This PDF is a selection from an out-of-print volume from the National Bureau of Economic Research

Volume Title: Merger Movements in American Industry, 1895-1956

Volume Author/Editor: Nelson, Ralph L.

Volume Publisher: UMI

Volume ISBN: 0-87014-065-5

Volume URL: http://www.nber.org/books/nels59-1

Publication Date: 1959

Chapter Title: Introduction and Summary

Chapter Author: Ralph L. Nelson

Chapter URL: http://www.nber.org/chapters/c2524

Chapter pages in book: (p. 1 - 7)

MERGER MOVEMENTS IN AMERICAN INDUSTRY, 1895-1956

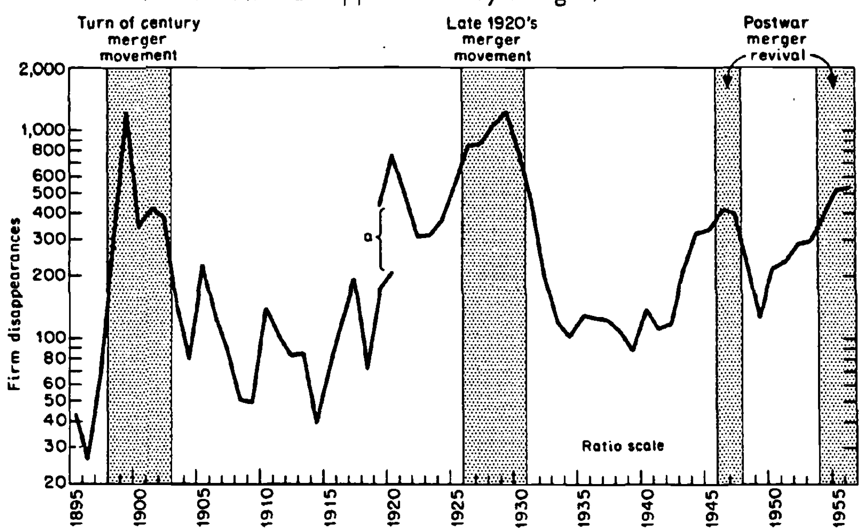
Chapter 1. Introduction and Summary

A merger is the combination into a single economic enterprise of two or more previously independent enterprises. Mergers are surely as old as social history, and indeed many were effected through marriage. However, mergers leading to enterprises of large size relative to national markets have become significant only since the Civil War. This process had to await the development of refinements necessary to a complex industrial system, and especially to the elaboration of the business corporation. The corporation, the basic instrument for mobilizing large amounts of capital with limited liability of the investors, and essential to the development of these large enterprises, has become important in the manufacturing and mining industries only in the last seventy-five years.

The role of mergers in the evolution of our economic structure and especially of the large and often dominant industrial enterprises, has fascinated American economists and legislators since the 1890's. Unfortunately, both economic analysis and legislative policy have been handicapped by inadequate knowledge. A basic purpose of the present study is to fill the biggest gap in our knowledge, the precise extent and characteristics of mergers in the period from 1895 to 1920.

CHART 1

Annual Firm Disappearances by Merger, 1895–1956



[a] The two series on merger disappearances are not directly comparable, and no attempt was made to splice them. A statistical comparison of the series is presented in Chapter 2.

Source: See the footnotes to Table 4.

An outstanding characteristic of mergers, which have been a basic force in molding our industrial structure, is the highly episodic nature of their occurrence. In three periods—1898–1902, 1926–1930, and 1946–1956—merger movements occurred on so extensive a scale that they constituted giant waves, as shown in Chart 1. This tendency of a fundamental form of expansion of industrial enterprise to show vast and widely separated peaks of activity poses a series of questions about the causes and motivations underlying mergers—questions that have interested students more, probably, than those relating to individual mergers.

One way of evaluating the importance of mergers in the growth of industrial enterprises is to pinpoint their occurrence in the history of the largest manufacturing corporations. Of the 100 largest in 1955 more than three-fifths had at least one important merger at some time in the company's history,[1] as shown in Table 1.

TABLE 1

Distribution of the 100 Largest Manufacturing Corporations of 1955 by Date of Most Important Merger[a]

Corporations having important mergers:		
Before 1895[b]	11	
1895–1904[c]	20	
1905–1915	7	
1915–1924	5	
1925–1934	11	
1935–1944	0	
1945–1955	9	63
Corporations having no important mergers:[d]		37
		100

Size of corporations measured by assets.

[a] The companies and dates of mergers are listed in Table C-1.

[b] Includes 8 oil companies created by the 1911 dissolution of the Standard Oil Company.

[c] Includes 3 cigarette companies created by the 1911 dissolution of the American Tobacco Company.

[d] Includes 2 distilling companies founded after the repeal of prohibition in 1935.

Source: *The Fortune Magazine Directory of 500 Largest U.S. Industrial Corporations*, July 1956; data compiled in present study; basic data Supplement to J. Fred Weston, *The Role of Mergers in the Growth of Large Firms*, University of California Press, 1953; Gertrude G. Schroeder, *The Growth of Major Steel Companies, 1900–1950*, Johns Hopkins Press, 1953; A. D. H. Kaplan, *Big Enterprise in a Competitive System*, Brookings, 1954; Moody's Manuals for 1929, 1939, and 1955.

