E. SOUNDNESS OF FINANCIAL INSTITUTIONS

1. BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM, DIVISION OF RESEARCH AND STATISTICS

Closed bank study

With a view to ascertaining more definitely the risks incurred by commercial banks in consequence of the different types of deposit held, this study is investigating intensively the movement of deposits of closed banks from 1928 to 1932. Data are being collected and analyzed with reference to: (a) movements in deposits of individuals and various types of business; (b) the sources of deposit withdrawals during the depression; (c) the asset adjustments made to meet withdrawals; (d) the distribution of deposits between personal and business accounts; (e) the kinds and average size of business loans and the proportion of loans kept on deposit with the lending banks; (f) the turnover of deposits in personal accounts. Data are also being gathered indicative of the types of business financed through customer loans, the typical size of loans, and policies of banks with respect to the proportion of loans kept on deposit. The extent to which various types of bank assets can actually be turned into cash to meet deposit withdrawals is one of the important questions to which this investigation is directed.

In preparation under the direction of Lauchlin Currie, Assistant Director of the Division of Research and Statistics. It is expected that the study will be completed by
late summer 1937, and published as a special report of the Board. The collection of data has been financed by WPA funds.

See also IE6

2. FEDERAL DEPOSIT INSURANCE CORPORATION, DIVISION OF RESEARCH AND STATISTICS

Asset and liability characteristics of non-member insured banks

Supplementing an investigation of bank earnings and expenses, described below, this investigation is devoted to the statistical analysis of significant balance sheet ratios reflecting the distribution of assets of banks grouped according to size of bank, size of town, geographic area, economic region and character of deposits. At present in an exploratory stage, the aims and purposes parallel those of the earnings and expenses study, namely, to determine standards for detecting uneconomic banking units and to establish a better basis for appraising internal changes of the banking system.

In preparation under the direction of Donald S. Thompson as a Research Division project. Findings of the study, when completed, will be published in the Annual Report of the Corporation.

See also IE4

3. FEDERAL DEPOSIT INSURANCE CORPORATION, DIVISION OF RESEARCH AND STATISTICS

Causes of bank failures, and the relation of banking to business fluctuations

As thorough a knowledge as possible of the causes of bank failures is important in the administration of the
Federal Deposit Insurance Corporation. As a working hypothesis it is assumed that bank failures are usually associated with: (1) business fluctuations and economic developments related thereto; and/or (2) bad internal management and misguided credit policies. Other studies of the Corporation deal with the internal management and credit policies of banks. The present study deals chiefly with the relation between bank failures and business fluctuations; and analyzes comprehensively causes of bank failures both nationally and regionally. The subjects are: (a) the urban and rural incidence of bank failures; (b) the volume and character of bank obligations for different classes of banks; (c) the character of bank assets; (d) losses and earnings trends of banks; (e) the capital structure of banks of different types; (f) the changing competitive elements in banking; (g) the relation of banking to legislation and supervisory regulation; (h) the relationship of banking conditions to production, local income and levels of property values; (i) changes in banking conditions growing out of balance of payments variations and the interregional movement of funds; (j) the effects of national monetary and banking policies.

Each subject enumerated is a major subject of investigation in itself. Study of all simultaneously is beyond the capacity of the Division of Research and Statistics of the Federal Deposit Insurance Corporation. At present investigation is therefore restricted largely to: (1) regional incidence of bank failures by type, class, size, location and competitive position of banks; (2) the relation between bank failures, fluctuations in volume of business, value of production and incomes in selected regions.

In preparation under the direction of Clark Warbur-
ton as a Research Division project, no date of completion is indicated.

See also IE11

4. FEDERAL DEPOSIT INSURANCE CORPORATION, DIVISION OF RESEARCH AND STATISTICS

Operating experience of non-members insured banks as reflected in earnings and expense reports

Earning and expense data reported by all insured banks not members of the Federal Reserve System are being analyzed for 1935 and 1936, by size of bank, size of town, geographic area, economic region, in relation to profitability and according to the distribution of assets and liabilities. Appropriate statistical techniques, including frequency distribution analysis and correlation of net earnings with as many as forty different balance sheet and income statement ratios, are being used. The purpose is to determine norms of bank operation performance under different circumstances by size, character of business, and type of bank policy. In this way, it is expected that standards for detecting uneconomic banking units may be evolved and also that a better basis may be developed for judging the relative importance of competitive factors affecting the efficiency and earnings of banks.

In preparation under the direction of Donald S. Thompson, as a Research Division project. Results of the analysis will be published in the Annual Reports of the Corporation.

