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

Volume Title: Business Incorporations in the United States, 1800-1943
Volume Author/Editor: George Heberton Evans, Jr.
Volume Publisher: NBER

Volume ISBN: 0-87014-048-5
Volume URL: http://www.nber.org/books/evan48-1
Publication Date: 1948

Chapter Title: The Number of Incorporations and Their Authorized Capital Stock
Chapter Author: George Heberton Evans, Jr.
Chapter URL: http://www.nber.org/chapters/c0673
Chapter pages in book: (p. 36-41)

## - Chapter 5

## The Number of Incorporations and Their Authorized Capital Stock

Had figures on total authorized capital stock been used in the preceding chapter instead of those on total incorporations, the series would have been shorter and for fewer states since information on capital stock is not as extensive as that on number. Moreover, series for total authorized capital stock fluctuate more violently and erratically. The major cyclical movements of the two series are much the same, though not identical, for each state. The total authorized capital stock figures are heavily weighted by big companies. A small company may be chartered with only a few hundreds of dollars of stock, while a big one may have an authorized capital stock of $\$ 50,000,000$ or more; one large company can balance many small ones in authorized capital stock. To show the relation between the number of incorporations and authorized capital stock, eleven ratio charts were prepared. Only four are presented here and discussed in detail, since each of the others is more or less similar to one of the four. Arrows indicate the turning points of business cycles, but no use is made of them in this chapter. They were inserted so that the charts here may supplement those of Chapter 9 , where the cyclical movements of incorporations are considered.
Each chart presents for a single state three 12 -month moving averages plotted at the seventh month: total incorporations; their total authorized capital stock; and the stock figures less the authorized capital stock of the 'large' companies, defined as those having authorized capital stock of $\$ 1,000,000$ or more. ${ }^{1}$ Such a definition is of course arbitrary and its use in the analysis of a series covering a long period is open to the criticism that a million dollar capital has carried different connotations at different times. Examination of the detailed data, however, indicated that little violence would be done to the picture by its use. Moreover, the application of a flexible, more realistic gauge for 'large' would have been unduly burdensome. Further discussion of the problem of classifying corporations on the basis of size is reserved for the next chapter. But one more point must be made here. Nonpar shares make difficult, sometimes impossible, the compilation of a capital stock series. Whenever nonpar shares appeared,

[^0]they were taken into the data at the par value that the tax laws of the given state indicated to be the equivalent, provided the equivalent was a uniform figure. Many states tax nonpar shares in the same way as shares of $\$ 100$ par value; for these states nonpar shares were treated as $\$ 100$ par value shares. When nonpar value shares were taxed on the basis of a declared value that might differ from company to company, the construction of a capital stock series was not attempted after such a tax provision was enacted.

The incorporating activities of states produced four patterns of relation between the two authorized capital stock series, observable in Charts $10-13$. The differences in the four patterns are caused by the character and frequency of the large incorporation. In pattern (1) the total authorized capital stock series is rather smooth and lies well above the capital stock series from which large companies have been eliminated, because the state chartered many very large companies. In pattern (2) the capital stock series lie close together and move in unison, because the state chartered neither many large companies nor any exceptionally large companies. In pattern (3) the two capital stock series also fluctuate in unison but they are further apart than in pattern (2), because the state chartered a fair number of large companies of almost uniform size. In pattern (4) the two capital stock series generally lie close together because the state habitually chartered few large companies; from time to time, however, the total stock series is featured by a 'hump' occasioned by the chartering of what, for the state, was an exceptionally large company.

Delaware is typical of states that incorporate many very large companies (Chart 10). Its total stock series is remarkably smooth, although it chartered some companies with a capital stock as high as $\$ 400,000,000$. Of course, the reason that such a company does not cause a hump in the series at the time of its chartering is to be found in the high capitalization of all companies; that is, so many large companies were chartered that even a very large company does not have much effect on the moving average. Moreover, the moving average itself tends to produce a smooth curve by spreading an exceptional item over twelve months. In 1933, and again in 1936, the picture is different. Big humps in the total capital stock curve give this portion of the chart an appearance somewhat similar to that of the chart for Illinois, discussed below. The curve for those years could
hardly be called characteristic of Delaware, which for decades has chartered annually many very large companies. The Maryland series for 1919-31 and the entire New Jersey series follow the Delaware pattern.

The Texas series (Chart 11) follows pattern (2). The curves representing total capital stock and the capital stock of all companies other than large corporations are very close, because almost no large companies were
abruptly as a single company affects the moving averages. The hump-and a similar one in the total capital stock series of Pennsylvania-was caused by the chartering of the New York Central Railroad Company with a capital stock of $\$ 300,000,000$. This company took out charters simultaneously in these and other states.
Illinois is one of the states that chartered a few smaller corporations in the largest size group and from

Chart 10
Delaware Business Incorporations Number and Authorized Capital Stock, 1916-1943

chartered and those that were created were not capitalized at a figure greatly exceeding a million dollars. The Florida series and the Maryland series for the period prior to 1919 resemble in many respects that of Texas.

