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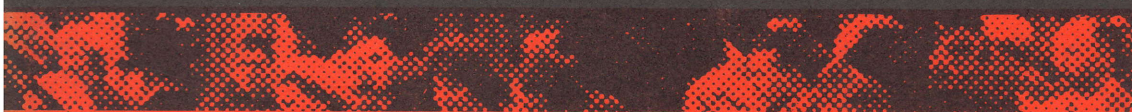

Autumn/1961

Stock ownership and the control of corporations

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symposium

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Stock ownership and the control of corporations

by Don Villarejo

Editors' comment: the editors of New University Thought *feel that a major function of the magazine is to publish original research on aspects of contemporary American society. The discussion of corporate ownership and control is felt to be particularly important because the large corporation is one of the primary influences in our society, and because the prevalent theories, which are only infrequently examined, color much contemporary social theory and have a heavy bearing on social policy. This article is the result of more than two years' research, most of it spent in extracting primary data from voluminous government reports and many scattered private sources. The tables present data unavailable elsewhere in this form. Don Villarejo, one of our editors, is a graduate student at the University of Chicago.*

This report constitutes the formal presentation of a portion of an extensive research into the operation of the American economy. We have selected the 250 largest industrial corporations as our sample space and have attempted to gather information on the specific nature of control in each case. In particular we seek to examine the various extant theories of control and weigh the evidence we have found with a view to determining a working theory of the "control of large corporations." Many views are well known in the academic and liberal community including Lundberg's *America's Sixty Families* (hardly a formal theory of control), Berle and Means' *The Modern Corporation and Private Property,* as well as the Madison Avenue "People's Capitalism" advanced by representatives of the New York Stock Exchange. While space does not permit a detailed examination of each of the many possible views, the more important will be considered in the light of our data.

In Part I we present data designed to shed some light on the general pattern of stock ownership in America and to equip the reader with the jargon of the field. In addition, Part I begins to enter into the general nature of the problem and the type of data involved. This section provides the basic framework for our discussion. Part II deals more specifically with the question of control. Here we discuss the theory of control extensively and present our findings in condensed form. Finally, Part III discusses the problem of control in connection with the individuals enjoying a prominent position in the corporations studied. This is done by examining interlocking directorates, correlating information on personal holdings of these directors, and studying the identity of the individuals—how many are bankers, how many are large stockholders, etc. This analysis leads logically to the presentation of a theory of control which takes into account the relationship of the men enjoying power to the institutions they control.

Part I: Stock ownership

In the past few years more and more of the public's attention has been directed to the ownership and trading of stocks. There are many reasons for this development not the least important of which is the expansion of stock ownership during the great stock market boom of the late fifties. More recently, the detection of fraud on the market has led to a full scale investigation of the nation's major security markets by the Securities and Exchange Commission.

Throughout this period, however, there has been a remarkable absence of study of the means of controlling corporations and the relation of this to the fact of expanding stock ownership. There exist, however, a number of theories attempting to advance an understanding of the devices used to control corporations. Among these, the most prominent, in terms of general acceptance, is that of A.A. Berle, Jr.: "management control." This idea has been fully exploited from the time it was first introduced in 1932 up to Berle's recent work *Power Without Property*. Briefly, it is Berle's position that increasingly the largest corporations are under the control of management (by which we mean the individuals primarily responsible for the day to day operations of the corporation), a group without significant personal stockholdings. We shall consider this theory at a later point. Another view pushed before the public is the theory of "People's Capitalism," which in its most developed form, insists that the ordinary people of the country own, and therefore control, the great corporate enterprises. G.K. Funston, President of the New York Stock Exchange, primary proponent of this view, has said:

> *"As such, the gradual creation of a 'People's Capitalism' is an economic landmark without parallel. It has tremendous appeal to the uncommitted people of the world."*[1]

We shall test this view as a part of this article. Yet another position is that of the economist Victor Perlo. Perlo asserts that economic institutions such as the major banks and brokerage firms have come to occupy a central position controlling the bulk of economic activity.[2] Finally, there is C. Wright Mills, who holds the position that a new level of development has been reached in modern times. His view is that the old propertied rich and the new privileged managerial class has evolved into a more compact group he calls the Corporate Rich.[3]

While all of these views express portions of the truth, none of them rely on a systematic study of the major corporations using recent data. For example, the TNEC data of 1940[4] provides much of Perlo's data. Berle has also not undertaken a full scale study to support his view; i.e., he has not studied the position of various stockholders in the corporations of interest in great enough detail. The New York Stock Exchange, while publishing data on the number of stockholders, has never studied even the fraction of stock owned by various income groupings. Mills relies on the sociologist's approach. He does not examine the mechanism of control in specific corporations. Another economist, R.A. Gordon, has explored this question in some detail but, again, relies heavily on the now outdated TNEC data. [5]

It seems appropriate, therefore, to re-examine the available data in order to obtain an understanding appropriate to the present time. But before turning to this question in detail, it is necessary to have a firm grasp of the general characteristics of stock ownership as well as the various devices used to hold stock.

The corporation

Corporations own roughly two-thirds of America's national wealth. The complete dominance of the corporate form is familiar to all of us. General Motors, U.S. Steel, General Electric, Standard Oil, and a whole host of other names are a part of our common understanding, yet they can not be found in the dictionary. A little less familiar is the extent of concentration of size among American corporations. In commenting on the fact that roughly 500 domestic corporations control about two-thirds of the non-farm economy, A.A. Berle, Jr. stated:

"This is, I think, the highest concentration of economic power in recorded history. Since the United States carries on not quite half of the manufacturing production of the entire world today, these 500 groupings—each with its own little dominating pyramid within it—represent a concentration of power over economics which makes the medieval feudal system look like a Sunday School party. In sheer economic power this has gone far beyond anything we have yet seen." [6]

It is our intention to examine some of these "little dominating pyramids" at a later point.

In theory, the corporate form is a device for pooling the resources of a large number of investors or, alternatively, it is a means of concentrating the ownership of property. Each of the many investors owns a portion of the enterprise and receives stock certificates as evidence of this fact. The *stockowner* enjoys the various rights accruing to investors including the right to participate in the election of directors. Stock certificates, or "stocks" as they are known, may be purchased or sold. Ordinarily, the market place for the sale of stocks is the stock exchange. The stock exchanges have grown at roughly the same pace as the corporate form. The New York Stock Exchange, for example, was founded in 1792.

In practice, the modern corporation rarely raises new funds by turning to the large number of small investors through the issuance of more stock. Consequently, the ownership and exchange of stocks has tended to become a more speculative activity. This type of activity, of course, attracts the crooks and fast buck operators as evidenced by the frenzy of speculative activity prior to the great stock market crash of 1929. The recent boom in the stock market has again brought the speculators to the fore. In fact, the large scale investigation of the stock markets to be undertaken by the SEC was triggered recently by the activity of some unscrupulous stockbrokers. This fact of growing speculative activity has had important effects on the various devices used to hold stock, as we shall see at a later point.

As a form of organization the corporate structure is quite simple. The stockholders, be they the original investors or others, elect a group of *directors* (usually numbering between ten to eighteen men). Each *share* is entitled to one vote, thus distinguishing corporate democracy from a political democracy in which each *citizen* has one vote. However, since the size of the investment determines the number of shares owned, the corporate form preserves (in the determination of directors at least) the relative weight or importance of each investor. Presumably the larger investor has more to lose and is therefore entitled to a larger voice in the determination of policy (albeit indirectly through the board of directors). In turn, the board of directors selects the management: a president, several vice-presidents, a secretary, a treasurer, etc. Thus, the line of responsibility is clearly laid out and, in one form or another, this structure is common to most modern corporations. It should be noted that Berle claims that in those corporations under management control it is actually the management and not the many thousands of stockholders who actually select the directors. We shall discuss this view at a later point.

While the structure described above seems to be relatively simple, the modern corporation is actually a bit more unwieldy than indicated. For example, the giant of them all—American Telephone and Telegraph—has nearly 2,000,000 stockholders of record. A stockholders' meeting of all holders is obviously not possible. Indeed, the most recent meeting of stockholders of A.T.&T. brought together the largest stockholders meeting in history, some 19,000 owners.

Shareowners and shareholdings

Various devices are used to hold stock in a corporation. Shown in Table I is a tabulation of *shareholdings* of record by category of *shareholder* in a large sample of domestic corporations. It is important to understand the distinction between shareholdings and shareowners. A *shareowner* is an individual who owns stock in one or more corporations. A *shareholding* is an entry in the records of the corporation indicating ownership of stock. A shareowner who owns stock in five corporations is represented by five shareholdings. On the other hand, one person may own stock in one corporation but may register the holding using several names, a portion of the total holding under each name. This single shareowner, then, would be represented by several shareholdings.

It is evident from Table I that the majority of corporate stock is owned directly by individuals. In fact, some 57.4 per cent of the common stock included in this study was owned directly by individuals. Equally important, 39.1 per cent of the stock was owned by one or another type of financial intermediary, institution, or corporation. For our purposes, a financial intermediary is a stockholder of record who holds stock for the benefit of others. For example, a brokerage firm may hold stock in its own name but the actual beneficiary may be one of the firm's clients. Let us now systematically investigate the various types of shareholders of record.

Table I: Shareholdings of record by class of shareholder; common stock of 6,679 issues: 1956

Classification	Number of shareholder	Shares held	Average number shares per holding
Domestic individuals	26,030	4,250	163
Fiduciaries	1,297	549	423
Brokers & dealers	326	693	2,126
Nominees	213	732	3,437
Institutions & others	491	1,174	2,391
Foreign	752	265	352
Total	29,109	7,663	263

Note: Number of shareholdings in thousands; number of shares held in millions; average number of shares per holding in units.

Source: *Who Owns American Business*, 1956 Census of Shareowners, New York Stock Exchange, pp. 23-25.

Shareholdings of individuals

As we have seen, the most common device for holding stock is the direct ownership by an individual (we include joint ownership by a man and wife, commonly known as a joint account, as direct ownership by an individual). However, this method of holding stock has diminished in relative importance. The last one hundred years have seen the growth of various types of financial intermediaries as well as a growth of holdings by insurance companies, foundations, investment companies, and the like. As shown in Table I, the average holding of an individual is only 163 shares. Since the typical large corporation may have several million shares of stock outstanding, it is clear that the average individual holding is negligibly small. This one fact has been the starting point for many discussions of the wide diffusion of stock ownership. But a moment's thought shows that this figure of 163 shares per shareholding is almost devoid of meaning as it averages over millions of *shareholdings*.

A better measure, by contrast, of the holdings of individuals is the ownership of stock by families, distributed by the size of the holdings. About one-third of all families owning publicly traded common stock have investments of $5,000 or less. (See table VI.) In addition, roughly four-fifths if all shareowning families own less than $25,000 worth of publicly traded common stock. Also, only one-fifth of share-owning families own perhaps one-half or more of all common stock held directly by individuals.[7] We are led to the conclusion that the average shareholding appears small simply because the bulk of individuals have small holdings while a small minority of owners have moderate or very large holdings. (See also our later discussion of Table IX.)

Shareholdings of fiduciaries

A fiduciary is one who holds property in trust for another. Fiduciary shareholdings account for 4.6 per cent of all shareholdings and 9.4 per cent of common stock. The average holding of a fiduciary is about two and one-half times as large as the average holding of an individual. But these figures shed little light on the full importance of fiduciaries.

