

THE MODERN CORPORATION
AND PRIVATE PROPERTY

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**CHAPTER I: PROPERTY
IN TRANSITION**

CORPORATIONS HAVE CEASED to be merely legal devices through which the private business transactions of individuals may be carried on. Though still much used for this purpose, the corporate form has acquired a larger significance. The corporation has, in fact, become both a method of property tenure and a means of organizing economic life. Grown to tremendous proportions, there may be said to have evolved a "corporate system"—as there was once a feudal system—which has attracted to itself a combination of attributes and powers, and has attained a degree of prominence entitling it to be dealt with as a major social institution.

We are examining this institution probably before it has attained its zenith. Spectacular as its rise has been, every indication seems to be that the system will move forward to proportions which would stagger imagination today; just as the corporate system of today was beyond the imagination of most statesmen and business men at the opening of the present century. Only by remembering that men still living can recall a time when the present situation was hardly dreamed of, can we enforce the conclusion that the new order may easily become completely dominant during the lifetime of our children. For that reason, if for no other, it is desirable to examine this system, bearing in mind that its impact on the life of the country and of every individual is certain to be great; it may even determine a large part of the behaviour of most men living under it.

Organization of property has played a constant part in the balance of powers which go to make up the life of any era. We need not resolve the controversy as to whether property interests are invariably controlling. The cynical view of many historians insists that property interests have at all times, visible or invisible, been dominant.

Following this grim analysis, one commentator on the rise of corporations observed that they had become the "master instruments of civilization."¹ Another expressed his depression at the fact that the system had at length reached a point definitely committing civilization to the rule of a plutocracy.² Still others have seen in the system a transition phase towards ultimate socialism or communism. Acceptance of any of these beliefs may be delayed; but the underlying thought expressed in them all is that the corporate system has become the principal factor in economic organization through its mobilization of property interests.

In its new aspect the corporation is a means whereby the wealth of innumerable individuals has been concentrated into huge aggregates and whereby control over this wealth has been surrendered to a unified direction. The power attendant upon such concentration has brought forth princes of industry, whose position in the community is yet to be defined. The surrender of control over their wealth by investors has effectively broken the old property relationships and has raised the problem of defining these relationships anew. The direction of industry by persons other than those who have ventured their wealth has raised the question of the motive force back of such direction and the effective distribution of the returns from business enterprise.

These corporations have arisen in field after field as the myriad independent and competing units of private business have given way to the few large groupings of the modern quasi-public corporation. The typical business unit of the 19th century was owned by individuals or small groups; was managed by them or their appointees; and was, in the main, limited in size by the personal wealth of the individuals in control. These units have been supplanted in ever greater measure by great aggregations in which tens and even hundreds of thousands of workers and property worth hundreds of millions of dollars, belonging to tens or even hundreds of thousands of individuals, are combined through the corporate mechanism into a single producing organization under unified control and management. Such a unit is the American Telephone and Telegraph Company, perhaps the most advanced development of the corporate system. With assets of almost five billions of dollars, with 454,000³ employees, and stockholders

¹ Thorstein Veblen, "Absentee Ownership and Business Enterprise," N. Y. 1923.

² Walther Rathenau, "Die Neue Wirtschaft," Berlin, 1918.

³ Annual Report of the American Telephone and Telegraph Company, New York, 1930, pp. 20 and 26, figures as of December 31, 1929. On December 31, 1930 the number of employees had dropped to 394,000 presumably a sub-normal condition.

to the number of 567,694,⁴ this company may indeed be called an economic empire—an empire bounded by no geographical limits, but held together by centralized control. One hundred companies of this size would control the whole of American wealth; would employ all of the gainfully employed; and if there were no duplication of stockholders, would be owned by practically every family in the country.

Such an organization of economic activity rests upon two developments, each of which has made possible an extension of the area under unified control. The factory system, the basis of the industrial revolution, brought an increasingly large number of workers directly under a single management. Then, the modern corporation, equally revolutionary in its effect, placed the wealth of innumerable individuals under the same central control. By each of these changes the power of those in control was immensely enlarged and the status of those involved, worker or property owner, was radically changed. The independent worker who entered the factory became a wage laborer surrendering the direction of his labor to his industrial master. The property owner who invests in a modern corporation so far surrenders his wealth to those in control of the corporation that he has exchanged the position of independent owner for one in which he may become merely recipient of the wages of capital.

In and of itself, the corporate device does not necessarily bring about this change. It has long been possible for an individual to incorporate his business even though it still represents his own investment, his own activities, and his own business transactions; he has in fact merely created a legal *alter ego* by setting up a corporation as the nominal vehicle. If the corporate form had done nothing more than this, we should have only an interesting custom according to which business would be carried on by individuals adopting for that purpose certain legal clothing. It would involve no radical shift in property tenure or in the organization of economic activity; it would inaugurate no "system" comparable to the institutions of feudalism.

The corporate system appears only when this type of private or "close" corporation has given way to an essentially different form, the quasi-public corporation: a corporation in which a large measure of separation of ownership and control has taken place through the multiplication of owners.

Such separation may exist in varying degrees. Where the men ultimately responsible for running a corporation own a majority of the voting stock while the remainder is widely diffused, control and

⁴ As of December 31, 1930. Standard Corporation Records.

part ownership are in their hands. Only for the remaining owners is there separation from control. Frequently, however, ownership is so widely scattered that working control can be maintained with but a minority interest. The Rockefeller family, for example, is reported to have retained direct or indirect minority interests in many of the Standard Oil Companies; and in the case of the Standard Oil Company of Indiana, this interest, amounting to only 14.5 per cent⁵ combined with the strategic position of its holders, has proved sufficient for the control of the corporation. In such a case the greater bulk of ownership is virtually without control. Separation of ownership and control becomes almost complete when not even a substantial minority interest exists, as in the American Telephone and Telegraph Company whose largest holder is reported to own less than one per cent of the company's stock. Under such conditions control may be held by the directors or titular managers who can employ the proxy machinery to become a self-perpetuating body, even though as a group they own but a small fraction of the stock outstanding. In each of these types, majority control, minority control, and management control, the separation of ownership from control has become effective—a large body of security holders has been created who exercise virtually no control over the wealth which they or their predecessors in interest have contributed to the enterprise. In the case of management control, the ownership interest held by the controlling group amounts to but a very small fraction of the total ownership. Corporations where this separation has become an important factor may be classed as quasi-public in character in contradistinction to the private, or closely held corporation in which no important separation of ownership and control has taken place.

Growing out of this separation are two characteristics, almost as typical of the quasi-public corporation as the separation itself—mere size and the public market for its securities. It is precisely this separation of control from ownership which makes possible tremendous aggregations of property. The Fords and the Mellons, whose personal wealth is sufficient to finance great enterprises, are so few, that they only emphasize the dependence of the large enterprise on the wealth of more than the individual or group of individuals who may be in control. The quasi-public corporation commands its supply of capital from a group of investors frequently described as the "investing public." It draws these savings to itself either directly, as individuals purchase stocks or bonds, or indirectly, as insurance companies,

⁵ See Table XII, p. 94.

banks, and investment trusts receive these savings and invest them in corporate securities. To secure these funds it must commonly avail itself of an open market in its securities—usually by listing shares on a stock exchange, or, less importantly, by maintaining a private or "unlisted" market. So essential, in fact, is the open market to the quasi-public corporation that it may be considered almost as characteristic of that type of corporation as the separation of ownership from control and the great aggregation of wealth.

These characteristics are not invariable. The private corporation may be, and in a few instances is, exceedingly large; witness the Ford Motor Company, still owned and directed by Mr. Ford and his immediate associates. Private or "close" corporations may and occasionally do avail themselves of a public market for their shares; the Aluminum Company of America, though most of its stock is closely held, has its shares listed on the New York Curb Exchange, and a small fraction of its stock is traded in there. But these instances are so exceptional as to prove the rule. In the overwhelming bulk of cases, corporations fall into the quasi-public class when they represent large aggregations of wealth and their securities are available in the open market; for in such corporations part or most of the owners have almost invariably surrendered control.

Though the American law makes no distinction between the private corporation and the quasi-public, the economics of the two are essentially different. The separation of ownership from control produces a condition where the interests of owner and of ultimate manager may, and often do, diverge, and where many of the checks which formerly operated to limit the use of power disappear. Size alone tends to give these giant corporations a social significance not attached to the smaller units of private enterprise. By the use of the open market for securities, each of these corporations assumes obligations towards the investing public which transform it from a legal method clothing the rule of a few individuals into an institution at least nominally serving investors who have embarked their funds in its enterprise. New responsibilities towards the owners, the workers, the consumers, and the State thus rest upon the shoulders of those in control. In creating these new relationships, the quasi-public corporation may fairly be said to work a revolution. It has destroyed the unity that we commonly call property—has divided ownership into nominal ownership and the power formerly joined to it. Thereby the corporation has changed the nature of profit-seeking enterprise. This revolution forms the subject of the present study.

Examination of the changes produced can properly commence with the new relationships between the owners on the one hand and control on the other, and it is these relationships with which this book will deal. This involves the area roughly termed "corporation finance"—the relations between the corporation as managed by the group in control, and those who hold participations in it—its stockholders, bondholders, and, to some extent, its other creditors. The change in internal organization—the relation of the corporation to its workers, its plant organization and its technical problem of production—we cannot consider at this time. Nor can we here deal with its external relationships, on the one hand with its customers—the terms on which it furnishes to them its products or its services—and on the other hand, with the political state—the government by which it may be in some degree controlled, or over which it may have a measure of dominance. Here we are concerned only with a fundamental change in the form of property, and in the economic relationships which rest upon it.

Outwardly the change is simple enough. Men are less likely to own the physical instruments of production. They are more likely to own pieces of paper, loosely known as stocks, bonds, and other securities, which have become mobile through the machinery of the public markets. Beneath this, however, lies a more fundamental shift. Physical control over the instruments of production has been surrendered in ever growing degree to centralized groups who manage property in bulk, supposedly, but by no means necessarily, for the benefit of the security holders. Power over industrial property has been cut off from the beneficial ownership of this property—or, in less technical language, from the legal right to enjoy its fruits. Control of physical assets has passed from the individual owner to those who direct the quasi-public institutions, while the owner retains an interest in their product and increase. We see, in fact, the surrender and regrouping of the incidence of ownership, which formerly bracketed full power of manual disposition with complete right to enjoy the use, the fruits, and the proceeds of physical assets. There has resulted the dissolution of the old atom of ownership into its component parts, control and beneficial ownership.