The figures for Colorado, Ohio, Pennsylvania, and Virginia illustrate the third pattern of relationship. Chart 12, which presents Ohio data, typifies the group. The total and the adjusted capital stock series are rather far apart and the total capital stock series is fairly smooth. An outstanding exception occurs in 191415, when total authorized capital stock rises and falls
time to time created one with a capital stock substantially in excess of $\$ 1,000,000$, the lower limit for the capital stock of a large corporation. The dashed (total capital stock) and the dotted (adjusted capital stock) lines on Chart 13 are close together except when Illinois incorporated what for it was a relatively large company. For example, a $\$ 96,000,000$ railroad company chartered in August 1909 is solely responsible for the hump in the total capital stock curve before and after that month. Similarly, a single company with a capital stock of $\$ 50,000,000$ chartered in July 1913 causes another
Chart 11
Texas Business Incorporations
Number and Authorized Capital Stock, 1872-1920

Chart 12
Number and Authorized Capital Stock, 1872-1918

hump. The Maryland series since 1932 and that of Massachusetts for the entire period resemble the IIlinois series.

Comparison of the total number series with either or both of the capital stock series yields several observations. Total capital stock series have a much wider
sideration. From 1872 to 1880 the average size remained constant; in 1881 it increased; from 1881 to 1897 it became smaller and perhaps continued to shrink slightly from 1897 through 1906; in 1907 it shrank sharply; then, from 1908 at least until World War I, it remained constant (Table 15).

Chart 13
Illinois Business Incorporations Number and Authorized Capital Stock, 1897-1918

12 -item Moving Averages


Source of monthly data: lllinois section of Appendix 3.
amplitude than total number series, particularly for states that charter very large corporations. When the large company is eliminated from the capital stock data, the adjusted stock series corresponds very closely in its cyclical movements with the total number series, though its amplitude is still generally somewhat wider.

Comparison of the two total series of each statenumber and authorized capital stock-gives rise to speculations. On the Ohio chart, for example, the two curves are parallel from 1872 through 1880. The capital stock curve then rises more sharply in 1881, but from that year until 1897 it falls while total number rises. From 1897 through 1906 the two trends are almost parallel; the total number series perhaps rises slightly more rapidly, but at the end of the period there is another clear-cut change in direction. In 1907 the capital stock series declines more rapidly than the number series. From 1908 through 1918, the two series are again parallel. By and large the average Ohio incorporation was becoming smaller throughout the period under con-

Table 15
Ohio Incorporations, Total Authorized Capital Stock Annual Averages, 1872-1918

|  | average capITAL STOCK |  | average capital stock |  | average capItat stock |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1872 | \$338, 313 | 1887 | \$270, 769 | 1902 | \$72,878 |
| 1873 | 208,990 | 1888 | 173,121 | 1903 | 68,480 |
| 1874 | 230,115 | 1889 | 279,339 | 1904 | 62,228 |
| 1875 | 289,147 | 1890 | 278, 669 | 1905 | 80,982 |
| 1876 | 180,706 | 1891 | 146,770 | 1906 | 71,464 |
| 1877 | 198,590 | 1892 | 128,208 | 1907 | 56,773 |
| 1878 | 239,960 | 1893 | 222,463 | 1908 | 42,582 |
| 1879 | 354,394 | 1894 | 71, 823 | 1909 | 41,486 |
| 1880 | 266,001 | 1895 | 125,391 | 1910 | 53, 821 |
| 1881 | 743,780 | 1896 | 114,182 | 1911 | 50,666 |
| 1882 | 413, 290 | 1897 | 71,447 | 1912 | 58,100 |
| 1883 | 345, 546 | 1898 | 75,334 | 1913 | 38,816 |
| 1884 | 301,329 | 1899 | 129,929 | 1914 | 188, 246 |
| 1885 | 209, 182 | 1900 | 72,262 | 1915 | 39,581 |
| 1886 | 251,332 | 1901. | 86,011 | 1916 | 78,927 |
|  |  |  |  | 1917 | $\begin{aligned} & 67,182 \\ & 54,558 \end{aligned}$ |

.For basic data, see the Ohio section of Appendix 3.

A decrease in average size might be due to several circumstances. For example, there might be a relative increase in the number of small companies, other things remaining constant. An increase in average size for all corporations, on the other hand, might be due solely to an increase in either the relative number or average size of large incorporations. There is no need to recount all possible factors or combinations of factors governing
average size. The object here is merely to emphasize that a constant average authorized capitalization does not necessarily imply a static situation in either the distribution or the average sizes of the subgroups. The next chapter provides some further insight into the movements of average capital stock, since there total incorporations are grouped on the basis of the size of the enterprise chartered.


[^0]:    ${ }^{1}$ The 12 -month moving average is used here and in certain other portions of the study to eliminate seasonal variation. Though not an entirely satisfactory method, it was the only practicable device when seasonal variation had to be eliminated from a large number of series. See Chapter 9 for a discussion of seasonal variation.