[1] A merger was considered important if (1) it represented the consolidation of a number of small or medium-sized companies into one firm occupying a leading position in its industry, or (2) a leading large firm acquired another large firm, thus markedly increasing both its absolute size and its leadership in the industry, or (3) a firm acquired a number of firms—large or small—in succession, thus rapidly increasing its size and its position in the industry. The classification was necessarily arbitrary in some cases; but preferably erring on the side of rejecting mergers of uncertain importance. For example, the early Alcoa

The historical data on these largest manufacturing corporations conforms with the previously noted behavior of mergers; the important ones occurred mainly during the three major waves of the merger movement. The decade spanning the wave at the turn of the century shows the largest number (twenty), and the decade spanning the wave of the late twenties shows the second largest number (eleven).[2] The third largest number of foundation-laying mergers (nine) came in the decade following World War II; in eight of these nine corporations the mergers occurred either in 1953, 1954, or 1955.

The Three Merger Movements

The first recorded merger movement of major proportions occurred as the United States entered the twentieth century, its peak years being 1898 through 1902. In many respects it was the most important of the major merger waves. It transformed many industries, formerly characterized by many small and medium-sized firms, into those in which one or a few very large enterprises occupied leading positions. It laid the foundation for the industrial structure that has characterized most of American industry in the twentieth century.

The second large movement took place in the years 1926 through 1930. It reflected to some degree the emergence of new leading industries in the years since the first merger wave. To some degree it represented attempts to restore the industrial concentration achieved by the first merger wave, a concentration which had become diluted over the years.

The third movement, a product of the decade following World War II, differs from the two earlier merger waves, having a lower peak and a wider spread across most of the postwar decade. The five years of its highest activity were 1946, 1947, and 1954, 1955, and 1956. It was thus not so clearly a sharp burst of business reorganization as were the two earlier movements, whose greatest

(then Pittsburgh Reduction) mergers, which brought in all the crucial aluminum-making patents, were not classified as important on the ground that the acquired companies were really only patent holders, and not important aluminum producers. On the other hand, the early Westinghouse mergers, by which producing facilities were acquired, were not classified as important on the ground that the critical factors in the company's future growth were the inventions of George Westinghouse, not the producing facilities acquired through merger.

[2] The pre-1895 period also laid the groundwork for eleven of the 100 largest 1955 corporations. But of these, eight were created by the dissolution of the Standard Oil Company and were initially the result of the merger activities of only one company.

activity was bunched in five successive years. Both in the absolute volume of merger activity and in its size relative to the business population, this latest merger wave is clearly smaller than the first two. Nor is it clear that the latest merger movement has had comparable effects upon the level of concentration.

Summary of Findings

The principal empirical contribution of this study is a comprehensive and detailed series of merger activity in manufacturing and mining for the twenty-six-year period 1895 through 1920 (Chapter 3). This period was examined for two reasons. First, the huge merger wave of 1898–1902, the most important of all American merger movements, had never been adequately measured. While descriptive treatments of prominent mergers are numerous, and while penetrating analyses of their causes have been made, there existed no comprehensive statistics on the early merger movement as a whole. Second, the period of low merger activity following the peak at the turn of the century and lasting until the revival of merger activity in the 1920's had never been examined. This hitherto missing chapter in merger history completes a list of comprehensive merger series dating from 1895 through 1956. This six-decade period spans all three of the major merger movements and all but one of the minor flurries of merger activity. The only known burst of activity outside this period occurred in 1888–1892.

The data for the turn-of-the-century merger wave were used to test several of the major theories of its causes (Chapter 4). The tests permit several inferences about the nature of these causes. Empirical investigations of such factors as the rate of industrial growth, the rise of technological innovation, and the growth of interregional transportation indicated that they were not likely to have been important immediate factors in the merger wave. The leading factors of immediate importance appeared to be the newly-achieved development of a broad and strong capital market, and the existence of institutions which enabled the organizers of mergers to utilize this market. The generally favorable condition of business and a rising, buoyant securities market made practicable larger and larger units of business enterprise. This in turn permitted the centralization, in one corporate structure, of control of a large part of an industry, and made possible a more effective rationalization of industry output by business leaders. A cursory examination of the merger experience in Great Britain, where a large merger wave also occurred at the turn of the century (see Appendix A), lends positive support to this interpretation of the merger wave in the United States.

The behavior of merger activity over the sixty-two-year period 1895–1956 was examined as it related to business cycles (Chapter 5). Along with the 1895–1920 merger series compiled in this work, the series of Willard H. Thorp and the Federal Trade Commission were drawn upon for more recent years. For comparisons of mergers and business conditions the techniques developed by the National Bureau of Economic Research were used. Of the twelve clear cycles found in merger activity, eleven showed a definite timing relationship to fluctuations in general business activity (reference cycles). The few reference cycles to which mergers did not respond were among the shortest or mildest (or both) of the sixty-two-year period.

Comparison of the timing of the merger cycle with cycles in other specific economic series permitted identification of those elements in a general business cycle that might be most directly related to merger activity. Peaks in the expansion of merger activity were found to be closest in timing to those in industrial stock prices, stock market trading, and new business incorporations. Merger peaks were found to lead by a substantial interval the peaks in industrial production and the reference cycle.

It appeared that merger expansion was not only a phenomenon of prosperity, but that it was also closely related to the state of the capital market. Two reference cycle expansions, unaccompanied by a strong upswing in stock prices, were marked by the absence of a merger revival. In one instance there was a contraction of merger activity coincident with a contraction in stock prices at a time of general expansion in economic activity.

To supplement the turning point comparisons, statistical correlation tests were made of the effects on merger activity of changes in the level of industrial production and stock prices. The findings confirm those of the business cycle comparisons; the condition of the capital market, as reflected in stock price changes, has clearly been a more important immediate influence in merger activity than underlying industrial conditions have been.

The general reader is advised to proceed to Chapter 3, which presents a detailed picture of early merger activity, or to the interpretive Chapters 4 and 5. He may wish to consult Chapter 2, containing discussions of research methodology, after reading the later chapters.