This dissolution of the atom of property destroys the very foundation on which the economic order of the past three centuries has rested. Private enterprise, which has molded economic life since the close of the middle ages, has been rooted in the institution of private property. Under the feudal system, its predecessor, economic organization grew out of mutual obligations and privileges derived by various individuals

from their relation to property which no one of them owned. Private enterprise, on the other hand, has assumed an owner of the instruments of production with complete property rights over those instruments. Whereas the organization of feudal economic life rested upon an elaborate system of binding customs, the organization under the system of private enterprise has rested upon the self-interest of the property owner—a self-interest held in check only by competition and the conditions of supply and demand. Such self-interest has long been regarded as the best guarantee of economic efficiency. It has been assumed that, if the individual is protected in the right both to use his own property as he sees fit and to receive the full fruits of its use, his desire for personal gain, for profits, can be relied upon as an effective incentive to his efficient use of any industrial property he may possess.

In the quasi-public corporation, such an assumption no longer holds. As we have seen, it is no longer the individual himself who uses his wealth. Those in control of that wealth, and therefore in a position to secure industrial efficiency and produce profits, are no longer, as owners, entitled to the bulk of such profits. Those who control the destinies of the typical modern corporation own so insignificant a fraction of the company's stock that the returns from running the corporation profitably accrue to them in only a very minor degree. The stockholders, on the other hand, to whom the profits of the corporation go, cannot be motivated by those profits to a more efficient use of the property, since they have surrendered all disposition of it to those in control of the enterprise. The explosion of the atom of property destroys the basis of the old assumption that the quest for profits will spur the owner of industrial property to its effective use. It consequently challenges the fundamental economic principle of individual initiative in industrial enterprise. It raises for reexamination the question of the motive force back of industry, and the ends for which the modern corporation can be or will be run.

The corporate system further commands attention because its development is progressive, as its features become more marked and as new areas come one by one under its sway. Economic power, in terms of control over physical assets, is apparently responding to a centripetal force, tending more and more to concentrate in the hands of a few corporate managements. At the same time, beneficial ownership is centrifugal, tending to divide and subdivide, to split into ever smaller units and to pass freely from hand to hand. In other words, ownership continually becomes more dispersed; the power formerly

joined to it becomes increasingly concentrated; and the corporate system is thereby more securely established.

This system bids fair to be as all-embracing as was the feudal system in its time. It demands that we examine both its conditions and its trends, for an understanding of the structure upon which will rest the economic order of the future.

CHAPTER II: THE APPEARANCE OF THE CORPORATE SYSTEM

CORPORATE ENTERPRISE is no new institution. From the days of the joint stock trading companies which built up the merchant empires of England and Holland in the Seventeenth Century, the quasi-public corporation has been well known. Its entrance into the field of industry, however, dates from the early Nineteenth Century. In 1800 the corporate form was used in America mainly for undertakings involving a direct public interest: the construction of turnpikes, bridges and canals, the operation of banks and insurance companies, and the creation of fire brigades. Up to that year only 335 profit-seeking corporations appear to have been formed in the United States, nearly all incorporated in the last decade of the Eighteenth Century. Of these, 219 were turnpike, bridge and canal companies, and another 36 furnished water and fire protection or dock facilities. Banks and insurance companies had just begun to assume corporate form and numbered 67 at the opening of the century. Manufacturing industry lay almost wholly outside the corporate field, being represented by only 6 corporations.¹

Though some of these early utility corporations were quasi-public in character, their stock being held by what was, for the time, a large number of stockholders, the first important manufacturing enterprise to be so organized dates from 1813. The Boston Manufacturing Company, first of the large New England textile firms, was established at Waltham, Massachusetts, during that year and was in many ways the prototype of the corporations of later date. Though insignificantly small in comparison with the corporate giants of today this company had all their essential characteristics. Within ten years of the date of

¹ Joseph S. Davis, "Essays in the Earlier History of American Corporations," Cambridge, 1917, Vol. II, p. 24.

incorporation, its stock, originally held by eleven stockholders, had become in a sense dispersed. By 1830 the stockholders numbered 76, no individual owned more than 8½ per cent of the stock, it took 12 to establish majority control, and the management lay with a board of directors whose combined holdings amounted to only 22 per cent. Twenty years later there were 123 stockholders, the largest of whom still owned 8½ per cent. Fifty-one per cent of the stock was distributed among 17 individuals while the management held only 11 per cent.²

Small though these figures seem in comparison with the hundreds of thousands of stockholders of the American Telephone Company today, they are none the less significant. The number of shareholders represented a very considerable dispersion for the par value of each share was \$1,000 and the total number of available shares was small. The paid-in capital of \$300,000,—increased in 20 years to \$1,000,000,—was a very large sum for industrial enterprise in those days. The size of the industrial plant was correspondingly large in relation to those of competing concerns, and for the first time, all the textile processes, from breaking open the bale of cotton to shipping the finished cloth, were brought under a single direction. Here, too, the “promoter,” so important a figure in the corporate system today, clearly appeared. By “selling out to the public,” to use the modern phrase, the original organizers freed themselves and a large part of their capital from the fortunes of their first investment and were enabled to go on to organize further similar corporate units. This they did, forming a succession of large textile concerns, all corporate in form, all capitalized at \$1,000,000 or more within a few years of organization, all equipped for large scale, mass production including every process, and all publicly held.³ In every company, ownership rested with the public and direction with a management which owned a relatively small proportion of the stock. In 1842, the stock of one company, the Merrimack, was held by 390 people, including: ⁴

- 80 administrators or trustees.
- 68 females.

² Derived from the Stock and Dividend Books of the Boston Manufacturing Company, preserved at the Harvard Business School, Cambridge, Massachusetts.

³ The Merrimack Co. was formed in 1822, the Hamilton in 1825, the Appleton and Lowell Companies in 1828, Middlesex in 1830, Tremont and Suffolk Companies in 1831, the Boott and Massachusetts Companies in 1835 and 1839, all in the single city of Lowell. The same promoters launched similar concerns in other New England towns and founded in 1846 the new textile center of Lawrence. —C. F. Ware, “Early New England Cotton Manufacture,” Boston, 1931. Appendix A.

⁴ *Ibid.*, p. 150.

- 52 retired business men.
- 46 merchants.
- 45 manufacturers and mechanics.
- 40 clerks, students, and unspecified.
- 23 lawyers.
- 18 physicians.
- 15 farmers.
- 3 institutions.

By virtue of their size and widespread ownership, these companies were always distinguished in New England as “The Corporations” in contrast to the small private concerns, though the latter were often incorporated.

The corporate development of this branch of the textile industry stood alone in the industrial field before 1860. Its growth, moreover, was arrested in the years after the Civil War when the corporate system was elsewhere growing apace, so that today, paradoxically, the textile industry is one of the few major industries which is not dominated by great quasi-public corporations.

More general in the ante-bellum period, and more significant for the future development, was the introduction of the corporate system into the railroad field. Railroad construction, involving a heavy initial outlay of capital, almost necessitated recourse to the corporate form. Once the first short lines had been constructed, this form made possible the next step, consolidation into larger systems. The first of the major groupings, the creation of the New York Central Railroad in 1853, was achieved through the devices which the corporation offered. The property of 10 small companies between Albany and Buffalo was transferred to a new corporation by exchange of stock and the 34 million dollars of securities, issued against the combined properties, were dispersed among 2,445 investors in Albany and other cities of New York State. No individual or group held a controlling financial interest in the new corporation.⁵ Already the stock of railroad companies was familiar on the public exchanges and by the 'Sixties fights for control of their properties had become either market fights or more sinister legal battles.⁶

Since the Civil War, the quasi-public corporation has come to dominate the railroad field almost completely. Advantages of consolidation and the disastrous effects of competition drove companies into larger and larger units until, in 1930, 14 great systems operated

⁵ F. W. Stevens, “The Beginnings of the New York Central Railroad,” N. Y., 1926, pp. 352, 382.

⁶ C. F. Adams, “Chapters of Erie,” Boston, 1871, pp. 11, 13.

86.6 per cent of the first class mileage and 81.7 per cent of all road-mileage in the country.⁷

Following the lead of the railroads, in the last part of the Nineteenth Century and the early years of the Twentieth, one aspect of economic life after another has come under corporate sway. Banking and insurance companies carried the system over from the earlier years of the century. So also did the public utilities, among which it has become practically universal.⁸ Mining and quarrying followed close on the heels of the utilities, being 86.3 per cent corporate in 1902 and 93.6 per cent in 1919.⁹ In the latter year, 99 per cent of the wage earners in the copper industry were employed by corporations, 98 per cent in iron ore, 97 per cent in lead and zinc, and 89 per cent in petroleum and natural gas.¹⁰ It should be noted, of course, that the extent to which a field is incorporated is not an exact measure of the presence of the quasi-public corporation and the corporate system, since private corporations are included in the totals. The latter, however, represent in most cases a relatively small proportion of the wealth and activity involved and therefore do not seriously invalidate such figures as an index of the extension of the quasi-public corporation.

Except for the textile corporations mentioned above, the corporate system made slower headway in the manufacturing field. Its growth was stimulated in the period immediately following the Civil War by the enlargement of industrial units and the spread of mass production. In the closing decades of the Nineteenth Century it received a further stimulus from the trust movement of those years. By 1899 the census reported 66.7 per cent of all manufactured products as made by corporations¹¹ and corporate increase in the Twentieth Century has been most rapid; 87 per cent of goods were so produced by 1919¹² and it is fair to assume that over 94 per cent of manufacturing is car-

⁷ Derived from the report of the House Committee on Interstate and Foreign Commerce on the "Regulation of Stock Ownership in the Railroads," 71st Congress, 3rd Session, House Report No. 2789, Feb. 21, 1931, pp. LII, LIV.

⁸ In 1922, 28 miles of electric railroads were in the hands of private individuals or partnerships. Census of Elec. Ind., Elec. R. R., 1922, p. 9. All telegraph companies were corporate by 1917. Census of Elec. Ind., Telegraphs, 1917, p. 9. All but \$5,000,000 of capital of telephone companies in 1922 was corporate. Census of Telephones, 1922, p. 1. All but \$5,200,000 of gross income of all non-municipal electric light and power companies was received by corporations in 1917. (99.0%.) Census of Elec. Ind., Cent. Elec. Lt. & Pr. Sta., 1917, p. 25. In these census figures the Massachusetts Trust is presumably included as a corporation.