See also IE2
5. FEDERAL DEPOSIT INSURANCE CORPORATION, DIVISION OF RESEARCH AND STATISTICS

Operating experience of non-member insured banks as reflected in examination reports

Examination reports are analyzed to ascertain the true capital position of non-member insured banks, and the distribution of loss, doubtful and substandard assets. Instituted first in 1934, these analyses are as yet experimental and every critical effort is being made to improve methods. Conceived as an aid to the development of criteria for determining the soundness of banks, frequency distributions are to be applied to the ratios reflecting the quality of assets and soundness of capital in order to establish typical standards for banks of different size classes, location, deposit composition, etc.

In preparation under the direction of Homer Jones as a Research Division project. Findings are published as available in the Annual Reports of the Corporation.

6. FEDERAL DEPOSIT INSURANCE CORPORATION, DIVISION OF RESEARCH AND STATISTICS

Operating experience of suspended insured banks

Detailed studies are to be made of the operating experience of each suspended banking institution to determine: (a) what type of assets constitutes the greatest risk; (b) what banking practices are unsafe and unsound; (c) what economic circumstances have finally compelled suspension; (d) what liquidation procedure is most feasible. Deposit data are to be assembled by classes of depositor; type and size of deposits; and priorities of deposits. Assets are to be studied over a ten-year period by type
and behavior, and compared with those of other insured banks of similar size and approximately similar operating experience. The liquidation history of different classes of assets is also to be investigated. Accumulated examination reports will be an important source of data for the inquiry, but supplementary data will be collected directly from bank records.

In preparation under the direction of Florence Helm as a Research Division project. At present in an exploratory stage, the results will be published in the *Annual Reports* of the Corporation as they become available.

See also IE1

7. U. S. DEPARTMENT OF AGRICULTURE, BUREAU OF AGRICULTURAL ECONOMICS, DIVISION OF AGRICULTURAL FINANCE

*Factors of banking success or failure in Arkansas, Utah and Wisconsin*

The purposes of these studies are to determine: (1) the types of banking found in areas where various types of agriculture predominate, as, for example, cotton production, dairying, the grazing industry, and the production of crops upon irrigated lands; (2) differences in the operating policies and in the resulting financial condition of surviving and closed banks within each type of agricultural area; (3) changes in the financial condition and in the operating policies of banks during the depression. Special attention is directed to the composition of the deposits, loans and investments of banks, to the experiences of banks with various classes of deposits, loans and investments, and to policies of bank examiners in commenting upon the condition of banks. The earnings, expenses, losses, and changes in the capital structure of
banks are also studied. Data were obtained directly from the banks and from supervising authorities.

In preparation under the direction of F. L. Garlock of the Division of Agricultural Finance, and in cooperation with the respective state agricultural experiment stations and colleges that are actively collaborating in field work and in collating and analyzing data. Banking supervisors and bankers associations of the respective states are supporting and cooperating in the project. This project on country banking was begun in 1932 with the Arkansas study, the results of which have been separately published. The Wisconsin study is expected to be published by the end of 1937; the Utah study should be completed by the middle of 1938.

For the other parts of this project see IC(b)5; IV A1; IVB1; IVC2; IVE5. See also IC(a)2; IE8, 10, 11 and 13; IVA3; IVE6 and 8.

1 See Bank Failures in Arkansas, Bulletin No. 315, Agricultural Experiment Station, University of Arkansas, Fayetteville, Arkansas.

8. INDIANA STATE DEPARTMENT OF FINANCIAL INSTITUTIONS

Indiana bank failures

This study embraces a statistical and analytical review of the principal factors of weakness contributing to the failure of Indiana state and private banks and trust companies. A complete breakdown of examination reports of failed banks from 1926 to 1933 is being made in order to trace lending and investing policies and practices, and to isolate unsound elements in credit administration. The object is to develop practical suggestions for preventing the repeated emergence of these same elements in the future.
In preparation under the direction of Dwight B. Cragun as one unit of a projected history of Indiana banking institutions. Definite publication plans have not yet been made.

See also IE₂, 10, 11 and 13; IVₐ₃

9. INDIANA STATE DEPARTMENT OF FINANCIAL INSTITUTIONS

The moratorium and rehabilitation of Indiana State banking

With the object of evaluating the factors of success in overcoming the banking difficulties of 1929–33, an exhaustive study is being made of examination reports of all Indiana chartered banks from 1932 through 1937. Data on various asset items are being gathered and analyzed by type and size of bank.

In preparation under the direction of Dwight B. Cragun as one unit of a projected history of Indiana banking institutions. Early publication of the findings is not contemplated.

10. NORTH CAROLINA STATE BANKING DEPARTMENT IN COOPERATION WITH THE RESEARCH COMMITTEE OF THE NORTH CAROLINA BANKERS ASSOCIATION

Loan and investment experience records of North Carolina banks

Originally prompted by the inadequate investment methods and policies of smaller banks, an analytical investigation is in process of the experience of North Carolina banks with all types of earnings assets over the last ten years. Types of lending and investing policies and experience are being noted and related to deposit compo-
sition, capital structures and reserves not included in capital structures. Data are being assembled from a detailed study of individual examination reports.