Since we have defined the term fiduciary in terms of another term not generally well known, the term "trust," it is appropriate for us to describe fiduciaries in greater detail. In order to fully appreciate this description it is necessary that the reader assume what is essentially a new view of property. This view requires that one regard property as of central importance and that one must plan in great detail to keep property intact. Thus, the death of a beneficiary does not mean distributing *property* to many beneficiaries but rather the redirection of *income* from the property to a new beneficiary. Changes in the tax laws require planning to lessen the impact on one's property. In the world of the propertied rich, the destruction of property via taxation or other means is regarded as a disaster. One of the most popular devices for maintaining property intact is the trust.

A trust may be defined as follows:

> *"A trust is a fiduciary relationship in which one person is the holder of the title to property, subject to an obligation imposed either expressly or by implication of law..."* [8]

Within this general framework there are many types of trusts in actual use today. Historically, the first type of trust to gain widespread usage was the *testamentary trust* under which an estate was left to the management of trustees for the purpose of insuring proper management of the property in question. If, for example, a decedent left only a wife and minor children, the testamentary trust was the ideal means of insuring proper management of the family property. Beginning in 1850 numerous trust companies began a period of rapid growth and their functions were described as follows:

> *"They are the recipients and trustees of funds in large and small sums, held for account of widows, minors, and others; and are safe depositories for those who wish to avoid the risks arising from investments in the public securities of the times."* [9]

By 1961, however, the *living trust* has assumed central importance. A living trust is a trust arrangement in which the individual places his property in trust while he is alive and continues to derive income from the trust. As we shall see, the living trust is a useful means of avoiding a large tax bite. In order to establish a trust, the individual gives property (no gift tax on gifts of this type) to the trust, appoints trustees, and sets up the terms of the trust. If an individual owns property directly and wishes to split up the income to several beneficiaries the trust is the perfect means of saving taxes. The income to the trust is not taxable to the trust if the income is distributed to beneficiaries. Thus, instead of paying one big tax bite on the direct income from the property, each beneficiary pays taxes only on the portion he receives at a much lower tax rate. In addition, one can direct that income from a trust be redirected at the death of a beneficiary to one or more other beneficiaries. Legally, the property does not change hands if a beneficiary should happen to die. Thus, there is no estate tax to pay since there has been no transfer of property. However, one cannot establish a perpetual trust, so that after several generations estate taxes must be reckoned with.

As the tax structure has grown in complexity, the trust has assumed an even greater importance in the economy. To underscore this point, Table II shows the growth of large fiduciaries in the twenty-one year period from 1937 to 1958.[10] In this period the number of fiduciaries with incomes in excess of $5,000 more than tripled (it should be remembered that an income of $5,000 probably represents property value in excess of $100,000). In the same period, dividend income of these fiduciaries more than doubled.

Table II: Large income fiduciaries, selected income component: dividends, 1937 - 58

Income class	Number of tax returns		Dividend income	
	1937	1958	1937	1958
$5,000 to $10,000	25,143	84,899	93,915	293,783
$10,000 to $20,000	14,817	55,839	123,049	374,170
$20,000 to $25,000	3,056	11,660	42,880	118,138
$25,000 to $50,000	5,672	22,007	129,392	327,920
$50,000 to $100,000	2,269	9,456	108,716	273,919
$100,000 to $500,000	1,191	4,157	160,271	300,706
$500,000 to $1,000,000	73	304	45,719	62,893
$1,000,000 or more	29	185	44,287	123,216
	52,250	188,507	748,229	1,874,745

Note: Dividend income in thousands of dollars. The figures as presented are not strictly comparable. In 1937, the published figures were classified by Balance Income Class, i.e., total income less total deductions (but before distributions to beneficiaries and taxes). 1958 figures are classified by Total Income Class (before any deductions). Further, in 1937 12,247 returns were misfiled on improper returns. These returns have been distributed by the author on a proportional basis to the shown income classes. Finally, in 1937 the requirements for filing were less stringent than in 1958. Thus, it is possible that in the lower income classes especially the figures shown are actually underestimates.

Sources: *Statistics of Income for 1937, Part 1*, U.S. Treasury Department, Bureau of Internal Revenue, Washington, D.C. 1940, pp. 173-178. *Statistics of Income, 1958: Fiduciary, Gift and Estate Tax Returns*, U.S. Treasury Department, Internal Revenue Service, Washington, D.C., 1961, p. 15, Table 2.

Using these data, it is most difficult to estimate the number of individuals owning stock through fiduciaries. This is because a given person may derive income from several trusts or, alternatively, several individuals may derive income from a single trust. As an example of the former there is the case of Mrs. Marie Hartford Robertson who, with her children, derives income from no less than eighteen trusts holding about 745,785 shares of the Great Atlantic and Pacific Tea Company.[11] A typical case of the other kind is provided by the Stewart family trust, holding about 129,186 shares of Union Oil of California.[12] In this case A.C. Stewart benefits from about 24,029 shares, while W.L. Stewart, Jr. benefits from about 28,001 shares.[13] Both gentlemen are directors of Union Oil of California. The identity of the beneficiaries of the remaining 77,156 shares is not publicly known, but they are presumably other members of the Stewart family.

Paralleling the growth of the trust as a means of holding property has been the growth of the modern trust company, designed explicitly to provide fiduciary services for individuals and corporations. However, the major trust institutions do not use a separate fiduciary for each account. Rather, an elaborate system of *nominees* has been developed and, in most studies of share ownership, one makes a careful distinction between shares held by individual fiduciaries and trust institution fiduciaries or nominees. The main reason for this distinction is that the bulk of the trust institution fiduciary business is handled by a rather small number of banks, leading to a considerable concentration of shareholdings by the trust departments of the major banks. On the other hand, non-institution trusts are almost invariably managed by a beneficiary or an employee of the beneficiary, in which case the degree of concentration is not so great.

Shareholdings of nominees

To those not familiar with the nominee system, the complexity of this means of holding stock must appear enormous. Briefly, the system works as follows: a private citizen opens an account with a trust institution; once the account has been opened and shares purchased in various corporations, the registration of the name of the owner on the list of shareholders of record in these corporations is not that of the beneficial holder or even the title of the actual trustees. Instead, the shares will appear under one of several standard names used by the bank. For example, the following names are in current use by the giant Bankers Trust Co. of New York: Eddy and Co., Salkeld and Co., Boehm and Co.[14] To the uninitiated examining the list of stockholders of a large corporation, these names are somewhat mystifying. Yet they provide a simple, effective means of protecting the indentity of beneficiaries of large trust holdings. Furthermore, this system of nominees is an effective method of bookkeeping within the trust institution. Certain trust institutions use a separate nominee for all testamentary trusts, etc. Some trust institutions have as many as twelve nominee names in standard use.

In order to appreciate the nominee system we have reproduced in Table III a list of the thirty largest holders of one of the nation's large corporations, the Chesapeake and Ohio Railway Company. Perhaps the only shareholding familiar to most readers is that Cyrus S. Eaton, the Cleveland financier. Further down the list we find the name Milbank, & Co., a nominee for members of the Milbank family. These are the only shareholdings easily identifiable as to the actual beneficiaries. All the remaining twenty-eight holdings are nominees of various banks and institutions, and brokers and dealers. Thus, A.A. Welsh and Co. is a nominee for the Cleveland Trust Co.; Sigler and Co. is a nominee for the Hanover Bank; Shaw and Co. is a nominee for the Morgan-Guaranty Trust Co.; King and Co. is nominee for the First National City Bank trust affiliate; Atwell and Co. is a nominee for the United States Trust Co.; Salkeld and Co. is a nominee for the Bankers Trust Co.; and so on. The ultimate beneficiaries of these holdings and of the holdings of the various brokers listed are, of course, not revealed.

Table III: Thirty largest holdings of record in the Chesapeake and Ohio Railway Company: 1959, common stock

Name	Shares held	Per cent of Shares outstanding
Merrill Lynch (a)	331,954	4.03
O'Neill & Co.	136,900	1.66
Hanab Company	133,984	1.63
Cyrus S. Eaton	103,427	1.26
Croft and Co.	90,000	1.09
Carothers and Clark	80,000	0.97
Touchstone and Co.	75,000	0.91
Ferro and Co.	53,500	0.65
French and Co.	50,000	0.61
N.V. Algemeene Tr. Maatschappi	49,650	0.60
Sigler and Co.	46,652	0.57
Shaw and Co.	46,321	0.56
Jacquith and Co.	46,055	0.56
Char and Co.	45,000	0.55
King and Co.	34,656	0.42
A.A. Welsh and Co.	32,364	0.39
Saxon and Co.	31,440	0.38
Salkeld and Co.	30,484	0.37
Genoy and Co.	26,262	0.32
Bache and Co.	25,029	0.30
Edal and Co.	23,000	0.28
Lages and Co.	22,700	0.28
Milbank and Co.	22,500	0.27
Carson and Co.	21,182	0.26
Paine, Webber, Jackson & Curtis	20,016	0.24
Loriot and Co.	20,000	0.24
Atwell and Co.	19,551	0.24
Francis I. DuPont and Co.	18,825	0.23
John F. Frawley and Co.	18,300	0.22
Goodbody and Co.	18,257	0.22
Total	1,673,010	20.32

Note: (a) Merrill Lynch, Pierce, Fenner and Smith, Inc.

Source: Annual Report of The Chesapeake and Ohio Railway Company to the Interstate Commerce Commission for the year ended December 31, 1959, p. 108.

With this brief description in mind we turn to the holdings of nominees as shown in Table I. We observe that nominees account for only 0.8 per cent of all shareholdings but, surprisingly, about 9.9 per cent of common stock. Nominee holdings average about twenty times the average holding of an individual. Yet this is only the beginning. The typical trust institution holds stock in about 790 corporations.[15] Since many of the large institutions use several nominees, a single bank may be represented by 8,000 shareholdings in our figures. On the other hand, it is known that only 412 trust institutions had trust assets under administration amounting to $10 million or more.16 Therefore, the 213,000 holdings attributed to nominees may only represent several hundred banks. By any measure, this certainly represents an enormous concentration of shares in so few shareholders. If we accept the figure of 790 as representative of the average number of corporations in which the trust institutions hold stock, then the average number of shares per nominee is an enormous 2,714,000 shares. Since a typical institution uses more than one nominee, it is clear that a very large concentration of shares reside with the major trust institutions.

Table IV: Shares owned through banks, brokers, and dealers in sixteen large corporations: 1951

Corporation	Banks		Brokers & dealers	
	Number	Holding	Number	Holding
American Airlines	65	8.6%	307	24.7%
American Telephone & Telegraph	123	4.8	348	2.3
Celanese Corp.	85	14.0	258	9.1
Cities Service Co.	81	10.0	284	17.6
Consolidated Edison	108	10.0	293	5.5
E.I. du Pont de Nemours	125	12.4	310	1.7
Electric Bond and Share	62	12.6	268	27.0
General Electric Co.	125	20.2	327	3.2
General Motors Corp.	126	7.5	352	2.3
International Tel. & Tel.	41	3.0	296	41.2
Pacific Gas and Electric	102	7.7	272	4.1
Pennsylvania Railroad	93	5.4	325	13.0
Radio Corporation of America	96	5.2	338	20.0
Sears, Roebuck and Co.	119	14.7	266	1.8
Standard Oil Co. (New Jersey)	125	17.9	343	3.2
United States Steel Corp.	106	8.8	337	8.9

Note: Holding is the combined number of shares owned as a per cent of total outstanding stock (common stock only) in each company.