⁹ Statistical Abstract of the United States, 1925, p. 703.

¹⁰ Abstract of 14th Census of the United States, 1920, p. 1278.

¹¹ 13th Census of United States, 1910, Vol. VIII, p. 135.

¹² 14th Census of United States, 1920, Vol. VIII, pp. 14, 108.

ried on by corporations at the present time.¹³ Wage earners in the employ of manufacturing corporations have increased correspondingly from 65 per cent of those engaged in manufactures in 1899 to 92 per cent (estimated) in 1929.¹⁴ Though in manufacturing, private corporations play a more important role than in the mining and utility fields, the growth in total corporate manufacturing reflects a large measure of growth of quasi-public corporations.

In a few manufacturing industries the transfer to the corporate form has been delayed, but even here the shift is noticeable. In 1920, the men's clothing industry, with a value product of over a billion dollars was only 54.6 per cent corporate, the bread and baking industry only 51.7 per cent, millinery and lace goods 46.9 per cent, automobile repairing 39.1 per cent, women's clothing 32.9 per cent, fur goods 30.1 per cent, cheese-making 20.7 per cent.¹⁵ These are the most important manufacturing industries in which the corporate form has not become overwhelmingly predominant,¹⁶ but in each case the 1920 figure showed a larger proportion of corporate production than the figure of the previous census. There is good reason, moreover, to believe that the recent census will show a very much greater proportion of corporate activity in most of these industries.

In the mercantile field the corporation is only just beginning to come into its own. Exact figures are not here available, but rough estimates place the per cent of wholesale sales made by corporations in 1909 at approximately 30 per cent and at 40 per cent in 1925. In the same sixteen-year period retail sales by corporations grew from 15 to 30 per cent of all retail sales.¹⁷ The latter growth included some additional extension of wholesale corporate trade since in many cases the retail corporation also performed the wholesale function. Though these figures, at best only approximate, may be shown to be in error when the census of 1930 reports a thorough canvass of the mercantile field for the first time, the rapid growth of the corporation in this area cannot be questioned.

This expansion is almost synonymous with the development of the chain store. From 1919 to 1927 sales by chain groceries increased 287

¹³ Estimate obtained by projecting trend line based on log of figure for per cent of manufactured products not made by corporations according to the census figures of 1899, 1909, and 1919.

¹⁴ Abstract of 14th Census of the United States, 1920, p. 1021 for 1899 and estimate (see note 13 for method) for 1929.

¹⁵ Abstract of 14th Census of the United States, 1920, pp. 1022-1029.

¹⁶ All industries reported in the Census as having a value product of over \$140,000,000, less than 55 per cent of which was produced by corporations.

¹⁷ Based on figures supplied by the National Bureau of Economic Research.

per cent while sales of 5 and 10 cent store chains grew 160 per cent.¹⁸ The rate of growth of these chain stores is so far in excess of the growth of total retail sales as to represent a noteworthy encroachment of corporate upon private enterprise in distribution.

For the fields of construction and what the census calls "unclassified industries"—*i.e.*, personal services, amusements, rental of business buildings, professional activities of physicians, lawyers, etc.—accurate figures are not available. Between forty and sixty per cent of all construction appears to be carried on by corporations,¹⁹ and perhaps some 15 to 25 per cent of the unclassified industries.²⁰ It is impossible to discover the degree of growth in these fields. Certainly there has been a marked increase in the number of moving picture houses owned by corporations, particularly by the big chains, barber and beauty parlors are chained and incorporated to a growing but still small extent, restaurant chains have grown in the last twenty years, and corporations for the owning of business property have extended their operations. It is not possible, however, to measure whether these developments have been more rapid than the total growth of business in these fields.

One of the last areas of non-corporate activity, the field of real estate, shows signs of coming within the corporate sphere. Much real estate is held by private corporations. Real estate corporations such as the Equitable Office Building, Inc., with active securities on the exchanges, have already made their appearance, and a Real Estate Exchange has recently been formed in New York to deal solely in securities of corporations organized to take over real estate.

In agriculture the corporation has made least headway. In 1920, 61.1 per cent of all farms, measured by their value, were operated by the owner, while 34.9 per cent were operated by tenants. Only 4.0 per cent were operated by managers.²¹ Presumably corporate farming was entirely restricted to the latter class, though lands held by a corporation and operated not by the corporation but by tenants would be included in the second group.

The operations of the government remain as the only field of economic activity not yet considered. Here, of course, the corporate system with its widely dispersed ownership is not in evidence. It should be noted, however, that even the government is beginning to

¹⁸ National Bureau of Economic Research, "Recent Economic Changes in the United States, N. Y., 1930, p. 362.

¹⁹ Based on figures supplied by the National Bureau of Economic Research.

²⁰ Rough estimate based on Income Tax data.

²¹ 14th Census of United States, 1920, Vol. V, p. 130.

employ the corporate device—witness, for example, the Port of New York Authority. Even here the corporation may become the established form, ultimate ownership and, to the extent that the democratic machinery is effective, ultimate control, vesting with the people.

Thus, in field after field, the corporation has entered, grown, and become wholly or partially dominant. The date of its appearance and the degree of its dominance have in general varied with two factors, the public character of the activity in question and the amount of fixed capital necessary to carry on business. It came first in the fields of public utilities, common carriers, banks and insurance companies (which even in the 1840's were conceded to perform public functions)²² and last in the areas of personal service and agriculture;—early, with the high fixed capital costs in railways and mines; late, in mercantile pursuits where capital consists to such a large extent of stock on hand. On the basis of its development in the past we may look forward to a time when practically all economic activity will be carried on under the corporate form. And wherever the corporation has become dominant, it has been in its quasi-public, not its private, rôle. It does not simply give a legal clothing to the private enterprise of individuals. It adds a new quality to enterprise—the quality of multiple ownership.

²² According to Nathan Appleton, leading New England textile manufacturer, Ware, *op. cit.*, p. 290.

CHAPTER III: THE CONCENTRATION
OF ECONOMIC POWER

THE CORPORATE system has done more than evolve a norm by which business is carried on. Within it there exists a centripetal attraction which draws wealth together into aggregations of constantly increasing size, at the same time throwing control into the hands of fewer and fewer men. The trend is apparent; and no limit is as yet in sight. Were it possible to say that circumstances had established the concentration, but that there was no basis to form an opinion as to whether the process would continue, the whole problem might be simplified. But this is not the case. So far as can be seen, every element which favored concentration still exists, and the only apparent factor which may end the tendency is the limit in the ability of a few human beings effectively to handle the aggregates of property brought under their control.

The size of the modern giant corporation is difficult to grasp. Many people would consider large a corporation having assets of a million dollars or an income of \$50,000. Measured by the average corporation this idea would be justified. In 1927 two-thirds of all corporations reporting net incomes earned less than \$5,000 each.¹ The average non-banking corporation in that year had an income of only \$22,000,² and gross assets of but \$570,000.³ In comparison with the average corporation the million dollar company would be large. But in comparison to the great modern corporation both are pigmies. On the basis of assets, the American Telephone and Telegraph Company would be equivalent to over 8,000 average sized corporations, and both the United States Steel Corporation and the Pennsylvania Railroad Company to over

¹ Statistics of Income, 1927, p. 19.

² *Ibid.* pp. 16 and 17. Non-banking is here used to exclude banks, insurance companies, and investment trusts.

³ *Ibid.* pp. 371 and 372.

4,000. A hundred million dollar company would be equivalent in assets to nearly 200 average corporations. Clearly such great organisms are not to be thought of in the same terms as the average company. Already the Telephone Company controls more wealth than is contained within the borders of twenty-one of the states in the country.

The great extent to which economic activity is today carried on by such large enterprises is clearly indicated by the accompanying list of the two hundred largest⁴ non-banking corporations, compiled as of January 1, 1930. Nearly all of these companies had assets of over one hundred million dollars, and fifteen had assets of over a billion dollars. Their combined assets amounted to eighty-one billions of dollars or, as we shall see, nearly half of all corporate wealth in the United States.

These great companies form the very framework of American industry. The individual must come in contact with them almost constantly. He may own an interest in one or more of them, he may be employed by one of them, but above all he is continually accepting their service. If he travels any distance he is almost certain to ride on one of the great railroad systems. The engine which draws him has probably been constructed by the American Locomotive Company or the Baldwin Locomotive Works; the car in which he rides is likely to have been made by the American Car and Foundry Company or one of its subsidiaries, unless he is enjoying the services of the Pullman Company. The rails have almost certainly been supplied by one of the eleven steel companies on the list; and coal may well have come from one of the four coal companies, if not from a mine owned by the railroad itself. Perhaps the individual travels by automobile—in a car manufactured by the Ford, General Motors, Studebaker, or Chrysler Companies, on tires supplied by Firestone, Goodrich, Goodyear or the United States Rubber Company. He may choose among the brands of gas furnished by one of the twenty petroleum companies all actively seeking his trade. Should he pause to send a telegram or to telephone, one of the listed companies would be sure to fill his need.

⁴ Largest according to gross assets less depreciation, as reported in Moody's Railroad, Public Utility, and Industrial Manuals. In the cases where a consolidated balance sheet was not given in Moody's, an estimate was made based on the assets of subsidiaries and the assets of the parent corporation minus its investments in affiliated companies. These estimates, while they cannot be perfectly accurate, are sufficiently so for the present purpose. In two cases, no balance sheet of the parent was given but a very rough estimate of the assets controlled was made, based on the bonds and stocks of the parent company and the assets of certain of its subsidiaries. No company is included in the list, a majority of whose voting stock was known to be owned by another corporation.

