations based on demand deposits other than interbank and United States Government, less cash items reported as in process of collection.)

greater sensitivity of deposits of District banks to changes in deposits of all United States member banks is probably largely a result of the difference between the economic structure of the District and that of the nation.

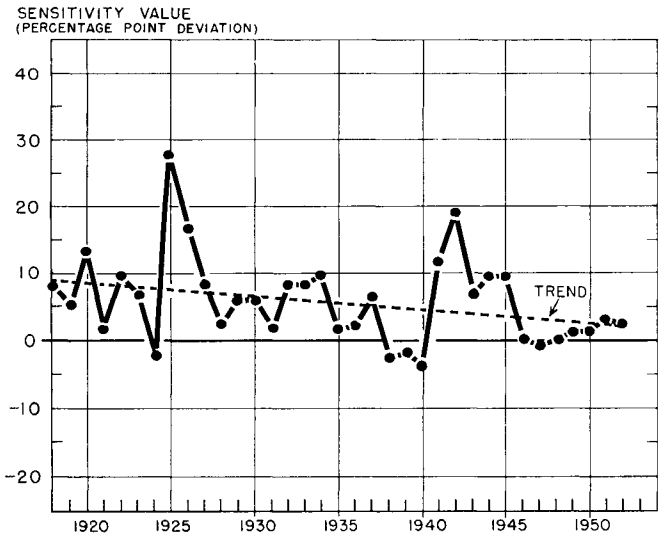
The analysis presented in Chart I, although providing a definite answer, is only a static measurement of the situation for the entire 35 years and does not allow for the possibility that important changes may be taking place in the degree of sensitivity of District deposits to fluctuations in national deposits. Such a change in the degree of sensitivity could occur as a result of fundamental changes in the economic structure of the Southeast. For this reason, an analysis of the year-to-year changes in sensitivity is necessary to determine whether the situation is becoming better or worse.

District Sensitivity Changing In Chart II, the data shown in Chart I are rearranged to reveal changes taking place from year to year in the sensitivity of bank deposits in the District to national deposit changes. The points in Chart II mark the sensitivity value for each year, or the value by which District deposit changes depart from equal sensitivity. The plotted points show only the degree of District sensitivity to United States deposit changes and thus are not affected by the size or direction of the change itself. The zero line indicates proportionate sensitivity, that is, a situation in which the proportionate change in District bank deposits was neither more nor less than those in national deposits. Values falling above the zero line indicate that in the particular year, District member bank deposits exhibited a greater percentage change than did deposits in the nation. Conversely, values falling below the zero line indicate a situation in which the percentage change in the District was less than in the United States.

During 30 of the 35 years since the beginning of 1918, District bank deposits exhibited a greater-than-proportionate sensitivity to changes in national deposits. The year of greatest sensitivity was 1925, when there was a 27.5 percentage point discrepancy between the District and national change in deposits. This was an unusual situation, arising from the Florida real estate boom. The year 1920, when the deposit "run-off" occurred, was marked by the third highest sensitivity value, 13.0 percentage points. The violent nation-wide liquidation of bank credit at this time came on top of an unstable condition in the District and resulted in a most difficult situation there.

Chart II

Trend in Degree of Sensitivity of District Member Bank Deposits



(Each sensitivity value was determined from Chart I by measuring, with appropriate sign, the vertical deviation of the point representing that year from the line of equal sensitivity.)

Although the sensitivity values in individual years are of interest, it is the long-term trend, as shown by the dotted line in Chart II, that is important. It is quite apparent that there has been a persistent decline in the degree of sensitivity of District deposits to changes in national deposits. In particular, sensitivity appears to have decreased noticeably in the period following World War II. At the present time, the degree of sensitivity of District member banks to changes in national deposits, although still positive or greater-than-proportionate to national changes, is negligible, compared with the periods of difficulty in the 1920's.

The decline in deposit sensitivity undoubtedly represents an encouraging development in District banking. If it continues, it will mean that District banks will discover their deposits fluctuating somewhat less than in prewar years. This will be a direct contribution to bank safety. In the long run, moreover, it may mean that District banks can utilize their resources somewhat more fully than would be the case if they were subject to greater deposit fluctuations.

Perhaps of equal importance is the fact that the decline in the degree of sensitivity of District bank deposits to national fluctuations is a symptom of real strengthening of the economic structure of the Southeast. The causes of such a structural change in the District economy may not be easily identified because our knowledge of them is imperfect. It is probable, however, that greater industrialization of the region, together with increased diversification of agriculture, has been a major reason for the change. In recent years, relatively stable agricultural prices have probably been a contributing factor. In addition, Federal fiscal relationships have probably been relatively more favorable to the District during and since World War II than earlier. These developments would be expected to lead to some stabilization of fluctuations in the inflow and outflow of funds, and thereby reduce the greater-than-proportionate sensitivity of deposits in the District. Finally, of course, it may well be that the quality of banking has improved and sounder practices are more prevalent today than formerly.

To the individual banker the best assurance against undue deposit fluctuations remains that of maintaining high credit standards and safeguarding with all the sagacity at his command the interests of his customers, both borrowers and depositors. This analysis seems to indicate, however, that bankers, in fostering the economic development of the region, even through fairly indirect means, may be contributing to the safety of their own institutions.

THOMAS R. ATKINSON