Source: *Share Ownership in the United States*, L.H. Kimmel, The Brookings Institution, Washington, D.C., 1952; pp. 50, 57. Moody's Corporation Manuals (for shares outstanding as of 12/31/51).

In order to grasp the full importance of nominee holdings in a specific corporation, Table IV gives the results of a survey of major trust institutions and their holdings in certain domestic corporations. Of greatest interest is the extent of nominee holdings in General Electric Co., a corporation generally believed to be widely held. Yet, a minimum of 20 per cent of the stock of G.E. is held by a mere 125 banks. While this is not the place for a full discussion of the various methods used to control corporations, it is important to realize that it is generally considered that a handful, possibly fifteen, New York banks dominate the personal trust business. The holding of 20 per cent by 125 banks fails to convey the full extent of concentration.

(An especially interesting account of the trust business and the importance of the major New York financial houses will be found in Perlo's book, Chapter IV--see footnote 2)

In spite of the great importance of personal trust holdings managed by the giant banks, there is very little public interest in or awareness of the booming trust business. There is all too little information publicly available concerning the relative importance of the major trust institutions and, equally important, very little is known of the holdings of specific institutions in specific corporations. This aura of secrecy is but another reflection of the common place attitude in the business world that a man's business transactions are his own private affair. Even government regulatory agencies have great difficulty in penetrating this great wall of secrecy. To this day there is virtually no information concerning the identity of most of the beneficiaries of these trusts.

Brokers and dealers

Stockbrokers play a role of considerable importance in the holding of stocks. Most people make stock transactions through a broker and, hence, the brokerage house enjoys a unique position as the "middle man." While certain firms are closely connected to one or more of the major banks, many of the very large firms are independent. One of the biggest, Merrill Lynch, Pierce, Fenner and Smith, recruits new business in somewhat the same spirit as vacuum cleaner salesmen. Merrill Lynch handles a very large number of small accounts. In terms of the average holding registered in the name of a broker, Table I shows that the average shareholding is only about two-thirds that of the average nominee. Table IV underscores the importance of the holdings of brokers and dealers in certain specific corporations. Of great interest is the better than 41 per cent of the stock of International Telephone and Telegraph registered in the names of only 296 brokers and dealers.

It must also be realized that since brokers are middle men, they carry the bulk of the active *trading accounts* (accounts which attempt to play the market and "make a killing"). Thus, in terms of long range interest in a given corporation, the holdings of brokers and dealers obviously rank below the nominees in overall importance.

Institutions and others

In this catchall category we find the holdings of the foundations, life insurance companies, investment companies, college and university endowments, mutual savings banks, and corporations. Unfortunately, the NYSE survey does not give a detailed breakdown of the relative importance of the various types of institutional investors. But it is clear that in terms of the size of average stockholding, they rank in importance on a par with the brokers and dealers. A more detailed consideration of these investors will be postponed to a later point.

Now that we have gained some idea of the relative importance of various classes of shareholders, we move to the pattern of stock ownership at the present time. We turn first to a discussion of the number and characteristics of shareowners.

Number and characteristics of shareowners

At the end of 1959 there were roughly 13.5 million individual shareowners in the United States. This compares with about 1.5 million shareowners in 1900.[17] The bulk of the rapid increase in the number of shareowners occurred in comparatively recent times. In 1952 only 6.5 million persons owned stock, while in 1937 perhaps 5 million individuals held shares.[18] Of greater interest than the number of owners is the pattern of ownership among income classes. In particular, we are concerned with the existence or absence of concentration of ownership. Table

V shows the distribution of ownership of common stocks as of the end of 1959. As noted earlier, about one-fifth of the shareowning families control nearly one-half of the stock owned directly by individuals.

Table V: Concentration of direct common stock ownership by income income class: 1959

Income class	Per cent of population in this class	Per cent in each class owning stock	Share in total value
Under $5,000	47	6	10
$5,000 - $9,999	39	16	26
$10,000 - $14,999	10	36	22
$15,000 and over	4	55	42
Total	100	14	100

Source: *1960 Survey of Consumer Finances*, Survey Research Center, Institute for Social Research, University of Michigan, Ann Arbor, 1961, p. 101, table 6-2.

In spite of the fact that more and more families own stock, there is overwhelming evidence to indicate that there has been little change in the historical pattern of marked concentration of ownership of stocks. As indicated in Table VI, the wealthiest one per cent of the population has maintained a tight grip on roughly two-thirds of outstanding beneficially held corporate securities.

On its face, Table VI appears to contradict the results shown in Table V. However, these results refer to different years and, in addition, use different measures--wealth vs. income. The reader should be cautioned that wealth and income are not interchangeable. Further, Table V uses data obtained from interviews and probably represents an understatement of the case.

Table VI: Percentage of corporate stock held by wealthiest one per cent of adults: selected years

Year	1922	1929	1939	1945	1949	1953
Amount	61.5	65.6	69.0	61.7	64.9	76.0

Note: Represented is fraction of stock beneficially owned by individuals based on market value.

Source: *Changes in the Share of Wealth Held by Top Wealth Holders, 1922-1956*, Robert J. Lampman, Occasional Paper 71, National Bureau of Economic Research, Inc., New York, 1960, p. 26, (Note that Lampman warns that these figures are very rough and should be used with caution.)

These facts seem to present us with a dilemma. If, on the one hand, stock ownership by families has expanded rapidly, and on the other hand, the very wealthy have maintained their position as regards the fraction of stock owned, hasn't stock ownership actually become more and more concentrated? A careful examination shows that this is not the case. Even though a fixed *percentage* of the total population may have actually increased their ownership of this vital asset, it is clear that the *number of persons* classified among the wealthiest one per cent has also increased at the same rate as the growth of the population. That is, while the top one per cent as a group has increased its concentration, its individual members have not necessarily done so.

Further, there is abundant evidence to show that more of the wealthy own stock than ever before. This last point deserves further amplification. One group of stockholders enjoying an especially rapid expansion of ownership has been the corporate executives or "top management." An extraordinarily well paid group—median income of 1,674 top executives of the 834 largest corporations is $73,584 [19]—these men have reached the top of the business world. Their major worry, of course, is taxation and the methods of avoidance. The general public is familiar with the fat expense account, but not as many are aware of the favorable stock deals now offered to most executives. This is the device of the stock option whereby an executive is offered the "option" of purchasing company shares at a pegged price, usually well below the market value. A favorable tax ruling in the late 1940's made the stock option gambit most lucrative and desirable. Today most major companies issue thousands of shares of stock yearly to officers of their organizations.

As an example of the gain to the buyer, consider the case of Air Reduction Co. During 1959 various officers exercised options on 22,643 shares at an aggregate option price of $704,627.[20] In December 31, 1959, the market price of Air Reduction Co. stock was $84 per share, so that the market value of the stock purchased by the Airco officers was $1,903,012. The rate of return to the executives in question was better than 150 per cent *computed annually*.

One effect of such deals has been the expansion of stock ownership among major executives. Back in 1939 only seven of the officers, excluding directors, of U.S. Steel Corp. owned common stock in their company. The aggregate holding of these seven was 3,660 shares, or 0.042 per cent of the outstanding common stock.[21] At the end of 1959, forty-eight major officers held 207,504 shares.[22] Similarly, in the giant Westinghouse Electric Corp., only three non-director officers held stock in 1939 (a total of 31 shares or 0.001 per cent of the total outstanding common stock) while in 1959 we find that thirty-five major officers held shares.[23] This pattern holds for many thousands of U.S. corporations in greater or lesser degree. The average holding of such officers is clearly moderate in size, although much larger than the typical holding of an individual.

Another group enjoying a rapid expansion of ownership has been the "professionals." Doctors, lawyers, engineers, and a whole host of others have enjoyed the fruits of stock ownership in increasing numbers. In fact, proportionately more families in which the family head is a professional own shares directly than in any other classification.[24] Only in the classification "managerial" do we find larger holdings on the average. Thus, while professionals tend to be stockholders, their holdings, on the average, are smaller than those of the managerial class. But of course the professionals do not enjoy the benefits of stock option plans.

Yet another aspect of this changing pattern is illustrated in Table VII, which shows the distribution of dividend income as revealed on income tax returns for the years 1928 and 1958. It is important to realize that dividend income from *all* sources is included in this tabulation, whether from trusts, holding companies, or direct holdings. It is clear that beneficial ownership of stock as exhibited in this table shows evidence of spreading to more of the moderate stockholders. On the other

Table VII: Distribution of dividend income by size of dividend income: 1928 and 1958 (for large stockholders only)

Size of dividend income	Number		Dividends received	
	1928	1958	1928	1958
$5,000 - $10,000	70,513	172,887	493,457	1,216,728
$10,000 - $25,000	51,047	107,520	781,571	1,631,807
$25,000 - $50,000	17,510	30,207	603,569	952,890
$50,000 - $100,000	7,574	11,822	519,509	829,517
$100,000 or more	4,187	5,070	1,082,941	1,118,998
	150,831	327,506	3,481,047	5,749,940

Note: Number refers to number of tax returns of individuals reporting dividend income in the indicated size classification. Amount received in thousand dollars.

Sources: 1928 figures: *Statistics of Income for 1928*, U.S. Treasury Dept., Bureau of Internal Revenue, Washington, D.C., p. 13. 1958 figures: Based on *Statistics of Income, 1958: Individual Income Tax Returns*, U.S. Treasury Department, Internal Revenue Service, Washington, D.C., 1960, pp. 29, 44 (See Appendix I for a brief description of the computational method used.)

hand, one must take into account the fact that a dividend income of $5,000 represents property worth at least $100,000—certainly a sizable shareholding. The number of returns showing dividend income between $5,000 and $10,000 more than doubled in the thirty-one year period, while those showing dividend incomes greater than $100,000 increased by only one-quarter in the same period. More important, those with smaller dividend incomes (between $5,000 and $25,000) received a larger fraction of total dividends received in 1958 than in 1928 (49.5 per cent in 1958 and 36.6 per cent in 1928). At the other extreme, those with dividend incomes greater than $100,000 received about 31 per cent of dividends paid to these stockholders in 1928, but only 19.5 per cent in 1958. By any measure, one finds that there has been some broadening of ownership by the moderately rich.

At the lower end of the income spectrum there is a rapid decline in the number of families owning stock. In particular, some 94 per cent of families with incomes below $3,000 own no stock whatsoever; about 92 per cent of families with incomes between $3,000 and $4,999 do not own stocks; 84 per cent of families with incomes between $7,500 and $9,999 do not own stock. Further, the total market value of holdings of these low income shareowners is about 36 per cent of the total value of publicly traded common stocks held by individuals, even though more than 60 per cent of all shareowning families are in this classification.[25] Thus, while there has certainly been some expansion of stock ownership by families with small incomes, the bulk of low income families do not hold stock and those that do hold stock have rather small holdings.

In summary, we find that the number of shareowners has expanded rather rapidly but that the distribution of ownership remains concentrated. Further, those enjoying a larger share of ownership, at least to a significant degree, are those among top management of the great corporate enterprises and the ever-growing middle class.