TABLE I: *The 200 Largest Non-banking Corporations in the United States*

Name	<i>Gross assets on or about Jan. 1, 1930. In millions of dollars</i>
Amusements	
<i>Eastman Kodak Co.</i>	163.4
<i>General Theatre Equipment, Inc. (Fox Theatres)</i>	360.0
<i>Loew's, Inc.</i>	124.2
<i>Paramount Publix Corp.</i>	236.7
<i>Radio Corp. of America</i>	280.0 (est.)
<i>Warner Bros. Pictures, Inc.</i>	167.1
Chemicals	
PETROLEUM	
<i>Atlantic Refining Co.</i>	167.2
<i>Continental Oil Co.</i>	198.0
<i>Gulf Oil Corp.</i>	430.9
<i>Ohio Oil Co.</i>	110.6
<i>Phillips Petroleum Co.</i>	145.3
<i>Prairie Oil & Gas Co.</i>	209.8
<i>Prairie Pipe Line Co.</i>	140.5
<i>Pure Oil Co.</i>	215.4
<i>Richfield Oil Co. of California</i>	131.9
<i>Shell Union Oil Corp.</i>	486.4
<i>Sinclair Consolidated Oil Corp.</i>	400.6
<i>Sinclair Crude Oil Purchasing Co.</i>	111.9
<i>Standard Oil Co. of California</i>	604.7
<i>Standard Oil Co. of Indiana</i>	850.0 (est.)
<i>Standard Oil Co. of New Jersey</i>	1767.3
<i>Standard Oil Co. of New York</i>	708.4
<i>Texas Corp.</i>	609.8
<i>Tide Water Associated Oil Co.</i>	251.4
<i>Union Oil Associates</i>	240.0 (est.)
<i>Vacuum Oil Co.</i>	205.7
OTHER CHEMICALS, SOAP, ETC.	
<i>Allied Chemical & Dye Corp.</i>	277.2
<i>Corn Products Refining Co.</i>	126.7
<i>Du Pont de Nemours & Co.</i>	497.3
<i>International Match Corp.</i>	217.6

Name	<i>Gross assets on or about Jan. 1, 1930. In millions of dollars</i>
OTHER CHEMICALS, SOAP, ETC. (Continued)	
<i>Koppers Co.</i>	250.0
<i>Procter & Gamble Co.</i>	109.4
<i>Union Carbide & Carbon Corp.</i>	306.6
Coal	
<i>Consolidation Coal Co.</i>	94.0
<i>Glen Alden Coal Co.</i>	300.0 (est.)
<i>Philadelphia & Reading Coal & Iron Corp.</i>	129.0
<i>Pittsburgh Coal Co.</i>	171.5
Food Products, Drugs, Tobacco, etc.	
DAIRY PRODUCTS	
<i>Borden Co.</i>	174.0
<i>National Dairy Products Co.</i>	224.5
FRUIT	
<i>United Fruit Co.</i>	226.0
MEAT	
<i>Armour & Co.</i>	452.3
<i>Swift & Co.</i>	351.2
<i>Wilson & Co.</i>	98.0
SUGAR	
<i>American Sugar Refining Co.</i>	157.1
<i>Cuban Cane Prod. Co.</i>	101.3
TOBACCO	
<i>American Tobacco Co.</i>	265.4
<i>Liggett & Myers Tobacco Co.</i>	150.3
<i>Lorillard (P.) Co.</i>	110.0
<i>Reynolds Tobacco Co.</i>	163.1
OTHERS	
<i>National Biscuit Co.</i>	133.2
Glass	
<i>Pittsburgh Plate Glass Co.</i>	101.6
Leather	
<i>International Shoe Co.</i>	111.3

TABLE 1: *The 200 Largest Non-banking Corporations in the United States (Continued)*

Name	Gross assets on or about Jan. 1, 1930. In millions of dollars
Lumber	
Long-Bell Lumber Corp.	116.1
Mercantile	
Drug, Inc. (United Drug Co.)	158.0
Great Atlantic & Pacific Tea Co.	147.3
Kresge Co.	109.5
Macy (R. H.) & Co.	97.0 (est.)
Marshall Field & Co.	137.2
Montgomery Ward & Co.	187.5
Sears, Roebuck & Co.	251.8
United Stores Corp. (United Cigar Stores)	161.5
Woolworth & Co.	165.4
Metal Products	
AUTOMOBILES	
Chrysler Corp.	209.7
Ford Motor Co.	761.0
General Motors Corp.	1400.0 (est.)
Studebaker Corp.	134.2
ELECTRICAL EQUIPMENT	
General Electric Co.	515.7
Westinghouse Electric & Manufacturing Co.	253.9
MACHINERY	
Deere & Co.	94.6
International Harvester Co.	384.0
Singer Manufacturing Co.	210.0 (est.)
United Shoe Machinery Corp.	94.1
OTHERS	
American Can Co.	191.3
American Car & Foundry Co.	119.5
American Locomotive Co.	106.2
American Radiator & Standard Sanitary Corp.	199.4
Baldwin Locomotive Works	98.8
Crane Co.	115.9

Name	Gross assets on or about Jan. 1, 1930. In millions of dollars
Metals	
ALUMINUM	
Aluminum Co. of America	300.0
COPPER & LEAD	
American Smelting & Refining Co.	241.0
Anaconda Copper Mining Co.	680.6
Kennecott Copper Corp.	337.8
National Lead Co.	108.4
Phelps Dodge Corp.	124.7
IRON & STEEL	
American Rolling Mill Co.	104.3
Bethlehem Steel Corp.	801.6
Cliffs Corp.	98.0
Crucible Steel Co. of America	124.3
Inland Steel Co.	103.2
Jones & Laughlin Steel Corp.	222.0
National Steel Corp.	120.8
Republic Iron & Steel Co.	331.7
United States Steel Corp.	2286.1
Wheeling Steel Corp.	128.3
Youngstown Sheet & Tube Co.	235.7
Paper	
Crown Zellerbach Corp.	117.7
International Paper & Power Co.	686.5
Minnesota & Ontario Paper Co.	90.3
Public Utilities (Grouped according to associated companies)	
COMMUNICATIONS	
American Telephone & Telegraph Co.	4228.4
Associated Telephone Utilities Co.	95.9
International Telephone & Telegraph Corp.	521.2
Western Union Telegraph Co.	332.2
ELECTRICITY AND GAS	
American Commonwealths Power Corp.	184.4
American Water Works & Elec. Co.	378.5

TABLE I: *The 200 Largest Non-banking Corporations in the United States (Continued)*

Name	Gross assets on or about Jan. 1, 1930. In millions of dollars
ELECTRICITY AND GAS (Continued)	
Associated Gas & Electric Co.	900.4
New England Gas and Electric Association	108.7
Railway and Bus Associates	112.2
Central Public Service Co.	199.5
Cities Service Co.	989.6
Consolidated Gas Co. of New York	1171.5
Consolidated Gas, Elec. Lt. & Power Co. of Baltimore	135.9
Detroit Edison Co.	296.1
Duke Power Co.	212.1
Edison Electric Ill. Co. of Boston	156.3
Electric Bond & Share Co.	756.0
American Gas & Electric Co.	431.0
American Power & Light Co.	754.1
Electric Power & Light Corp.	560.0 (est.)
National Power & Light Co.	500.0 (est.)
INSULL GROUP	
Commonwealth Edison Co.	440.0 (est.)
Middle West Utilities Co.	1120.0 (est.)
Midland United Co.	298.1
North Amer. Light & Power Co.	308.4
Peoples Gas, Light & Coke Co.	192.1
Public Service Co. of Northern Illinois	190.0
KOPPERS CO. GROUP	
Brooklyn Union Gas Co.	123.7
Eastern Gas & Fuel Associates	158.7
Lone Star Gas Corp.	109.0
North American Co.	810.3
Pacific Gas & Elec. Co.	428.2
Pacific Lighting Corp.	203.4
So. California Edison Co., Ltd.	340.6
Stone & Webster, Inc.	400.0 (est.)
Tri-Utilities Corp.	346.0
UNITED CORPORATION GROUP	
Columbia Gas & Electric Corp.	529.2

Name	Gross assets on or about Jan. 1, 1930. In millions of dollars
ELECTRICITY AND GAS (Continued)	
UNITED CORPORATION GROUP (Continued)	
Commonwealth and Southern Corp.	1133.7
Niagara Hudson Power Corp.	756.9
Public Service Corp. of New Jersey	634.6
United Gas Improvement Co.	802.0
United Light & Power Co.	520.1
United States Electric Power Corp.	1125.8
Utilities Power & Light Corp.	373.1
Railroads (Grouped according to associated companies)	
Alleghany Corp.	1600.0 (est.)
Erie Rd. Co.	560.9
Kansas City Southern Ry. Co.	146.1
New York, Chicago & St. Louis R. Co.	350.0 (est.)
Wheeling & Lake Erie Ry. Co.	104.1
Atchison, Topeka & Santa Fe Ry. Co.	1135.4
Atlantic Coast Line R. Co.	840.0 (est.)
Baltimore & Ohio Rd. Co.	1040.8
Chicago & Alton Rd. Co.	161.8
Reading Co.	565.0 (est.)
Western Maryland Ry. Co.	168.2
Chicago & Eastern Illinois Ry. Co.	97.4
Chicago Great Western Rd. Co.	149.2
Chicago, Milwaukee, St. Paul & Pacific Rd. Co.	776.1
Chicago & North Western Ry. Co.	641.0
Chicago, Rock Island & Pacific Ry. Co.	477.4
Chicago Union Station Co.	96.8
Delaware & Hudson Co.	269.4
Delaware, Lackawanna & Western R. Co.	189.3
Denver & Rio Grande Western Rd. Co.	223.4
Florida East Coast Ry. Co.	123.6
{ Great Northern Ry. Co.	812.4
{ Northern Pacific Ry. Co.	813.9
Chicago, Burlington & Quincy Rd. Co.	645.4
Spokane, Portland & Seattle Ry. Co.	140.2

TABLE I: *The 200 Largest Non-banking Corporations in the United States (Continued)*

Name	Gross assets on or about Jan. 1, 1930. In millions of dollars
Railroads (Continued)	
Missouri-Kansas-Texas Rd. Co.	314.0
New York Central Rd. Co.	2250.0
New York, New Haven & Hartford R. Co.	560.8
Boston & Maine Rd. Co.	256.4
Pennsylvania R. Co.	2600.0 (est.)
Lehigh Valley Rd. Co.	226.0
Norfolk & Western Ry. Co.	497.0
Wabash Ry. Co.	334.6
St. Louis-San Francisco Ry. Co.	439.9
St. Louis Southwestern Ry. Co.	139.4
Seaboard Air Line Ry. Co.	283.1
Southern Pacific Co.	2156.7
Southern Ry. Co.	655.5
Union Pacific Rd. Co.	1121.1
Illinois Central Rd. Co.	680.9
Virginian Ry. Co.	152.7
Western Pacific Rd. Corp.	156.0 (est.)
Real Estate	
U. S. Realty & Improvement Co.	124.6
Rubber	
B. F. Goodrich Co.	163.6
Firestone Tire & Rubber Co.	161.6
Goodyear Tire & Rubber Co.	243.2
United States Rubber Co.	307.8
Textiles	
American Woolen Co.	113.9
Traction	
Boston Elevated Ry. Co.	109.7
Brooklyn & Manhattan Transit Co.	288.5
Chicago Rys. Co.	108.2
Hudson Manhattan R. Co.	131.7
Interborough Rapid Transit Co.	458.6
Philadelphia Rapid Transit Co.	95.6