In preparation under the immediate direction of Hugh McLeod, Jr., State Bank Examiner, with the advisory assistance of J. B. Woosley of the School of Commerce, North Carolina State University. Completion is expected by late spring but no publication plans have yet been made. The results of this united investigation are expected to lead to a number of special studies subsequently to be undertaken by the State Banking Department.

See also IE7, 8, 11 and 13; IVA3

11. NATIONAL BUREAU OF ECONOMIC RESEARCH

The agricultural cycle and commercial bank solvency

This study is concerned with principal economic forces affecting agriculture over the period of the latest major agricultural cycle from 1893 to 1933, and the consequences of the interplay of broader influences for the solvency of commercial banks. In tracing the development of agricultural banking and the farm credit structure, attention is paid to: (a) the growth of banking competition; (b) bank policies with respect to production and capital or mortgage loans; (c) loans to tenants and to owners; (d) the relationship of mortgage loans to property values; (e) the terms of agricultural loans and repayment policies; (f) the policies of country banks in investments. Special consideration is given, in addition, to distinctive factors affecting country bank operations under adverse conditions, as: (a) production, price and marketing hazards; (b) inadequate borrowing facilities; (c) the secular decline of agriculture and the dete-
rioration of agricultural finance; (d) special measures of financial relief to agriculture. Appraisal is made, finally, of the elements determining effective banking service for agriculture.

Originally undertaken as one of a series of studies for the Federal Reserve Committee on Branch, Chain and Group Banking in 1931, it has been completely revised and extended in scope under the auspices of the National Bureau of Economic Research. Prepared under the direction of David L. Wickens, an Associate of the National Bureau, and financed in its revision stages from funds given for the purpose by the Social Science Research Council. The study is expected to be published in 1937.

See also IE3

12. UNIVERSITY OF MINNESOTA, SCHOOL OF BUSINESS ADMINISTRATION, FINANCIAL AND INVESTMENT REVIEW

Extent of reserves to absorb losses in bonds in state banks

With a view to determining the vulnerability of state banks to changes in the long term rate of interest, data have been collected showing the cushion that now exists for absorbing depreciation of the ‘net risk’ bond account among various classes of Minnesota state banks.

In preparation under the direction of Laurence R. Lunden, and published as completed in the Financial and Investment Review. The State Department of Banking has actively cooperated in the preparation of this study, one section of which has been published.

See also IVC5–7; IVF2
Ratio analysis of failed banks in Louisiana

Financial statements of all state banks placed in liquidation during 1930–35 are being subjected to an intensive ratio analysis covering several years prior to failure. A similar analysis, for comparative purposes, is also being made of banks that did not fail. Special attention is being given to changes in the source of banking funds, including borrowed funds, and to changes in the investment of funds.

In preparation under the direction of M. H. Hornbeak of the University of Louisiana, the study is to be completed by spring 1937.

See also IE7, 8, 10 and 11

The relation of capital to deposits in American banks

The definition of the various funds that constitute the capital structure of a bank affords a point of departure for this study. The development of the American banking organization is then reviewed in order to trace: (a) the origin of some of our present day laws and traditions relative to bank capital; (b) the growth of banking since the enactment of the National Bank Act; (c) the changes in the assets and deposits as affecting the strain on the capital. Bank failures are treated only from the standpoint of their general causes and the extent of protection afforded by capital funds. The final part of the analysis examines the question whether the amount of
capital, surplus, undivided profits and capital reserves should be predicated on the volume of deposits and whether there should be an arbitrary fixed ratio between the two to ensure proper protection to the depositors.

See also IIIA6

1 Thesis, Graduate School of Banking, American Institute of Banking, Section American Bankers Association.

15. SECISTR, HORACE [NORTHWESTERN UNIVERSITY]

Standards for detecting the imminence of bank failure

The objective in this analysis is to ascertain what standards, if any, can be evolved from a history of bank suspensions for detecting the imminence of bank failure by bank managements and supervisory authorities. As a working hypothesis, it is assumed that evidences of possible bank failure are detectable from ordinary balance sheet data, provided that accurate analysis of such data by groups of banks has been made over a period of time and standards for bank solvency thereby established. As a test of this hypothesis, balance sheet data from reports of the Comptroller of the Currency have been assembled and analyzed for 745 national banks that failed in 1925, 1929, 1930, 1931 and 1932, and also for 111 banks selected at random that did not fail during these years. For each bank included in the groups, antecedent financial history is being traced back to 1921 by means of balance sheet analysis methods. Several hypotheses concerning signs of strength or weakness are being tested by institutions that failed and by those that did not fail with a view to determining indices of declining strength and developing standards of financial strength confirmed by the experience records of the period under review.