Financial intermediaries and institutions

The ownership of common stocks by various financial intermediaries and institutions and corporations is summarized in Table VIII. The holdings of these financial intermediaries amounts to roughly one-third of outstanding common stock publicly traded (excluding foundations and colleges and universities). The most important of all of the financial intermediaries is revealed to be the trust institution whose holdings were discussed in earlier sections. The various insurance companies have relatively smaller holdings while the financial intermediaries not under trust company administration rank second only to the trust institutions (this includes non-bank administered trusts, personal holding companies, and investment trusts).

Table VIII: Stockholdings of principal financial intermediaries and institutions: 1958

Classification of owner	Common stock holdings in billions at market value	Source
Trust Institutions	$66.2	a
Personal trust accounts	30.7	b
Trusteed corporate pension funds	9.5	c
Common trust funds	1.3	d
Estates and others	24.7	e
Fire and casualty insurance companies	6.8	f
Life insurance companies	2.5	g
Investment trusts	13.2	h
Colleges and universities	2.0	i
Personal holding companies	3.1	j
Non-bank administered trusts	13.4	k
Foundations	1.2	m
Sub-total	108.4	
Non-financial corporations	37.2	n
Grand total	145.6	
All holders	$363.0	p

Sources: a) Based on 1957 figures quoted in *Trusts and Estates,* Vol. 98, No. 2, February, 1959. We have simply taken into account the increase in holdings of the Pension Funds and Common Trust Funds. No allowance has been made for the increase in holdings of personal trust accounts from 1957 to 1958. Thus, the figure is certainly on the small side. b) *The Trust Bulletin,* Vol. 39, No. 1, Sept. 1959, "Report of National Survey of Personal Trust Accounts," J.H. Wolfe, Table I. It is my belief that this figure is on the low side since many banks estimate the value of an account on a *book value* (cost when purchased or acquired) basis rather than on a current market value basis. c) *Securities and Exchange Commission Statistical Bulletin,* June 1960, p. 6, Table 3. d) *Federal Reserve Bulletin,* May 1959, p. 478. e) Line a less the sum of lines b, c and d. f) Compiled by the author from *Moody's Bank and Finance Manual, 1959,* Moody's Investor's Service, 99 Church St., New York. g) *Life Insurance Fact Book,* Institute of Life Insurance, p. 79. h) Author's estimate based on source cited in f (above). i) Author's estimate based on source cited in a (above). j) Computed by author from data in *Statistics of Income: Corporation Income Tax Returns: 1958-59,* U.S. Treasury Department, Internal Revenue Service, Washington, D.C., 1961, pp. 175-176. k) Computed by author from data in *Statistics of Income: Fiduciary, Gift and Estate Tax Returns,* U.S. Treasury Department, Internal Revenue Service, Washington, D.C., 1961, p. 23. m) Same as a (above). Since domestic foundations have total assets of roughly $11.5 billion, mostly in stocks, (see *New York*

Times. July 11, 1960, p. M1) it is clear that the estimate shown is much too small. However, the source cited has been used as a reference for other entries above and is used for the sake of consistency. See the discussion below. n) Computed by the author from the source cited in j (above). p) Computed by the author from *U.S. Securities and Exchange Commission*, 25th Annual Report, Washington, 1960, pp. 63, 67.

Comment: The figures cited above do not include the holdings of mutual savings banks, commercial bank direct holdings, holdings of brokers and dealers, holdings of law firms, and holdings of partnerships. In addition, the figure shown for personal trust accounts is believed to be on the liw side, as is the figure for foundations. Furthermore, those figures based on dividends received do not take into account shares held but not paying dividends. Clearly, the above estimate is well on the low side and, by my estimate is actually fifteen to twenty billion dollars larger than the figure shown. That is, the holdings of all but non-financial corporations should total in the neighborhood of $125 billion while the total holdings of non-financial corporations should be perhaps one or two billion dollars larger. Thus, the grand total should be in the neighborhood of $165 billion.

The investment trusts or investment companies are often referred to as mutual funds because they pool the resources of many individuals for common investment. These companies actively seek small accounts and have enjoyed a rapid growth in the recent boom period of the stock market. In terms of number of stockholders, the investment companies rank at the top of the list with such giants as General Electric and General Motors. It is presumed that each investor reaps the benefits of a balanced portfolio without having to pay the large outlay needed to obtain shares in perhaps a hundred different corporations. However, the service and sales charges are quite steep if one invests small sums. For the investment of large sums the charges are relatively smaller. In fact, a recent tax ruling permitted the exchange of investment company shares in return for shares of another corporation. Thus, the privilege accumulates to those owning property.

The shareholdings of certain insurance companies are limited by law to less than two per cent of the outstanding stock of the corporation in which the investment is made. However, most insurance companies have only recently begun to expand their investment activities in the common stock field. In fact, several of the larger insurance companies have announced their intention to buy the legal limit of stocks allowed. As we shall see, insurance companies number among the largest domestic industrial corporations. The full importance of such holdings has not been generally recognized by most students of share ownership.

While we have discussed the role of the trust institutions at an earlier point, it is fruitful to return for a few words concerning the trusteed corporate pension funds. These pension funds are currently the largest single net purchasers of stock on the open market. The rapid growth of these funds has been the subject of much comment by economists recently.[26] In the five year period from 1955 to 1959, the ownership of common stocks by trusteed pension funds increased from $4.8 billion to $12.3 billion.[27] For our purposes, it is important to realize that this is a field dominated by a relatively small number of financial institutions —again the handful of New York banks.

In conclusion, then, we find that the major financial intermediaries account directly for about one-third of publicly traded common stock and of this total, roughly half is held by the major trust institutions, a field dominated by the major New York banks. One begins to appreciate the term "Wall Street" as a center of financial power.

Part II: control

While we have focused much of our attention on the general features of stock ownership, we have yet to address ourselves to the problem of greatest interest in this investigation. Namely, who in particular is in a position to exercise leadership in a giant corporation and how do such persons derive their power? In oversimplified terms, who *controls* the giant enterprise? Is it a ruthless robber baron still hanging around from the 19th century? Or is it a well bred and well mannered executive whose sound judgement is based on a thorough technical familiarity with his organization and products?

Before we can tackle these questions we need an understanding of the term "control." By control we mean the power, whether exercised or not, to make the major decisions demanded by the mere existence of the enterprise. More than this, we mean the power to direct the affairs of the corporation. It is most important to realize that the normal day-to-day decision-making involved in operating the firm is not what we are talking about. We refer to the fundamental decisions, including the selection of management. Our language suggests a single individual as a "controller" in a given corporation. Yet we must admit the possibility that several individuals might jointly share such a position of power.

Methods of determining control

On the basis of our earlier discussion we can conclude that there are several possible measures for determining the individual or group enjoying a controlling position in a corporation. We need to know who are the directors and officers of the corporations of interest. We also need to know the extent of their stockholdings as well as the identity of the largest stockholders; and, finally, we need some information as to who, among all the persons referred to, makes the kind of decisions in which we are interested. Of the four pieces of data required, only the first two can be obtained from publicly accessible sources. Data on the largest stockholders is all too often scanty or badly out of date. Finally, systematic information on just who makes what decisions in specific corporations is available in only a few cases.

Other writers have used additional data also. Most prominently one finds the use of information on the identity of the stock transfer agent and the stock registrar in a corporation of interest Another type of data used is the identity of the banking houses which head bond issues in securing new capital for a given corporation. Such facts, while certainly of interest, are generally conceded to be of secondary importance as compared with data on stock ownership. Therefore, we shall turn our primary attention to the identification of officers, directors, and large stockholders.

But why do we use the somewhat vague term "large stockholders?" Shouldn't we seek the identity of those stockholders who command a clear majority of the stock, even though they are, by definition, in the category "large?" Shown in Table IX is the distribution of shareholdings by size of shareholding, measured in terms of number of shares held as of late 1951. More recent data is not available. The table indicates the distribution in some 1,411 common stock issues of manufacturing corporations. Included are the common stock issues of many small as well as many very large corporations. Thus, we indicate numerical averages even though this is hardly representative of a specific corporation of interest. We find that, on the average, only 118 shareholdings account for about 57 per cent of the outstanding stock. These 118 holdings average nearly 5,000 shares each and represent only a little more than 2 per cent of all shareholdings. The heavy imbalance noted in Part I of the study is again evident: a small minority of holdings account for the bulk of corporate shares.

Table IX: Distribution of shareholdings by size of holding in manufacturing corporations

In the total survey:			
Size of holding	**Number of holdings**	**Number of shares**	**Average holding**
1 - 99 shares	4,742,366	147,294	31.1
100 - 999 shares	2,475,497	481,453	194.5
Above 1,000 shares	166,150	825,572	4,968.8
Total	7,384,013	1,454,319	197.1
In the average corporation:			
Size of holding	**Number of holdings**	**Average number of shares**	**Per cent of stock held**
1 - 99 shares	3,360	31.1	10.1
100 - 999 shares	1,755	194.5	33.1
Above 1,000 shares	118	4,968.8	56.8
Total	5,233	197.1	100.0

Note: Shown in the first part of this table is a survey of shareholdings in 1,411 common stock issues of manufacturing corporations. Number of shares held in thousands; number of shareholdings and average holding in each size class in units. In the second part of the table we have attempted to indicate how this pattern might look in an average corporation. Thus we have formed averages by dividing by 1,411 (the number of issues covered) to find an average of 5,233 shareholdings in our mythical average corporation. Also shown is the fraction of stock represented by holdings in each size class. For example, shareholdings of 1,000 shares or more account for nearly 57% of the outstanding stock in the sample corporations.

Source: L.H. Kimmel, *Share Ownership in the United States*, The Brookings Institution, Washington, D.C., 1952. Figures are for the end of 1951.

We would like, then, to obtain lists, on a corporation by corporation basis, of, say, the largest 150 shareholdings. Unfortunately, no modern corporation will part with such a list unless required to do so by law. However, in the late 1930's a government agency, the Temporary National Economic Committee, did collect data of this sort. The TNEC compiled lists of the 20 largest shareholdings in each of the 200 largest non-financial corporations in the land. In addition, the TNEC compiled a list of the beneficial holdings of officers and directors of these corporations. In sum, this volume of material represents the most comprehensive and systematic collection of data of this type currently available. Unfortunately, the data is now more than 20 years out of date. Substantial changes have occurred rendering much of the material useless. For example, many of the persons listed have disposed of all or a portion of their holdings while others have died passing only a fraction of their holdings on to descendents. On the other hand, many individuals have actually increased their holdings over the years. Therefore, TNEC data must be avoided or at least used with considerable caution.

Even though lists of the largest stockholdings in specific corporations are not available, it is possible to collect certain facts. In the case of corporations with securities listed on stock exchanges one can collect data on the holdings of officers and directors. In addition, one can collect data on the holdings of insurance companies and investment companies. Finally, by scouring the financial pages of many periodicals one can determine some information not officially available. While the systematic information we would like to have cannot be obtained at present, the situation is far from hopeless.