Name	Gross assets on or about Jan. 1, 1930. In millions of dollars
Traction (Continued)	
Third Avenue Ry. Co.	110.0 (est.)
United Rys. & Elec. Co. of Baltimore	96.7
Transportation	
International Mercantile Marine Co.	100.0 (est.)
Pullman, Inc.	315.5

Perhaps, on the other hand, the individual stays in his own home in comparative isolation and privacy. What do the two hundred largest companies mean to him there? His electricity and gas are almost sure to be furnished by one of these public utility companies: the aluminum of his kitchen utensils by the Aluminum Co. of America. His electric refrigerator may be the product of General Motors Co., or of one of the two great electric equipment companies, General Electric and Westinghouse Electric. The chances are that the Crane Company has supplied his plumbing fixtures, the American Radiator and Standard Sanitary Corp. his heating equipment. He probably buys at least some of his groceries from the Great Atlantic and Pacific Tea Co.—a company that expected to sell one-eighth of all the groceries in the country in 1930^{4a}—and he secures some of his drugs, directly or indirectly, from the United Drug Company. The cans which contain his groceries may well have been made by the American Can Company; his sugar has been refined by one of the major companies, his meat has probably been prepared by Swift, Armour, or Wilson, his crackers put up by the National Biscuit Company. The newspaper which comes to his door may be printed on International Paper Company paper or on that of the Crown Zellerbach Corporation; his shoes may be one of the International Shoe Company's makes; and although his suit may not be made of American Woolen Company cloth, it has doubtless been stitched on a Singer sewing machine.

If he seeks amusement through a radio he will almost of necessity use a set made under a license of the Radio Corporation of America. When he steps out to the movies he will probably see a Paramount,

^{4a} Wall Street Journal, Nov. 25, 1929.

Fox, or Warner Brothers' picture (taken on Eastman Kodak film) at a theatre controlled by one of these producing groups. No matter which of the alluring cigarette advertisements he succumbs to he is almost sure to find himself smoking one of the many brands put out by the "big four" tobacco companies, and he probably stops to buy them at the United Cigar store on the corner.

Even where the individual does not come in direct contact, he cannot escape indirect contact with these companies, so ubiquitous have they become. There are few articles of consumption to whose production one of the big companies has not to some extent contributed. The International Harvester Company and the Deere Company, plowmakers, have aided in the production of most of the bread that the American eats, to much of the cotton he wears and to many of the other agricultural products he consumes. It is almost impossible to obtain electric power from a local utility without receiving service from generating equipment supplied by one of the two big electric equipment companies. Few industrial products are made without the aid at some point in the process of steel derived from one of the big companies. And nearly every article involves transportation by one of the big railroads, either in the state of a raw material or that of a finished product.

While these companies play an integral part in the business of the country, their dominant position becomes apparent only when we seek to examine their importance in relation to the whole of the American economy. Here we must turn to the tool of statistics for only thus can we grasp the picture of our economic life as a whole. To make a statistical comparison of the relative importance of the large corporations, it is first necessary to decide upon a measure of importance. Since this study is primarily concerned with property, we have taken wealth, the economic equivalent of property, as the criterion of "importance" and have further assumed that the gross assets⁵ controlled by a corporation are roughly proportional to its wealth. Wherever possible, however, the results obtained have been checked by the use of a second measure of importance—net earnings.⁶

In seeking to present a picture of the relative positions of these

⁵ Gross assets less depreciation. In some balance sheets depreciation is subtracted from assets and in others it is included as a liability. Both practices are legitimate, but the latter results in a larger figure for gross assets. An adjustment has, therefore, been made where necessary to obtain gross assets exclusive of depreciation.

⁶ Statutory net income as compiled by the Treasury Department. This consists of the untaxed net income derived by a corporation directly from its business operations.

large corporations, four economic areas will be examined: (1) the New York stock market; (2) all corporate wealth; (3) all business wealth; and (4) the national wealth.

In the New York stock market there can be no question of the dominant position of the large corporation. Taking the list of stocks published weekly by the "Commercial and Financial Chronicle" and covering all but the most inactive stocks traded on the New York Stock Exchange in a normal week, 130 out of the 573 independent American corporations represented can be classed as huge companies, each reporting assets of over one hundred million dollars.⁷ These 130 companies controlled more than 80 per cent of the assets of all the companies represented. In the following table, these corporations are grouped by size showing the total assets held by each group and the per cent which this represents of the assets of all the corporations covered.⁸

<i>Size measured by gross assets</i>	<i>Number of companies</i>	<i>Gross assets held by group</i>	<i>Per cent of total assets represented</i>
Under \$50,000,000	372	\$ 7,325,000,000	10.9
\$50-\$100,000,000	71	4,950,000,000	7.4
Over \$100,000,000	130	54,714,000,000	81.7
Total	573	\$66,989,000,000	100.0

⁷ The stocks of 678 corporations were included in the list published by the "Commercial and Financial Chronicle" in the issue selected, that of the typical week of March 9, 1929. Of these, 76 were subsidiaries of other corporations on the list, 21 were foreign corporations and 8 were financial corporations. When a corporation listed on the exchange was a subsidiary of a corporation not listed, the parent was regarded as represented on the exchange. The assets of the listed corporations were obtained in Moody's Manuals for 1928 and 1929.

⁸ A similar study was made for the independent companies listed on the New York Curb Exchange, using the curb transaction list from the same issue of the "Commercial and Financial Chronicle." Unfortunately, the study was first made for a different purpose which involved only the companies in existence in 1927 and a compilation of assets as of that date. For this reason it does not include many companies which should be added. As the correction would probably not make a radical difference in the set of percentages, the uncorrected results are given below:

<i>Size measured by gross assets</i>	<i>Number of companies</i>	<i>Gross assets held by group</i>	<i>Per cent of total assets represented</i>
Under \$50,000,000	371	\$3,731,000,000	24.3
\$50-\$100,000,000	31	2,308,000,000	15.0
Over \$100,000,000	37	9,338,000,000	60.7
Total	439	\$15,377,000,000	100.0

Besides showing the overwhelming importance of the huge corporation, this table shows what is perhaps of even greater significance, the relative unimportance of the medium-sized corporation having assets between \$50,000,000 and \$100,000,000 and as a group controlling less than 8 per cent of the total assets represented. The small corporations—and in this day of industrial giants the reader must not be shocked by the reference to all corporations with assets less than \$50,000,000 as small—though numerous, do not hold an important position. It is noteworthy, however, that practically half the corporations included had less than \$30,000,000 assets and as a group controlled less than 6 per cent of the total.⁹

When we compare the combined assets of the two hundred largest non-banking corporations with the assets of all non-banking corporations, their dominant role is further emphasized. These companies, 42 railroads, 52 public utilities, and 106 industrials, each with assets over ninety million dollars, had combined assets at the beginning of 1930 of \$81,074,000,000.¹⁰ According to an estimate based on Income Tax figures, the total assets of all non-banking corporations at the beginning of 1930 amounted to \$165,000,000,000.¹¹ Thus the two hundred big companies controlled 49.2 per cent or nearly half of all non-banking corporate wealth, while the remaining half was owned by the more than 300,000 smaller companies.

The same dominant position of the large companies is shown when we compare the net income of the largest companies with the net income of all corporations. In 1929, the most recent year for which Income Tax statistics have been published, the largest two hundred non-banking corporations, each with an income of over \$5,000,000, received 43.2 per cent of the income of all non-banking corporations.¹²

Even this figure, however, tends to minimize the importance of the big companies. To a very considerable extent the Income Tax statistics, on which it is based, fail to include as part of the income of

⁹ See Appendix A for a more detailed table of companies according to size.

¹⁰ In the 26 cases where a consolidated balance sheet was not given in Moody's an estimate was made based on the assets of subsidiaries and the assets of the parent corporation minus its investments in affiliated companies. These estimates, while they cannot be perfectly accurate, are sufficiently so for the present purpose. In two cases, no balance sheet of the parent was given but a very rough estimate of the assets controlled was made, based on the bonds and stocks of the parent company and the assets of certain of its subsidiaries.

¹¹ This estimate was arrived at by making an estimate of the gross assets of all non-banking corporations on Dec. 31, 1929, according to the method described in "The Large Corporation in American Economic Life," American Economic Review, Vol. XXI, March, 1931, pp. 15 and 16.

¹² See Table IV.

a big company all the income derived from property under its control. In compiling the figures of income the Treasury Department has tabulated as separate corporations all companies filing separate Income Tax returns, even when they were actually controlled by other companies. Since any subsidiary company controlled through ownership of less than 95 per cent of its stock (or of the voting stock) was required to file a separate return¹³—and any subsidiary could file a separate return if it so desired—many companies are included as separate when actually they were controlled by other companies and for the present purpose should have their earnings consolidated with the latter.

For instance, the American Telephone and Telegraph Company was presumably represented in Income Tax returns as at least four companies, the parent company with assets over \$3,000 million in 1928, the Pacific Telephone and Telegraph Company with assets over \$379 million, the New England Telephone and Telegraph Company with \$268 million assets and the Mountain States Telephone and Telegraph Company with \$80 million assets.¹⁴ Even dividends received from these subsidiaries were not included in the statutory net income of the parent. Many other large corporations were in the same situation. For this reason the earned incomes reported by the large companies are frequently less than the earnings of property under their control.

A second factor tending to minimize the apparent importance of the large corporation, is the greater proportion of its income which is paid out as interest and therefore is not included as "statutory net income." It is fairly certain that large companies, particularly railroad and public utilities, tend to have a larger indebtedness in proportion

¹³ Revenue Act of 1926, Sec. 240 (a), (c) and (d). In case 95 per cent or more of the stock or of the voting stock of each of two or more corporations was owned by "the same interests" the corporations could file a consolidated return and would, therefore, appear as a single corporation in the statistics of income. Such a situation arises so infrequently that it need not be regarded here.