Holdings of directors and "community of interest"

As a first step in trying to obtain a currently valid picture of control we have selected the 250 largest industrial corporations for intensive study. The list of the 250 largest, as ranked by total assets, appeared in the July, 1960, issue of *Fortune*. In addition, data on securities owned was requested from 16 of the largest insurance companies in the United States. Only Metropolitan Life Insurance Co. refused to supply the requested data stating that it is not the policy of Metropolitan to reveal lists of securities owned. Data on the holdings of the 18 largest investment companies in the corporations of interest was also collected. The method of tabulating the holdings of directors is fully explained in Appendix II of this article. It was found that useable data could be obtained in the case of 232 of the corporations studied.

Table X: Distribution of directors' holdings by size of holding in each of 232 large industrial corporations

	Number of corps. in which directors' holdings are in the indicated size class					
Size class	Total	I	II	III	IV	V
0.00 - 0.99	68	27	22	5	7	7
1.00 - 1.99	45	8	9	13	6	9
2.00 - 2.99	14	1	5	2	1	5
3.00 - 3.99	17	3	1	5	6	2
4.00 - 4.99	12	3	2	5	2	0
5.00 - 9.99	39	3	3	10	14	9
Above 10.00	37	3	5	8	7	14
Total	232	48	47	48	43	46
Median holding	2.20%	0.72%	1.12%	3.66%	4.73%	4.36%

Note: Size class refers to the total per cent of stock held by all directors in a corporation of interest. Thus, in 37 corporations the aggregate holding of directors exceeded 10 per cent. The roman numerals I, etc. refer to a ranking of the 250 largest industrial corporations by size of total assets. We have arbitrarily divided these 250 corporations into five groups according to size of total assets. For example, in quintile I we include the 50 largest corporations among the 250 chosen for study. Of these 50, data was available for 48. And so on for the other four quintiles. For purposes of tabulation we have included among holdings all shares listed in the indicated sources even though the director may not benefit from the ownership of all such shares. This point is explained in Appendix II. A special note is required in the case of Ford Motor Co. In this company directors held only 2.30 per cent of the common stock. However, three members of the Ford family held 44.8 per cent of class B common stock, which, as a class, has 40 per cent of the voting power. Based on the number of shares of each class of common stock outstanding we have assigned 1.7475 vote per class B share and 1 vote per common share. Using this technique, directors of Ford hold 19.01 per cent of the voting power.

Shares outstanding, *Moody's Industrial Manual, 1960.*

Medians computed by the author from the original arrays.

Sources: See table of "Large stockholdings and directors holdings in major industrial corporations" and Appendix II for the holdings of directors and the sources used.

A considerably compressed view of the results is shown in Table X which presents the distribution of the aggregate holdings of directors in the 232 sample corporations expressed as a fraction of the total shares outstanding. The median holding of directors is 2.20 per cent of the outstanding stock. In other words in half the corporations studied the aggregate directors holding is greater than 2.20 per cent of the outstanding stock. Also clearly observed is the well known fact that directors tend to hold proportionately less stock in the very largest corporations than in the moderate size corporations. Thus, the median holding in quintile I is 0.72 per cent and in quintile V is 4.36 per cent. Even though the median directors holding is small, in no less than 76 corporations the directors alone hold more than 5.00 per cent of the outstanding stock. Furthermore, we must realize that the directors holding, taken alone, is not a valid indicator of concentration. For example, in Tidewater Oil the directors hold only 0.16 per cent of the outstanding stock while 65.55 per cent of the stock is held by Mission Corp., Mission Development Co. and Getty Oil Co., all under the solid control of the Getty family. Also, in most cases only a fraction of a family's total holdings are actually included in the total shown for directors. As a case in point consider Firestone Tire and Rubber. Four Firestone family members are directors of the company accounting for 4.43 per cent of the outstanding stock. Yet, the total holding of the Firestone family is authoritatively put at 25 per cent of the stock. (The reader should refer to our table of large stockholdings for verification of these statements.) Similarly, in Swift and Co. we find that H.H. Swift and T.P. Swift held 1.19 per cent of the stock while a private communication to R.A. Gordon indicated that total Swift family holdings is about 7 per cent. (Again see our table.) It should be ovbious that data of this type is fully necessary when we discuss the holdings of directors.

In order to better appreciate the significance of the data we have shown in Table XI the holdings we presume are represented on the board of directors of Phelps Dodge Corp. Phelps Dodge ranks 89th on our list of 250 largest industrials placing it in the second quintile of Table X. The *direct* holdings of the 17 directors totals 85,324 shares

Table XI: Holdings represented on the board of Phelps Dodge Corporation: 1959

Officer-Directors	Holding	Reference
R.G. Page, Pres. of Phelps Dodge, D	1,400	5/52; a
C.E. Dodge, V.P. of Phelps Dodge, D	62,206	9/56; b
W.C. Lawson, V.P. of Phelps Dodge, D	500	(1/58)
H.T. Brinton, Pres. of subsidiary, D	358	10/59
Directors (former officers)		
P.G. Beckett, formerly a V.P., D	200	7/50
C.R. Kuzell, formerly a V.P., D	300	6/57
Non-officer Directors		
P.L. Douglas (V.P., Otis Elevator), D	100	4/57
W.S. Gray (Chmn., The Hanover Bank), D	200	12/43
Continental Insurance Co. (director)	107,000	c
R.L. Ireland (Off., Consolidation Coal), D	0	(2/53)
M.A. Hanna Co. (director)	80,000	d
K.L. Isaacs, D	200	2/49
Mass. Investors Trust (vice-chmn.)	250,000	e
T.S. Lamont (V.-Chmn., Morgan-Guaranty), D	4,356	5/57
W.D. Manice (Dir., Southern Pacific), D	8,100	3/59
R.S. Perkins (Off., First Nat'l. City Bank), D	200	9/58
New York Life Ins. Co. (director)	25,200	f
J.C. Rea, D	2,956	12/48
Franz Schneider, D	0	(3/54)
Mutual Life Ins. Co. of N.Y. (director)	4,900	g
H.D. Smith, D.	600	4/58
Newmont Mining Co. (director)	296,238	d
A.C. Tener, D	3,448	8/49
Grand Total	848,462	
Total (directors only)	85,324	
Shares outstanding	10,142,520	

References: *Poor's Register of Directors and Officers, 1960*. Dates such as 10/59 refer to monthly report in which holding was found as described in App. II. Those in parentheses refer to unpublished reports found in Securities and Exchange Commission files. a) Also a director of the Hanover Bank; b) Also a director of the First National City Bank; c) *Annual Report, 1960;* d) *Moody's Industrial Manual, 1960;* e) *Moody's Bank and Finance Manual, 1960;* f) *Schedule of Securities, 1960;* g) *Schedule of Securities, 1960.*

Note: Of the seventeen directors listed, six (Dodge, Lamont, Manice, Rea, Smith, Tener) were directors on Sept. 30, 1939 date of the TNEC study. Rea and Dodge family holdings in excess of holdings shown above are believed to total 7.98% as shown in the TNEC study. See footnote 4.

D refers to direct holdings.

or 0.84 per cent of the outstanding stock placing it slightly below the median for corporations in this quintile. In addition, the holding is well below the median for all 232 corporations. As can be seen we have indicated holdings of several companies in which the Phelps Dodge directors are prominently involved. Using publicly accessible sources we are easily able to identify the basis of representation of directors whose aggregate indirect holdings are in excess of 7.50 per cent. Furthermore, there is a strong possibility that at least another 7.98 per cent of the stock is also represented on the board. The holdings which are represented are held by three insurance companies, two investment companies, and one industrial company (which has large holdings in several major industrial corporations). In each case the representation is direct in that a single man is both a director of Phelps Dodge and of the company holding the shares. It is less obvious that other stockholdings are indirectly represented, i.e., shares held by some insurance companies are also actually represented but in this case the holding company and Phelps Dodge do not have directors in common. For example, the Insurance Co. of North America holds 20,000 shares and is not directly represented. Yet, Morgan Guaranty Trust Co. shares a director with Insurance Co. of North America and does have a representative on the Phelps Dodge board.[28] This kind of "indirect representation" is actually quite extensive in the large corporations and certainly reveals the community of interest concept to be of central importance in understanding the control of large corporations. While this discussion of Phelps Dodge Corp. is hardly exhaustive, it is evident that a full understanding of stock ownership in a given corporation demands that we identify the holdings of various insurance companies, investment companies, and other large holders as well as the holdings of directors.

The holding necessary for control

Let us now turn to the problem of just how much stock is required to control a corporation. Berle and Means assert that control by a minority interest is obtained only when 15 per cent of the stock (or more) is held by the group in question[29] Yet, financial analysts and observers, perhaps closer to the problem than the academic community, assert that a controlling interest can actually be obtained with a much smaller interest. For example, we find the comment about the Prince family holding in Armour and Co.:

"*In the Prince trust today there are still 320,900 shares out of 5,158,305 outstanding,* ample for control in a situation where the rest of the stock is well dispersed."[30]

Thus, in the case of Armour and Co., a holding of a little better than 6 per cent is viewed by responsible observers as being ample for control. And this situation is stated to obtain precisely when most of the holdings are small which Table X demonstrated was the case in most manufacturing corporations with publicly held stock. It should also be pointed out that the initiative for making decisions in Armour and Co. rests squarely with W.W. Prince, currently scion of the Prince family fortune. Can we regard, therefore, a holding of 6 per cent as the minimum necessary for control? Hardly, for this conclusion may only be valid in the case of Armour and Co. and, on the other hand, the Prince family may need only a portion of this 6 per cent holding to retain control.

At this point it is useful to consider a concept mentioned in the discussion of Phelps Dodge Corp., namely the idea of "community of interest." As we have seen many different holdings are often represented on the board of directors of a given corporation. Representation, whether direct or indirect, is obviously accorded to groups whose ownership position demands some attention. In discussing the fraction of stock needed for control one financial writer states: "... control on a very slim margin can be held *through friendship with large stockholders outside the holding company group*," [31] confirming the conclusion reached in our examination of Phelps Dodge Corp. As C. Wright Mills' brilliant work pointed out, we must think of those in a power position as part of a general framework of interdependent interests: what he prefers to call an elite. We shall see in Part III that interlocking directorates among the various corporations studied form an extraordinarily complex network, the full tabulation of which would fill the pages of a large volume. It seems obvious that the community of interest concept provides the key to understanding how a compact minority may enjoy a commanding position in a corporation with thousands of shareholdings. It should be noted in this context that the median holding of the twenty largest owners of record as a group, in the 92 industrial corporations studied by the TNEC and included in our study, was 31.86 per cent of the outstanding common stock.[32]

One final bit of evidence regarding the fraction of stock needed for control should also be mentioned. In discussing the large holdings of the trust departments of the major banks, through the nominee system, the financial writer A.L. Kraus states:

> "*At the same time the larger an institutional investor becomes the greater risk it runs that it will assume a controlling position in individual companies...To avoid such a situation* some banks now place a limitation on their holdings of a single company's shares at 5 per cent of the total outstanding."[33]

Implicit in this statement is the fact that a holding of five per cent or more may give a *single interest* working control irrespective of other interests in the large corporation in question (providing, of course, that the 5 per cent position is the largest single interest). Naturally, we do not contend that the 5 per cent figure is in any sense the "magic number." The fraction actually necessary in a specific corporation may well be larger or smaller depending on circumstances. Nonetheless, the figure does provide a useful yardstick in our study.

The theory of management control

Let us now examine another, wholly different, theory of control: the Berle theory of management control. In essence this theory rests on the fact that most large corporations actually have many thousands of shareholdings representing ownership. Because their holdings are tiny (refer to Table IX), the smaller stockholders rarely attempt to seek representation on the board of directors of a large corporation. Indeed, it would require the cooperation of many thousands of such small owners to obtain a sizable "collective vote" in the selection of directors. Furthermore, the small sums represented in these investments make it unlikely that the owners will spend the money and the time to attend the annual shareowners meeting. For example, we find that only 125 stockholders attended the March 16, 1960 annual meeting of International Harvester Co.[34] International Harvester had at the end of 1959 about 102,000 shareholdings of record.[35] An article in a leading business periodical bemoans such attendence records and cites further examples:

> *"The 1960 figures for some other leading annual meetings were: General Electric, 2,114 stockholders present out of 417,053; General Motors, just over 3,000 out of 781,970; RCA, 1,600 out of 164,000; Standard Oil of New Jersey, some 4,500 out of 607,627. There were many more annual meetings at which scarcely any stockholders turned out at all."*[36]

Therefore, the mass of small stockholders who do not attend the annual meetings have to submit their votes to a proxy committee if they wish to have their shares voted. And—this is the key point—the proxy committee, in almost all cases, is selected by management (by which we mean the executives of the corporation in question). Since the proxy committee may vote the shares as it sees fit, Berle suggests that this represents a considerable concentration of power in the hands of management. Now, most officers of the major corporations do not hold much stock (in a relative sense) and, thus, if management wishes to stay in power, may do so by merely selecting directors through the proxy machinery who will heed their wishes. Therefore, in Berle's view, ownership has been effectively separated from control. Tending to confirm Berle's view is the fact, as we have noted, that in many corporations the personal holdings of the directors are quite small (Table X showed that the median holding of directors was only 2.20 per cent). In conclusion, then, Berle describes a mechanism which places power not in the hands of the directors, but in the hands of management alone. Because this view is widely accepted in academic circles we shall consider it carefully.

To bolster his position, Berle's initial work in this field classified 200 corporations as to the character of control. Unfortunately, Berle did not have the useful TNEC data at his disposal and relied heavily on sources then publicly accessible. In fact, Berle's work was completed before it was possible to learn the precise holdings of even the directors of the corporations studied. Therefore, it is not surprising to find that Berle classifies corporations as under management control whenever his sources did not supply information to the contrary. For example, Firestone Tire and Rubber was classified as under management control though, as we have noted, the Firestone family even today holds 25 per cent of the stock. More important, Berle failed to recognize the fact, as we have noted, that many directors only *represent* large holdings (recall the case of Phelps Dodge Corp.). Therefore the TNEC data helped to overcome the failures of Berle's work. It is our opinion that this issue can only be settled today if lists of, say, the largest 150 shareholdings in each corporation of interest became available to the public. Clearly, one must regard the theory of management control with some suspicion until all the evidence is available. However, we do find some cases in which the management appears to enjoy a dominant position. For example, G.W. Romney is generally conceded to be in command of American Motors Corp. and, incidentally, may well emerge as one of the dominant stockholders in that company by virtue of lucrative stock options.

A final word on the theory of management control. One of the most celebrated examples of this type of control is the case of Chrysler Corp. in which the directors hold only 0.47 per cent of the stock. L.L. Colbert is usually cited as the management representative who dominates the Chrysler Corp. pyramid of power. Yet recent events have shattered this illusory view. Following conflict of interest scandals in the company W.C. Newberg, Chrysler president, was unceremoniously dumped and replaced by a new man. But, in addition, Colbert himself, though chairman of the board of directors, was later removed. Outside interests named G.H. Love, of M.A. Hanna Co. and Consolidation Coal, as board chairman. We see that *outside directors*, representing a variety of interests, easily unseated the men supposedly maintaining power through the mechanism of management control. The basis of power of these interests is not, all too unfortunately, well known.

The tabulation of large holdings

Now that we have examined the more important formal theories of control in some detail it is appropriate to discuss our data. At the outset it must be stated that our list of large stockholdings relies completely on publicly accessible sources and, therefore, is somewhat incomplete. Moreover, we have listed large stockholdings even when those interests are not directly represented on the board of directors. This is done in the spirit of illustrating the large position of some of the institutional investors in the corporations under study. Also, it was not possible to find the holdings of 73 directors of the 3,190 sought. This was because no data was on file in the SEC office for these directorships. It is likely that reports either have not been filed or are being used by members of that agency and are not available. In any case, every effort to secure these missing reports has been to no avail. The absence of these reports, however, does not significantly affect our tabulation. The grounds for this assertion lies in the fact that most of these directors are officers of the corporations of interest and, in general, we find that most officer-directors have rather small relative holdings. We believe that the reader will agree that the absence of this data does not justify withholding the data we have collected. In any case, our list of director's holdings is therefore an underestimate in a number of corporations.

Another technical point deserves some mention. A number of the corporations studied have preferred stock with regular voting privileges. Data on holdings of these preferred shares has been collected in the same way as data on common stockholdings. But space does not permit the publication of this data at present time. Equally important from our point of view is the fact that even in such cases the preferred stock usually represents only a small fraction of voting power (almost invariably less than 5 per cent of the overall voting power). But in some cases the holdings of voting preferred stock are quite important. This is because voting preferred stock enjoys a privileged position often with six or eight votes per share as contrasted with the one vote per share allotted to common stock. A case in point serves to illustrate. New York Life Insurance Co. holds 99,650 shares of American Can Co., 7 per cent cumulative preferred stock with each share enjoying six votes. In addition, New York Life holds 67,400 common shares of American Can.[37] The total voting power represented is 665,300 votes or 2.60 per cent of the overall number of votes. While this example represents a case of rather extreme concentration as compared with most cases, it is clear that a refined treatment must take such cases into account.

An examination of our tabulation of holdings shows that many wealthy individuals are active on the boards of a number of the corporations studied. Furthermore, it is apparent that considerable wealth is concentrated in the hands of a few of the propertied rich. One of the most striking cases is that of Richard K. Mellon whose extensive holdings in the five corporations of the sample in which he is a director are listed below.

Holdings of Richard K. Mellon as revealed in five major corporations

Company	Shares held	Market value
Aluminum Co. of America	1,587,476	$169,066,194
General Motors Corp.	240,000	13,080,000
Gulf Oil Corp.	6,362,319	233,815,223
Koppers Co.	115,732	5,265,806
Pittsburgh Plate Glass	108,500	8,639,312
		$429,866,535

Market value based on closing price per share as of Dec. 31, 1959. As breathtaking as this great wealth is we must realize that additional holdings in corporations in which he is not a director have not been taken into account. Nor for that matter have his holdings in several corporations not studied. Certainly, Mr. Mellon's vast wealth, all inherited, reveals that the very rich have not disappeared from the American scene.

Perhaps the most obvious revelation contained in our table of large holdings is the fact that the propertied rich control a rather large number of corporations through extensive stockholdings. The Mellon family, the Dorrance family, the Thomson family, du Ponts and Woodruffs, Cannons and Cones, Houghtons and Deeres, Dows and Firestones, Motts and Pratts, Heinzes and O'Neils, Phipps' and Watsons, Blocks and Kaisers, Reynolds' and Meads, Ordways and Rockefellers, and a whole host of others represent concentrations of wealth and power which are, to say the least, awe-inspiring. That the oridinary small stockholder shares in a "people's capitalism" is a notion that borders on absurdity in the face of such facts. One can not but wonder what a full scale tabulation of large holdings, as we have proposed in suggesting the compilation of the 150 largest owners in each corporation, would reveal. In addition, the tabulation proposed would certainly allow an objective evaluation of the currently accepted theory of "management control" as opposed to our hypothesis of control within the framework of the concept of community of interest.

The exercise of control

With our data in mind, we turn, finally, to a question of considerable importance, namely, what are the fruits of control? C. Wright Mills has presented a concise evaluation of one aspect of the answer to this question in his theory of "accumulation of advantage." The privileges which accumulate to those in a position of power, including liberal expense accounts, profitable stock options, tax advantages to those who own property (as contrasted with the tax position of those not owning property), and the like are obvious advantages accruing to the "elite." But of equal importance are those business deals, often extremely lucrative, open only to those enjoying a measure of control in a corporation. As an example of some interest, there is the case of Carroll M. Shanks, now the deposed president of Prudential Life. Mr. Shanks is also a director of Georgia-Pacific Corp., an important company in the lumber business. While still president of Prudential, Mr. Shanks engineered a deal involving Georgia-Pacific which, had it not come to light, would have resulted in a most lucrative personal return. It is somewhat amusing that the unfavorable publicity directed against Mr. Shanks in this particular deal resulted directly in his resignation from Prudential. Briefly, the transaction was the following: Mr. Shanks put up $100,000 of his own money and borrowed $3,900,000 toward the purchase price of Timber Conservation Co. The remaining $4,400,000 was advanced by Georgia-Pacific in which, as we have noted, Mr. Shanks was a director and in which Prudential holds 89,107 shares or 1.64 per cent of the stock. While the Prudential holding certainly does not represent control, under the community of interest concept we must view this holding as significant and as representing a measure of influence. Of great interest is the fact that Georgia-Pacific purchased the Shanks interest in Timber Conservation Co. the very day of the initial purchase and, in return, gave Mr. Shanks a cutting contract. Reportedly, the transaction would have resulted in a tax saving of $400,000 to Mr. Shanks yielding a full return on his investment plus a handsome profit.[38] Clearly, the position of Prudential in Georgia-Pacific had considerable influence in the decision to purchase Timber Conservation Co. While the violent reaction to this transaction resulted in Mr. Shanks' demise from Prudential, as well as the necessity to dispose of the cutting contract, the advantage of an important investment position in a specific corporation is clear.

More often, control means the ability to redirect a company's policies in case the company should cease to be a profitable object of investment. As a case in point let us consider a recent event involving a corporation we have not studied. Commercial Solvents Corp. was, for many years, under the management of J.A. Woods, the firm's president. To the investor interested in Commercial Solvents it was apparent by late 1958 that the company was not flourishing under Woods' leadership. Whereupon, the Milbank family, the dominant interest took steps to replace Woods with another man. These steps merely involved informing Woods, through H.H. Helm a director of Commercial Solvents and Chairman of Chemical Bank New York Trust Co., that his term was up. Woods, underestimating the shares the Milburns represented, was reluctant to surrender without a fight. Upon learning that the Milbanks spoke for 30 per cent of the stock, representing personal holdings as well as some holdings of friends and business associates, Woods expressed some surprise and quickly resigned. Though Woods wanted to fight to retain his position, another view won the day: "... Woods was a hired hand who had been well paid. Now a group of owners simply wanted to dismiss him."[39]

It is evident that control, in this case passive until management proved to be incompetent, is often mainly concerned with the proper operation of the firm. It is for this reason that management often appears to be in a controlling position in so many of the more successful firms. Why exercise a controlling position when management is doing a good job? The fruits of a large investment are such that a threat to the investment is often the only motivation for those enjoying the dominant position to exercise leadership.

In this section of our report we have presented some of our data in an effort to underscore the hypothesis of control we think is demanded by the facts. In Part III we shall consider the holdings of directors and the identity of the individuals in greater detail with an eye to correlating the fact of extensive interlocking directorships with the findings summarized in our table of large stockholdings. In addition we shall attempt to specify precisely the controlling group in each corporation.