¹⁴ Subsidiaries of the American Telephone and Telegraph Company presumably filing income tax returns separate from parent in 1928, (i.e., less than 95 per cent owned). Derived from "Bell Telephone Securities-Reference Tables and Descriptions," 1929, published by the Bell Telephone Securities Company, a subsidiary of the American Telephone and Telegraph Company. Figures as of December 31, 1928:

Gross assets in millions	Name	Percent stock owned by A. T. & T. Co.
\$ 80.1	Mountain States Tel. & Tel. Co.	72.82
268.6	New England Tel. & Tel. Co.	61.98
379.6	Pacific Tel. & Tel. Co.	82.00

to their size than small companies. If the net income of all subsidiary corporations had been included in the net income of parents, and if income had included income represented by amounts paid out as interest, it is probable that the two hundred largest would have received well over 45 per cent of the net income of all corporations. This figure would therefore tend to give support to the figure derived on the basis of gross assets.

The income figures also indicated that the medium-sized corporation is not a particularly important factor. The 800 non-financial corporations next in size (according to net income) after the largest 200, received only 19.3 per cent of the net income of all corporations. This figure covers all corporations reporting income of over one million dollars and less than four and one-half million dollars, incomes representing assets ranging roughly from 18 to 80 million dollars. If all corporations had filed consolidated income accounts, the 800 corporations would have reported a still smaller proportion of corporate income since that of many important corporations would have been shifted into the higher group and only a slight balancing would come through addition from below.

In contrast to the medium-sized, the small corporation, reporting an income under one million dollars, makes an important showing. Such corporations accounted for 37.5 per cent of all corporate income, due, in large measure, to the sheer weight of numbers among the smallest units. This would seem to indicate that the bulk of corporate wealth was represented either by huge units having assets running into the hundreds of millions or by relatively small corporations having assets under four million dollars.

When we seek to compare the wealth of the big companies with that of all industry we get into difficulty since there appears to be no adequate basis for estimating the total business wealth in the country. A very rough estimate,¹⁵ however, indicates that at least 78 per cent and probably a larger proportion of American business wealth is corporate wealth. Since the two hundred largest corporations controlled approximately 49 per cent of all corporate wealth, the rough calculation would indicate that they controlled 38 per cent or more of all business wealth.

When we come to national wealth, we are necessarily dealing with estimates which can at best be only most approximate. The National Industrial Conference Board has estimated that the national

¹⁵ The method employed is described in "The Large Corporation in American Economic Life," *loc. cit.* pp. 19 and 20.

wealth at the end of 1928 amounted to \$360,062,000,000.¹⁶ If we assume an increase equal to the average of the previous six years we should have \$367,000,000,000 as the national wealth in 1929. Since the total assets of the two hundred big companies in that year amounted to \$81,077,000,000,¹⁷ they controlled roughly 22 per cent of the total wealth of the country. The lower relative importance of the large corporation in comparison to the national wealth is in large measure due to the importance of agricultural land and improvements, residential real estate, personal property including automobiles, and large volume of government property.

To recapitulate, the following table gives the results of the foregoing analysis:

Relative Importance of Large Corporations

(On or about January 1, 1930)

	<i>Results obtained by actual computation</i>	<i>Probable limits</i>
<i>Proportion of corporate wealth (other than banking) controlled by the 200 largest corporations</i>	49.2%	45-53%
<i>Proportion of business wealth (other than banking) controlled by the 200 largest corporations</i>	38.0% ¹	35-45%
<i>Proportion of national wealth controlled by the 200 largest corporations</i>	22.0%	15-25%

¹ Unadjusted for unconsolidated income tax returns.

It is apparent from these figures that a very considerable portion of the industrial wealth of the country has been concentrated under the control of a relatively few huge units. There were over 300,000 non-financial corporations in the country in 1929. Yet 200 of these, or less than seven-hundredths of one per cent, control nearly half the corporate wealth.

It must further be remembered that the influence of one of these huge companies extends far beyond the assets under its direct control.

¹⁶ The Conference Board Bulletin, No. 38, (February 25, 1930), p. 303, National Industrial Conference Board, New York.

¹⁷ The error due to including bills receivable in gross assets is not sufficiently large in comparison to the probable error in the estimate of national wealth to warrant making an adjustment.

Smaller companies which sell to or buy from the larger companies are likely to be influenced by them to a vastly greater extent than by other smaller companies with which they might deal. In many cases the continued prosperity of the smaller company depends on the favor of the larger and almost inevitably the interests of the latter become the interests of the former. The influence of the larger company on prices is often greatly increased by its mere size, even though it does not begin to approach a monopoly. Its political influence may be tremendous. Therefore, if roughly half of corporate wealth is controlled by two hundred large corporations and half by smaller companies it is fair to assume that very much more than half of industry is dominated by these great units. This concentration is made even more significant when it is recalled that as a result of it, approximately 2,000 individuals out of a population of one hundred and twenty-five million are in a position to control and direct half of industry.

The actual extent to which the concentration of power has progressed is striking enough. More striking still, however, is the pace at which it is proceeding. In 1909, the assets of the 200 then largest non-banking corporations amounted to only \$26.0 billion.¹⁸ By 1919 they had reached \$43.7 billion, an increase of 68 per cent in ten years. In the next ten years from 1919 to 1929 they increased to \$81.1 billion, an increase of 85 per cent.

The growth of 150 identical corporations included in the largest 200 companies in both 1919 and 1928 is given in Table II.

The assets of 44 identical railroads increased from \$18 billion in 1919 to \$23 billion in 1928 or 24 per cent; 71 identical industrial corporations increased from \$14 billion to \$23 billion in the same period, a growth of approximately 58 per cent in nine years. In the public utility field, as is well known, the rate has been vastly more rapid. In the same nine years the assets of 35 identical utilities grew from \$6 billion to \$18 billion, or nearly three times. The more rapid growth of the utilities approximately compensates for the slow growth of the railroads, and the total for the 150 corporations shows a growth from \$39 billion to \$63 billion, or an increase of practically 63 per cent.

Though the growth of the large corporations shown in these tables is rapid, it is truly significant only if it has been more rapid than the growth of all industrial wealth. We have already discussed the difficulty in estimating the total industrial wealth for each year; but, as we have seen, more accurate material is available with reference to the wealth of corporations. Here again the distinction between banking and non-

¹⁸ See Table III.

TABLE II: *Gross Assets of 150 Identical Corporations Common to Both 1919 and 1928 List of 200 Largest American Corporations*

Year	Gross assets as of Dec. 31 in million dollars ¹			
	44 Rail- roads	71 Indus- trials	35 Public utilities	150 Corpo- rations
1919	18,480	14,288	6,017	38,785
1920	20,535	16,186	6,393	43,114
1921	20,186	15,590	6,745	42,521
1922	20,643	15,962	7,757	44,362
1923	20,409	17,174	8,749	46,332
1924	20,839	17,703	9,814	48,356
1925	21,272	19,111	11,508	51,891
1926	21,881	20,569	13,562	56,012
1927	22,462	21,154	15,580	59,192
1928	23,026	22,675	17,703	63,404
Increase				
1919-1928	24%	58%	194%	63%
Annual Rate of Growth				
1919-1928 ²	2.4%	5.2%	12.3%	5.6%
Increase				
1924-1928	9%	28%	80%	31%
Annual Rate of Growth				
1924-1928 ²	2.3%	6.0%	15.9%	7.0%

¹ Derived from Moody's Railroad, Public Utility and Industrial Manuals.

² Compounded annually.

banking corporations is necessary, especially in view of the rapid growth of investment trusts which have been included, for the present purpose, with banks. Where industrial activity is concerned, there is reason to exclude such companies from consideration. In examining the growth of the 200 largest corporations, the increase in their gross assets has been accepted as a reasonable measure of growth. In measuring the growth of all non-financial corporations, no accurate

TABLE III: Comparison of Growth of Large Corporations with Growth of All Corporations

Year	200 largest non-financial corporations		All non-financial corporations	
	Gross assets as of December 31 ¹ (million dollars) (a)	Annual rate of growth ² (per cent) (b)	Estimated wealth as of December 31 (million dollars) (c)	Annual rate of growth ² (per cent) (d)
1909	\$26,063	5.1	\$ 63,303 ³	3.0
1919	43,718		90,507 ⁴	
1920	48,436			
1921	47,762			
1922	49,729	4.1		4.3
1923	51,886	4.2		
1924	54,337	4.7	102,658 ⁵	
1925	58,317	7.2		
1926	63,404	8.7	112,435 ⁶	4.8
1927	67,165	5.9	117,693 ⁷	
1928	73,139	8.6	124,334 ⁸	5.7
1929	81,074	10.6	131,500 ⁸	5.8
1909-1928		5.4		3.6
1921-1928		6.1		4.4
1924-1928		7.7		4.9

¹ For method of obtaining figures see text.

² Where an interval of more than a year intervenes between successive figures, the annual rate of growth is figured on a basis which gives a rate compounded annually.

³ Estimate obtained by determining the per cent growth in the capital stocks and indebtedness of all non-financial corporations between December 31, 1909 (Annual Report of Commissioner of Internal Revenue, 1910, pp. 69 and 74) and December 31, 1924 (Statistics of Income, 1925, pp. 31, 43 and 46). In the latter year the fair value of all capital stocks was used, as it was somewhat larger than total par value even for those corporations reporting par value. This percentage was then applied to the estimated wealth of non-financial corporations on December 31, 1924.

⁴ Estimate of non-financial corporate wealth made by the Federal Trade Commission and based upon the capital stock tax returns for approximately December 31, 1921, as compiled by the Treasury Department. (National Wealth and Income, Federal Trade Commission, p. 134.) This figure includes real estate, buildings, and equipment as reported and estimates for cash and inventory. Figures cover all corporations.

⁵ Figures for real estate, building, equipment, cash and inventory of all non-financial corporations as tabulated by the Treasury Department (Statistics of Income, 1925,

p. 40) plus an adjustment for wealth of corporations whose balance sheets were not tabulated. Adjustment was made by assuming the wealth of corporations whose assets were not tabulated was in the same proportion to the fair value of their stock as the wealth of corporations tabulated to the fair value of their stock (*ibid.*, p. 31).

⁶ Real estate, buildings, etc., of non-financial corporations (Statistics of Income, 1926, pp. 360 and 390) adjusted for corporations whose balance sheets were not tabulated. This adjustment was made on the basis of the proportion of balance sheets tabulated in each income class. As over 99 per cent of all but the very smallest corporations appear to have been tabulated, the error in estimation cannot be large (*ibid.*, pp. 356, 358, 360, and 398).

⁷ Same basis as (⁶) (Statistics of Income, 1927, pp. 371, 372, 380 and 382).