1 "America Embraces a Peoples Capitalism", G.K. Funston, New York Stock Exchange, Oct. 25, 1956, p. 2.

2 *The Empire of High Finance*, Victor Perlo, International Publishers, New York, 1957.

3 *The Power Elite*, C. Wright Mills, Oxford University Press, 1957.

4 *Investigation of Concentration of Economic Power*, Monograph No. 29, "The Distribution of Ownership in the 200 Largest Non-Financial Corporations", U.S. Government Printing Office, Washington, D.C., 1940.

5 *Business Leadership in the Large Corporation*, R.A. Gordon, The Brookings Institution, Washington, D.C., 1945.

6 "Economic Power and the Free Society", A.A. Berle, Jr., Fund for the Republic, December, 1957, p. 14.

7 See *1960 Survey of Consumer Finances*, Survey Research Center, Institute for Social Research, The University of Michigan, pp. 100-101. This data represents only direct personal holdings in publicly traded common stocks. Data based entirely on responses to questionnaires and is subject to reporting errors by respondents.

8 *The Development of Trust Companies in the United States*, James G. Smith, Henry Holt and Co., New York, 1928, p. 45.

9 "The Trust Companies of New York", Bankers Magazine, Vol. 4, 1854, pp. 321-5. Cited in J.G. Smith, *The Development of Trust* ..., op. cit., p. 289.

10 . Unfortunately, 1937 was the first year in which income tax data on non-taxable fiduciaries became available. Thus, we cannot make precise comparisons with earlier years.

11 *New York Times*, March 5, 1959.

12 *Official Summary of Security Transactions and Holdings*, Vol. 27, No. 5, U.S. Securities and Exchange Commission, May 1961. Note that we have taken into account stock dividends subsequent to Dec. 31, 1959 but prior to report date to give holdings as of Dec. 31, 1959.

13 Ibid, Vol. 26, Nos. 1 & 9. Corrected to give holdings as of Dec. 31, 1959.

14 *Directory of Trust Institutions of the United States and Canada*, Fiduciary Publishers, Inc., 50 E. 42nd St., New York, 1959 revised edition.

15 *Share Ownership in the United States*, The Brookings Institution, Washington, D.C., 1952, p. 49, L.A. Kimmel.

16 *The Trust Bulletin*, Vol. 39, No. 1, Sept. 1959, "Report of National Survey of Personal Trust Accounts", J.H. Wolfe, p. 5.

17 Figure for 1900 - author's estimate; Figure for 1959 - New York Stock Exchange estimate.

18 Figure for 1952 - L.A. Kimmel, *Share Ownership* ..., op. cit.; Figure for 1927 - A.A. Berle, Jr. and G.C. Means, *The Modern Corporation and Private Property*, 1932

19 *Fortune*, Nov. 1959, p. 138.

20 Annual Report, 1959.

21 TNEC, op. cit.

22 Compiled from *Official Summary* ..., op. cit., various reports.

23 TNEC, op. cit. and *Official Summary* ..., op. cit.

24 *Survey of Consumer Finances*, op. cit., p. 104. Table 6-5.

25 *Survey of Consumer Finances*, op. cit., pp. 101-102, Tables 6-1, 6-2.

26 *Pension Funds and Economic Power*, P.P. Harbrecht et al., Twentieth Century Fund, New York, 1959.

27 Securities and Exchange Commission,"Statistical Bulletin", June, 1960, p. 6.

28 Annual Reports, 1959.

29 See *The Modern Corporation and Private Property*. A.A. Berle, Jr. & G.C. Means, The Macmillan Co., New York, 1932. pp. 83-84.

30 *Fortune*. Oct. 1959, p. 122.

31 *New York Times*, Nov. 11, 1958, p. Fl.

32 See TNEC, op. cit. We have omitted from this computation such corporations as Climax Molybenum subsequently merged with American Metal Co.

33 *New York Times*, Sept. 30, 1959, p. Fl.

34 *New York Times*, March 17, 1960, p. 45.

35 See *Moody's Industrial Manual*, Moody's Investor's Service, 1960.

36 *Dun's Review and Modern Industry*, August 1960, p. 65.

37 New York Life Insurance Co., Schedule of Securities, 1960.

38 *New York Times*, Sept. 14, 1960, p. 61.

39 "How Well-Bred Investors Overthrow a Management", *Fortune*, May 1959, pp. 134 ff.

Large stockholdings and directors holdings in major industrial corporations: Part I*

Relevant stockholder	No. of shares outstanding	Per cent of shares outstanding	References
Air Reduction Co.			
Directors	32,476	0.83	
Southern Natural Gas Co.	172,600	4.41	a
Prudential Insurance Co.	54,500	1.39	b
Allegheny Ludlum Steel			
Directors	155,340	4.01	
R.M. Arnold	51,299	1.33	3/56
L.W. Hicks	54,980	1.42	2/56
W.C. Kirkpatrick (ex)	57,218	1.48	9/55
Allied Chemical Corp.			
Directors	110,385	1.17	
C.W. Nichols	86,736	0.92	1/52
Bank of New York	1,209,626	12.80	c
Aluminum Co. of America			
Directors	2,664,081	12.64	'
R.K. Mellon	1,587,476	7.54	1/52
R.A. Hunt	857,796	4.07	5/52
A.V. Davis (hon. chrmn)	936,824	4.45	3/57
Sarah M. Scaife (est.)	1,542,540	7.33	d
Paul Mellon (est.)	1,230,000	5.85	d
Ailsa M. Bruce (est.)	600,000	2.85	d
Amerada Petroleum			
Directors	98,300	1.56	0
Alfred Jacobsen	72,000	1.14	6/51
Corey and Co. (nominee)	681,912	10.80	e
Phelps Dodge Corp.	200,000	3.17	f
U.S. & Foreign Securities	160,000	2.53	g
Mass. Investors Trust	200,000	3.17	h
Continental Insurance Co.	147,100	2.33	i
American Home Products Corp.			
Directors	273,075	3.54	
A.H. Diebold	130,000	1.69	5/53
H.S. Marston	48,000	0.62	3/59
American Machine & Foundry			
Directors	318,822	4.29	
Morehead Patterson	158,120	2.13	9/59
George Arents	100,960	1.36	7/52
H.P. Patterson	22,652	0.30	(11/59)
J.P. Beaird (ex.)	54,234	0.73	11/58
American Metal Climax			
Directors	892,707	6.29	0

* See explanatory note at end of this part.

H.K. Hochschild	601,658	4.25	1/58
Walter Hochschild	122,683	0.86	11/58
Selection Trust Co., Ltd.	1,751,797	12.35	k
Phelps Dodge Corp.	712,161	5.02	f
American Sugar Refining			
Directors	169,590	9.42	0
M.J. Ossorio	152,400	8.47	1/58
F.E. Ossorio (Became director after 1960)	47,760	2.65	1/61
American Viscose			
Directors	70,352	1.37	
Allied Chemical Corp.	395,264	7.72	f
Courtaulds, Ltd. (England)	85,417	1.67	f
Armour and Co.			
Directors	235,590	4.56	
M.R. Bauer	110,000	2.13	3/59
Milton Steinbach	67,100	1.30	12/59
Prince family trust	293,370	5.69	10/58
(W.W. Prince is President of Armour and Co.)			
Ashland Oil and Refining			
Directors	483,203	7.98	
W.W. Vandeveer	117,659	1.94	2/55
F.R. Newman	82,241	1.36	4/55
R.D. Gordon	67,286	1.11	2/52
P.G. Blazer	55,952	0.92	6/59
W.G. Bechman	38,674	0.64	7/52
J.F. Breuil	35,429	0.58	7/57
Babcock and Wilcox			
Directors	110,143	1.78	
C.W. Middleton	70,528	1.14	4/55
A.G. Pratt	30,612	0.50	5/57
E.G. Bailey (ex.)	115,514	1.86	7/52
Continental Insurance Co.	152,400	2.47	i
(A.G. Pratt is listed as a director of one of the affiliates of Cont. Ins.)			
Baldwin-Lima-Hamilton			
Directors	272,538	6.42	
McClure Kelley	170,928	4.02	4/51
G.A. Rentschler	73,000	1.72	2/59
Brunswick Corp.			
Directors	575,717	7.36	
R.F. Bensinger	226,140	2.89	1/60
B.E. Bensinger	188,322	2.41	11/59
H.P. Cowen	39,429	0.50	11/59
Burlington Industries			
Directors	587,704	6.06	
J.S. Love	209,717	2.16	1/60
M.G. Lowenstein	122,728	1.27	(4/57)
H.M. Kaiser	69,425	0.72	12/59
J.L. Eastwick	207,463	2.14	11/60
(became vice-chmn. in 1960)			
Burroughs Corp.			
Directors	175,639	2.65	
G.L. Todd	91,690	1.38	1/60
H.S. Chase	67,600	1.02	7/49
Descendants of J. Boyer(est)	789,765	11.93	m
Consol. Electrodynamics	144,878	2.19	n
Campbell Soup			
Directors	140,817	1.31	
W.C. Swanson	118,932	1.11	(1/59)
Dorrance family	8,709,649	81.18	f
Cannon Mills			
Directors	190,085	18.32	
C.A. Cannon	163,155	15.72	f
W.C. Cannon	13,609	1.31	2/60
Cannon Foundation	103,140	9.93	5/60
J.I. Case			
Directors	171,448	5.99	
M.B. Rojtman	155,000	5.42	6/58
Celanese Corp.			
Directors	107,979	1.47	
A.R. Balsam	73,206	1.00	5/59
Dreyfus family and Foundation	734,471	10.01	2/56;p
Cerro de Pasco Corp.			
Directors	75,541	3.03	
R.H. Lewin	32,260	1.26	(7/59)
R.P. Koenig	22,443	0.90	1/60
Wellington Fund (Invest.Co.)	78,750	3.16	h
Champion Paper and Fiber			
Directors	315,198	7.15	
D.J. Thomson	100,000	2.27	7/58
L.C. Thomson	63,390	1.44	12/59
H.T. Randall	50,300	1.14	11/57
R.B. Robertson, Jr.	48,550	1.10	6/58
R.B. Robertson	27,650	0.63	4/59
H.W. Suter	23,808	0.54	8/58
Thomson family (total hold.)	1,763,200	40.00	q
Mass. Investors Trust	165,000	3.74	h
John Hancock Mutual Life Ins.	50,000	1.13	r
Cities Service Co.			
Directors	448,938	4.18	
W.A. Jones	260,800	2.42	7/57
Stanhope Foster	133,648	1.24	8/53
Investors Mutual (Invest.Co.)	151,808	1.41	h
Clark Equipment			
Directors	122,195	5.14	
Frank Habicht	50,911	2.48	4/58
D.H. Ross	41,000	1.72	10/58
Clark family (est.)	65,120	2.74	s
One William Street Fund	55,600	2.34	h
Cleveland Cliffs Iron Co.			
Directors	135,552	5.98	
J.H. Wade	40,650	1.79	(12/57)
George Gund	35,912	1.58	8/47
P.R. Mather	30,000	1.32	9/54
Portsmouth Corp.	388,672	17.15	8/59
S.L. Mather (ex.)	11,875	0.49	8/47
Coca Cola Co.			
Directors	150,478	3.53	
R.W. Woodruff	76,135	1.78	1/60
Winship Nunnally	22,666	0.53	12/59
Coca Cola Int'l. Corp.	1,164,016	27.27	1/60
Colgate Palmolive			
Directors	415,815	5.18	
J.K. Colgate	158,958	1.98	2/59
E.H. Little	109,260	1.36	11/59
C.S. Pearce	60,739	0.76	1/60
S.B. Colgate (ex.)	25,200	0.31	1/58
H.A. Colgate (ex.)	63,093	0.79	11/56
Combustion Engineering			
Directors	198,787	5.99	
C.M.F. Coffin	117,144	3.53	5/56
J.V. Santry	19,300	0.58	1/60
W.H. Zinn	17,500	0.53	(2/59)
United Funds, Inc.	67,700	2.04	h
Cone Mills			
Directors	807,766	23.45	
Caeser Cone	288,866	8.38	10/53
Benjamin Cone	254,433	7.38	11/51
Herman Cone, Jr.	201,356	6.11	10/58
C.N. Cone	23,175	0.67	4/59
M.H. Cone Memorial Hosp.	492,025	14.28	12/51
Consolidation Coal			
Directors	417,423	4.54	
G.H. Love	104,900	1.14	1/60
R.L. Ireland	83,700	0.91	8/59
H.E. Davenport	78,520	0.85	9/58
A.R. Matthews	59,675	0.65	10/58