⁸ Same basis as (⁶), except that 97 per cent of balance sheets were assumed to be tabulated. (Statistics of Income, 1928, pp. 32, 380, and 386 and Statistics of Income, 1929, pp. 25 and 332.)

figures for gross assets are available. For certain years, notably 1921, 1924, and 1926 to 1929, a figure which the Federal Trade Commission has designated as "wealth used in corporate business" can, however, be employed as a satisfactory measure of growth. This item includes only cash, inventory, land, buildings and equipment. In each of these years the figure is based upon the data supplied from tax returns, and, to make the data for the different years comparable, certain adjustments have been necessary as explained in the footnotes of Table III. With these adjustments, the figures for different years become reasonably comparable and should indicate with a fair degree of accuracy the rate of increase of all corporate wealth exclusive of that of banking corporations. For the year 1909 less satisfactory material is available; but an estimate, involving a very much larger margin of error, has been made for that year.

When the rates of growth of the wealth of all non-financial corporations and of the assets of the 200 largest corporations are thus compared, they show the large corporations as a group to be growing very much more rapidly than all corporations. For the period from 1909 to 1928 their annual rate of growth has been 5.4 per cent, while that of all corporations (assuming the estimates are reliable) has amounted to only 3.6 per cent, and for corporations other than the largest 200 only 2.0 per cent. The large corporations would thus appear to be increasing in wealth over 50 per cent faster than all corporations or over two and one-half times as fast as smaller corporations. From 1921 to 1928 the annual rate of growth of the large corporations has been 6.1 per cent compared with 4.4 per cent for all corporations or 3.1 per cent for the smaller companies. From 1924 to 1928, a period of most rapid growth, the annual rates were respectively 7.7 per cent for the large, 4.9 per cent for all, and only 2.6 per cent for corporations

other than the largest 200, indicating that the large corporations were growing more than half again as fast as all corporations and three times as fast as smaller corporations.

This very much more rapid rate of growth of the big companies in comparison to other companies is equally evident when we examine the proportion of the income of all non-banking corporations which has been reported each year by the 200 companies reporting the largest incomes.¹⁹

For 1921 the results are misleading as in that year, the year of depression, the net income of all corporations was extremely low, and on purely statistical grounds, one would expect the proportion received by the corporations reporting the largest income to be very much greater than normal. In the remaining years, however, there is no reason to think that the figures are not reasonably comparable for different years. The results run roughly parallel to those obtained when the growth in assets was examined. Thus, while the years from 1920 to 1923 show no noticeable growth in the proportion of net income received by the 200 largest, from 1924 to 1929 there is a very marked increase in the proportion of all corporate income going to the 200 largest, increasing from 33.4 per cent in 1920 to 43.2 per cent in 1929 or from an average of 33.5 in the years 1920-1923 to an average of 40.4 in the years 1926-1929.

This increase in the proportion received by the large companies could theoretically be explained on two grounds other than the actual growth of the large corporations. If they had obtained an increasing rate of return on their capital in comparison with the smaller companies, the increase in the proportion of income could be explained. It could likewise be explained on the ground that for a large number of subsidiary corporations the net income was not consolidated with the parent in the earlier years and was so consolidated in the later years. This latter explanation, however, could at most account for only a very small part of the increase, since approximately the same proportion of all non-financial corporate dividends were reported as received by non-financial corporations in 1927 as in 1922,²⁰ indicating that subsidiaries were reported as separate corporations to approximately the same extent throughout the period.

It is quite conceivable that an important part of the increase is explained by the greater profitableness of large corporations; but the fact that the change coincides roughly with the change shown for

¹⁹ See Table IV.

²⁰ 20.3 per cent in 1922 and 20.5 per cent in 1927. Derived from Statistics of Income, 1922, pp. 18, 19 and 22, and *ibid.*, 1927, pp. 312 and 315.

TABLE IV: Growth of Large Corporations as Indicated by Relation of Their Statutory Net Income to That of All Corporations¹

	Net income of all non- financial corporations (million dollars)	Estimated net income of 200 largest non- financial corpora- tions (million dollars)	Per cent by largest 200 cor- pora- tions (million dollars)	Estimated net income of 800 next largest non- financial corpora- tions (million dollars)	Per cent by next largest 800 cor- pora- tions
1920	\$6,899	\$2,307	33.4	\$1,305	19.0
1921	3,597	1,354	37.6	708	19.6
1922	6,076	1,958	32.2	1,151	19.0
1923	7,453	2,445	32.8	1,386	18.6
1924	6,591	2,378	36.0	1,247	19.0
1925	8,060	2,993	37.1	1,522	18.9
1926	8,337	3,335	40.0	1,564	18.7
1927	7,459	2,865	38.4	1,360	18.2
1928	8,646	3,493	40.4	1,618	18.7
1929	9,456	4,081	43.2	1,808	19.1
<i>Average</i>					
1920-1923	\$6,006	\$2,015	33.5	\$1,137	18.9
<i>Average</i>					
1926-1929	\$8,474	\$3,444	40.7	\$1,587	18.7

¹ Derived from Statistics of Income for the respective years. Net income of all non-financial corporations equals statutory net income of all corporations reporting net income less that of financial corporations reporting net income. Income for the largest 200 was estimated by taking the net income of all non-financial corporations reporting income over \$5,000,000 including nearly 200 companies and adding to this an estimate of the income of additional companies to make the total of 200. In each case the few additional companies were assumed to have a net income of \$5,000,000. (If the average income of the added companies had been \$4,500,000 it would have lowered the estimate in 1927 only from 38.4 to 38.2 per cent. In other years the change would have been very much less. As in each year there were approximately 800 companies having incomes between \$1,000,000 and \$5,000,000, it is unlikely that the average income of the few companies necessary to make up the 200 largest would have been below \$4,500,000 and was probably closer to \$5,000,000. The assumption of the latter figures would not, therefore, lead to appreciable error.

Income for the next largest 800 was estimated by taking the income of all non-financial corporations reporting statutory net income of over \$1,000,000 (approximately 900 corporations each year) and adding an estimate of the income of addi-

tional companies to make a total of 1,000, the extra companies being assumed to have an income of \$1,000,000. From the resulting figure the estimated income of the largest 200 was subtracted. (Error due to the probability that the additional companies had an average income of somewhat less than \$1,000,000 would be negligible. If the average in 1927 had been \$900,000 it would have reduced the percentage only from 18.2 to 18.1. As there were nearly 1,000 corporations having incomes between \$500,000 and \$1,000,000, the average income of the added companies must have been more nearly \$1,000,000 than \$900,000. In other years the error would have been even less.)

corporate wealth tends to strengthen the conclusion that the large corporations have increased greatly both their proportion of the wealth and their proportion of the income of all corporations.

Though it is not possible to obtain figures for the growth of industrial wealth, we have already seen that the corporation has become increasingly important in industry after industry. Presumably a constantly increasing proportion of all industrial wealth has come under corporate sway.²¹ If that be the fact, the proportion of industrial wealth controlled by the 200 corporations has been increasing at a rate even more rapid than their proportion of all corporate wealth.

The relative growth of the wealth of the large corporations and the national wealth can only be very roughly calculated. As we have indicated, national wealth is a difficult concept to define, and all estimates of national wealth must be, at best, approximate; so that too much reliance should not be placed on any comparison of the growth of corporate wealth with that of national wealth. Between 1922 and 1928 the estimates by the National Industrial Conference Board²² indicate a growth in national wealth of 12.5 per cent compared with the growth in assets²³ of the 200 largest corporations of 45.6 per cent, or annual rates of growth of 2.0 per cent and 6.3 per cent respectively.²⁴ While the estimates based on the 1930 census figures may be considerably higher than those of the Conference Board, the estimates of the latter for 1928 would have to be increased by over 30 per cent to make the rate of increase in the national wealth equal to that of the 200

²¹ The 1899 census reported 66.7 per cent of all manufactured products are made by corporations, as against 87.0 per cent in 1919. An extension of trend based on the log of the figure for the per cent of manufactured products not made by corporations according to the census figures of 1899, 1909, and 1919 indicates that in 1929 approximately 94 per cent of all manufactured products were made by corporations. Basis figures obtained from 14th Census of the U. S., vol. viii, pp. 14 and 108.

²² National Industrial Conference Board, Conference Board Bulletin No. 38 (February 25, 1930), p. 303.

²³ The use of the gross assets of corporations rather than their tangible wealth is reasonable, since the comparison is primarily for noting changes in relationship rather than an absolute relationship.

²⁴ Compounded annually.

corporations. There can, therefore, be little doubt that the wealth of the large corporations has been increasing at a very much more rapid rate than the total national wealth.

To summarize the conclusions with relation to growth:

- (1) On the basis of gross assets, the large corporations appear to have been growing between two and three times as fast as all other non-financial corporations.
- (2) This conclusion is supported by the figures of corporate income.
- (3) Since an increased proportion of industrial wealth presumably continues to come under corporate sway, the proportion of industrial wealth controlled by the large corporations has been increasing at a rate even faster than the proportion of corporate wealth controlled by them.
- (4) Since estimates of national wealth are extremely approximate it is not possible to determine the growth in the proportion of national wealth controlled by the large corporations, but there can be little question that the proportion has been increasing at a rapid rate.

Just what does this rapid growth of the big companies promise for the future? Let us project the trend of the growth of recent years. If the wealth of the large corporations and that of all corporations should each continue to increase for the next twenty years at its average annual rate for the twenty years from 1909 to 1929, 70 per cent of all corporate activity would be carried on by two hundred corporations by 1950.²⁵ If the more rapid rates of growth from 1924 to 1929 were maintained for the next twenty years 85 per cent of corporate wealth would be held by two hundred huge units. It would take only forty years at the 1909-1929 rates or only thirty years at the 1924-1929 rates for all corporate activity and practically all industrial activity to be absorbed by two hundred giant companies. If the indicated growth of the large corporations and of the national wealth were to be effective from now until 1950, half of the national wealth would be under the control of big companies at the end of that period.

Whether the future will see any such complete absorption of economic activity into a few great enterprises it is not possible to predict. A glance at Table III will show that the rate of growth has not been uniform. The years from 1921 through 1923 showed little more growth by the large corporations than by all, though this slackening may reflect only a breathing spell after the excessive growth of the war years. One would expect, moreover, that the rate of concentration

²⁵ Assuming 49.2 per cent of non-banking corporate wealth was held by the largest 200 in 1929 and applying the rates of growth indicated in Table III.

would slacken as a larger and larger proportion of industry became absorbed and less remained to be added. The trend of the recent past indicates, however, that the great corporation, already of tremendous importance today, will become increasingly important in the future.

This conclusion is still further confirmed when we examine the ways in which the growth of the large companies takes place and compare their growth by each method with that of other companies. A given corporation can increase the wealth under its control in three major ways: by reinvesting its earnings, by raising new capital through the sale of securities in the public markets, and by acquiring control of other corporations by either purchase or exchange of securities. While there are numerous other ways by which an increase could take place, such as private sale of securities to individuals, these three so far outweigh other methods that they alone need to be considered.

A comparison of the savings of large corporations with those of all corporations indicates that the big companies as a group save a larger proportion of their net income. In the six-year period from 1922 to 1927 inclusive, 108 corporations (all of the 200 largest for which consolidated statements could be obtained for each year) saved 38.5 per cent of their net income available for dividends.²⁶ In the same period, all corporations combined saved only 29.4 per cent of their net income.²⁷ Since the earnings of the large corporations are included as an important proportion in the earnings of all corporations and since these large companies saved a larger than average percentage of earnings, the remaining corporations, mainly smaller companies, must have saved a proportion very much smaller than average, probably less than 25 per cent of their earnings. The importance of this method of growth is indicated by the fact that roughly a quarter of the growth of the large corporations was derived from earnings between 1922 and 1927.

Of much greater importance as a source of relative expansion has been the second method—the raising of new capital in the public markets. Over 55 per cent of the growth of the large companies has been made possible by the public offering of additional securities,²⁸ a fact which particularly concerns us here since these offerings are all made to the public investor, and since the dependence of these corporations on new capital is undoubtedly one of the strongest factors determining the relation between those who control the corporations

²⁶ See Appendix B.

²⁷ This difference in rate of saving is probably not an indication of greater liberality in paying dividends on the part of the small corporations but an indication of their greater liability to loss. For both groups, the net income for the group included the net income of those making a profit minus the losses suffered by the remainder.

²⁸ See Appendix C.

and their investing stockholders. Here again the large corporation increases the wealth under its control by this means of expansion to a much greater extent than the smaller companies. From 1922 to 1927 inclusive, a sample study indicates that two-thirds of all public offerings of new securities (as reported by the "Commercial and Financial Chronicle"—excluding banking companies) were made by the two hundred largest companies or their subsidiaries.

The third and more spectacular method of growth of the large corporations is by consolidation or merger. Within the eleven years, 1919 through 1929, no less than 49 corporations recorded among the largest two hundred at one time or another during the period have disappeared by merging with other large companies on the list.²⁹ It would be an extensive task to chronicle all the smaller companies which the companies on our list have absorbed. A list of a few of the more important industrial mergers in 1928 and 1929 involving only one big company will be found in Appendix E. Roughly twenty per cent of the growth of the largest companies which we have been observing can be attributed to additions through merger, a growth which effects a reduction in the corporate wealth lying outside the control of the largest group.

The growth in the assets of the two hundred largest corporations in the six-year period from 1922 to 1927 inclusive is given below, as well as estimates of the manner of growth.

<i>Estimated savings out of earnings</i>	\$ 5,748,000,000	26.5%
<i>Estimated new capital from sale of securities</i>	11,813,000,000	55.0%
<i>Estimated growth as a result of mergers</i>	4,000,000,000	18.5%
	<hr/>	<hr/>
	\$21,561,000,000	100.0%
<i>Estimated reduction from reappraisals, etc., and error in estimates</i>	\$ 2,000,000,000	
<i>Net growth in assets, 1922-1927, inclusive</i>	19,561,000,000	

One question yet remains—are these companies likely to survive? It is sometimes said that consolidations of great magnitude sooner or later, more often sooner, go into a period of decline,—that beyond a certain point the organization breaks down, and the whole falls of its own weight. There appears, however, to be little foundation for such a suggestion. Examination of the condition in 1928 of the two hundred companies which were largest in 1919 shows the following:³⁰

²⁹ For list of these, see Appendix D.

³⁰ A study of the present status of the two hundred companies included as the largest in the list for 1910 yield percentage results per unit of time almost identical with those for the 1919 list.

Of the 200 largest corporations in 1919:—

- 23 merged with larger companies.⁸¹
 - 154 were included in list of largest 200 corporations in 1928.
 - 21 remained large and active concerns though 7 of them went through reorganization.
 - 2 liquidated or the equivalent.
-
- 200

This table shows 25 companies actually disappearing in nine years, or a rate of disappearance of 1.4 per cent a year. If this were the normal rate of disappearance it would indicate an average expectancy of over 70 years of further life. At the same time the disappearance of a corporation through merger does not indicate that its organization has broken down and that it is about to fall into dissolution; it passes, but does not die. If we regard the two liquidated companies as the only ones which actually disappeared, we would have a dissolution rate of 1 per cent in nine years or an average expectancy of 900 years of life, either as an independent concern or as an integral part of a larger enterprise. On the other hand if we apply the rates of merger and of dissolution simultaneously they indicate that at the end of 360 years sixteen of the two hundred companies would have disappeared through dissolution and all the remaining companies would have merged into a single corporation having a life expectancy of over 1000 years. Furthermore, if the changes in the nine years are a promise of the future, half of the companies included in the 1919 list of 200 companies will also be represented in a list of the largest two hundred compiled a century hence, ten directly and ninety as absorbed units in these ten.

These figures are, of course, an unwarranted extension into the future of the trend of nine years from 1919 to 1928. They serve, however, to indicate that there is little in the history of the 200 companies in the nine-year period considered to suggest that the large corporation has a short life cycle ending in dissolution.

In conclusion, then, the huge corporation, the corporation with \$90,000,000 of assets or more, has come to dominate most major industries if not all industry in the United States. A rapidly increasing proportion of industry is carried on under this form of organization. There is apparently no immediate limit to its increase. It is coming more and more to be the industrial unit with which American economic, social, and political life must deal. The implications of this fact challenge many of the basic assumptions of current thought.

⁸¹ See Appendix F.

(1) Most fundamental of all, it is now necessary to think, to a very important extent, in terms of these huge units rather than in terms of the multitude of small competing elements of private enterprise. The emphasis must be shifted to that very great proportion of industry in the hands of a relatively few units, units which can be studied individually and concretely. Such studies will reveal the operation of half of industry and what is more important, that half which is likely to be more typical of the industry of the future.⁸²

(2) Competition has changed in character and the principles applicable to present conditions are radically different from those which apply when the dominant competing units are smaller and more numerous. The principles of duopoly have become more important than those of free competition.

(3) An increasing proportion of production is carried on for use and not for sale. With the increase in the large companies, a larger proportion of goods are consumed by the producing organization in the process of making further goods. To this extent the calculus of cost versus quality would presumably be solved in the interest of producing a product which would yield the maximum use per unit of cost rather than the maximum profit per unit of investment. Under the latter incentive the consumer is only incidentally offered the product which will give him the most use per unit of cost unless he himself is easily able to measure usefulness. Adulteration, shoddy goods, and goods of lower quality than would be economically desirable are frequent under the incentive for profit. To the extent that production is for use by the producing organization there is no such incentive.⁸³

(4) The nature of capital has changed. To an increasing extent it is composed not of tangible goods, but of organizations built in the past and available to function in the future. Even the value of tangible goods tends to become increasingly dependent upon their

⁸² For instance, it seems likely that a study of the directors and senior officers of the 200 largest companies, their training, social background, and other characteristics, would reveal more of vital importance to the community than a study of those at the head of thousands of smaller companies. The same would be true of the ownership of the large companies, their labor policies, their price policies, their promotion practices, etc. This is not to suggest that the practices of the large companies would be typical of the smaller companies, but rather that they would be factually more important.

⁸³ For instance, it is to the advantage of the American Telephone and Telegraph Company to have its subsidiary, the Western Electric Company, make the best possible vacuum tubes for the innumerable repeater sets in use on its long distance lines. On the other hand, it might be to the advantage of a corporation making tubes for sale to the public to make second-grade tubes which would wear out quickly and allow a second sale at a second profit to be made.

organized relationship to other tangible goods composing the property of one of these great units.

(5) Finally, a society in which production is governed by blind economic forces is being replaced by one in which production is carried on under the ultimate control of a handful of individuals.³⁴ The economic power in the hands of the few persons who control a giant corporation is a tremendous force which can harm or benefit a multitude of individuals, affect whole districts, shift the currents of trade, bring ruin to one community and prosperity to another. The organizations which they control have passed far beyond the realm of private enterprise—they have become more nearly social institutions.

Such is the character of the corporate system—dynamic, constantly building itself into greater aggregates, and thereby changing the basic conditions which the thinking of the past has assumed.

³⁴ Approximately 2,000 men were directors of the 200 largest corporations in 1930. Since an important number of these are inactive, the ultimate control of nearly half of industry was actually in the hands of a few hundred men.

CHAPTER IV: THE DISPERSION OF STOCK OWNERSHIP

ACCOMPANYING THE CONCENTRATION of economic power, growing out of it, and making it possible, has come an ever wider dispersion of stock ownership. This in turn has brought about a fundamental change in the character of wealth,—in the relation between the individual and his wealth, the value of that wealth and the nature of property itself. Dispersion in the ownership of separate enterprises appears to be inherent in the corporate system. It has already proceeded far, it is rapidly increasing, and appears to be an inevitable development.

As is to be expected, the process of stock dispersion has proceeded furthest in the very large companies. The stockholder lists of the largest railroad, the Pennsylvania Railroad, the largest public utility, the American Telephone and Telegraph Company, and the largest industrial, the United States Steel Corporation, show in each case that the principal holder in 1929 owned less than one per cent of the outstanding stock. The most important holdings reported were, respectively, .34 of one per cent, .70 of one per cent, and .90 of one per cent.¹ In these companies no single individual holds an important proportion of the total ownership. Even the aggregate holdings of the twenty largest stockholders of the Pennsylvania Railroad amounted in 1929 to only 2.7 per cent, of the Telephone Company to 4.0 per cent, and of the Steel Company to 5.1 per cent. Below the first twenty, the amount held by each stockholder dropped off rapidly to insignificant proportions. The twentieth holder of Railroad stock owned but .07 of one per cent, of Telephone stock .09 of one per cent, and of Steel stock but .09 of one per cent.¹ The remainder of the half million Telephone

¹ See Table XII, pp. 99 and 100.