G.M. Humphrey	55,000	0.60	10/58
M.A. Hanna Co.	2,310,000	25.11	1/60
Mellon family (est.)	1,299,321	14.12	t
Incorporated Investors, Inc.	121,400	1.32	h
Container Corp. of America			
Directors	360,266	3.41	
R.G. Ivey	319,500	3.03	7/58
Container Corp. Bonus Plan	487,093	4.61	u
Owens Illinois Glass Co.	180,000	1.71	f
Insurance Co. of N. America	150,000	1.42	u
United Funds, Inc.	161,500	1.53	h
Fundamental Investors	150,000	1.42	h
Investors Mutual	143,000	1.36	h
Investors Stock Fund	116,000	1.10	h
Continental Oil			
Directors	167,967	0.79	
L.F. McCollum	104,367	0.68	11/59
Newmont Mining Co.	973,440	4.61	f
Rockefeller Foundation	300,000	1.41	u
Cont. Oil Thrift Plan Trustee	268,753	1.27	u
Mass. Investors Trust	380,000	1.80	h
Corning Glass Works			
Directors	3,675,016	54.41	
A.A. Houghton, Jr.	1,930,170	28.54	5/55
Amory Houghton	1,632,730	24.18	7/58
Continental Insurance Co.	76,250	1.13	j
Crane Co.			
Directors	171,933	11.34	
T.M. Evans	163,500	10.79	1/60
Mrs.EmilyCraneChadbourne	121,000	7.99	w
E.L. Cord	47,500	3.14	x
Dan River Mills			
Directors	787,320	17.56	
F.W. Jefferson, Jr.	286,665	6.40	12/59,y
F.W. Jefferson	230,820	5.15(12/59,y)	
J.W. Abernathy	106,700	2.38	7/57
A.A. Shuford, Jr.	71,650	1.60	9/59
Moses Richter	38,270	0.85	1/58
Oliver Iselin (ex.)	27,417	0.61	2/59
Dana Corp.			
Directors	1,091,220	21.16	
C.A. Dana	1,050,000	20.34	4/55
Insurance Co. of N. Amer.	137,844	2.75	u
Deere and Co.			
Directors	75,076	1.12	
B.F. Peek	35,834	0.54	2/59
Deere family trusts	997,051	14.87	f
Affiliated Fund	200,000	2.99	h
Diamond Alkali			
Directors	297,425	10.23	
R.F. Evans	171,740	5.90	3/52
W.H. Evans	113,267	3.91	2/59
United Funds, Inc.	31,000	1.07	h
Diamond National			
Directors	699,619	15.69	
R.G. Fairburn	301,330	6.76	1/60
B.W. Martin	212,262	4.76	8/55
E.T. Gardner	95,608	2.14	10/58
E.T. Gardner, Jr.	31,064	0.70	3/59
W.H. Walters	28,067	0.63	3/60
Dow Chemical			
Directors	1,832,036	6.95	
A.B. Dow	745,380	2.94	11/54
H.H. Dow	296,266	1.12	12/57
H.D. Doan	205,643	0.78	12/57
C.J. Strosacker	201,027	0.76	9/57
Dow family (est.)	3,830,000	14.52	xx
E.I. du Pont de Nemours			
Directors	2,001,760	4.37	
William du Pont, Jr.	1,269,488	2.77	3/59
L. du Pont Copeland	197,924	0.43	3/57
Bernard Peyton	153,704	0.34	4/59
Christiana Securities Corp.	12,199,200	26.63	4/58
DelawareRealty&Invest.Co.	1,217,920	2.66	4/58
Eastern Gas and Fuel			
Directors	105,450	3.77	
Halfdan Lee	19,625	0.70	12/56
C.B. Houston	18,673	0.67	2/51
E.M. Farnsworth	18,039	0.64	7/54
Int. Utilities Corp.	71,500	2.55	1/60
Electric Auto-Lite			
Directors	24,490	1.56	
C.R. Feldmann	16,200	1.03	11/57
Mergenthaler Linotype Corp.	378,950	24.20	1/60
Firestone Tire and Rubber			
Directors	496,886	5.65	
R.C. Firestone	128,718	1.46	10/53
L.K. Firestone	101,181	1.15	8/59
R.S. Firestone	90,429	1.03	10/58
H.S. Firestone, Jr.	69,181	0.79	11/58
Harbel Corp.	979,379	11.13	7/58
(Firestone family holding co.)			
Firestone family (total)	2,198,500	25.00	f
Mass. Invest. Trust	235,000	2.67	h
Flintkote			
Directors	415,239	8.20	
G.K. McKenzie	290,142	5.73	2/59
(As voting trustee)			
Ford Motor Co.			
Directors	379,795	2.30	
Savings & Investment Program	1,269,207	7.70	5/59

Class B stock with 40% of total voting power is held by members of the Ford Family and the Edison Institute. Shares of class B stock shown below: f

Benson Ford	1,025,916	16.3	9/56
W.C. Ford	979,308	15.5	7/56
Henry Ford II	819,185	13.0	3/59
Foremost Dairies			
Directors	827,131	10.64	
P.E. Reinhold	263,571	3.39	7/56
J.C. Penney	231,377	2.98	7/59
G.D. Turnbow	208,798	2.68	12/57
Fruehauf Trailer			
Directors	314,370	4.73	
Roy Fruehauf	171,502	2.54	1/60
J.M. Robbins	50,030	0.74	8/59
Fruehauf family (total hold.)	473,000	7.00	z
Bernstein family	49,544	0.72	2/60
Fidelity Fund	148,500	2.20	h
General Mills			
Directors	342,505	4.81	
J.F. Bell	213,606	3.00	11/52
P.D. McMillan	47,493	0.67	12/58
Continental Insurance Co.	75,000	1.06	j
Television Electronics Fund	100,000	1.41	h
General Motors Corp.			
Directors	5,139,742	1.83	
C.S. Mott	2,460,000	0.88	2/53
A.P. Sloan	1,185,156	0.42	5/59
J.L. Pratt	672,324	0.24	7/52
E.I. du Pont de Nemours	63,000,000	22.42	3/55
Christiana Securities Corp.	535,500	0.19	h
Donaldson Brown (ex.)	421,431	0.15	1/57
General Precision Equipment			
Directors	108,084	9.60	
E.A. Link	39,101	3.47	2/59
G.C. Whitaker	20,881	1.85	12/59
H.G. Place	20,000	1.77	8/57
F.D. Herbert, Jr.	19,602	1.74	8/55

The Martin Co.	184,000	16.33	1/60
W.A. Reichel (ex.)	11,844	1.05	5/57
Television Electronics Fund	25,000	2.22	h
General Telephone and Electronics Corp.			
Directors	337,995	1.54	
T.S. Gary	290,522	1.32	8/59
Voting trust	1,601,295	7.28	f
General Tire and Rubber			
Directors	345,956	6.57	
John O'Neil	118,086	2.24	8/59
T.F.M. O'Neil	106,442	2.02	3/54
R. Iredall	55,137	1.05	12/59
O'Neil family (total hold.)	1,125,000	21.33	aa
Georgia Pacific Corp.			
Directors	464,587	8.53	
O.R. Cheatham	193,534	3.55	1/54
J.N. Cheatham	59,130	1.09	3/59
J.L. Buckley	50,521	0.93	1/59
R.F. Johnson	39,016	0.72	2/59
C.E. Daniel	34,000	0.62	1/60
R.B. Pamplin	30,403	0.56	5/59
E.M. Howerdd (ex.)	143,835	2.64	5/54
Prudential Insurance Co.	89,107	1.64	j
W.R. Grace and Co.			
Directors	302,567	6.50	
J.H. & M.G. Phipps	185,837	3.98	9/58; 6/59
J.P. Grace	71,193	1.53	12/58
Gulf Oil Corp.			
Directors	6,731,142	6.72	
R.K. Mellon	6,362,319	6.35	1/56
W.K. Warren	318,270	0.32	3/59
Donaldson Brown (ex.)	598,797	0.60	7/51
Paul Mellon (est.)	9,206,553	9.19	d
Ailsa Mellon Bruce (est.)	7,970,766	7.96	d
Sarah Mellon Scaife (est.)	7,372,512	7.36	2/48
Phipps family holding co. (est.)	804,255	0.79	bb
H.J. Heinz			
Directors	369,490	21.88	0
H.J. Heinz II	368,659	21.83	1/60
Howard Heinz Endowment	242,155	14.34	1/52
Vera I. Heinz	52,129	3.09	9/56
Charles Heinz (officer)	11,803	0.70	3/47
Heinz family (total-est.)	1,284,000	76.00	z
Hooker Chemical Corp.			
Directors	419,383	5.72	
H.M. Dent	206,520	2.82	4/59
J.C. Cassidy	69,000	0.94	9/58
V.H. Shea	54,923	0.75	3/59; 4/59
Hooker family	458,000	6.24	f
Tri-Continental Corp.	110,000	1.50	h
Chemical Fund, Inc.	82,000	1.12	h
Hunt Foods and Industries			
Directors	602,397	21.04	0
Norton Simon	415,764	14.52	1/60
F.R. Weisman	69,960	2.44	8/59
Hart Isaacs	61,308	2.14	1/60
R.J. Miedel	30,526	1.06	1/60
J.R. Clumeck	18,350	0.64	2/59
R.E. Simon	349,567	12.21	1/60
Ideal Cement			
Directors	1,961,230	17.48	
Charles Boettcher II	1,265,841	11.28	8/57
Albert Coors	395,640	3.52	(2/59)
A.E. Humphreys	122,022	1.09	(8/57)
Wellington Fund	138,300	1.23	h
Investors Stock Fund	125,000	1.11	h
Ingersoll-Rand			
Directors	473,732	7.86	

J.H. Phipps	244,299	4.05	6/58
J.P. Grace	141,012	2.34	12/54
D.C. Keefe	35,670	0.59	7/48
Doubleday family holding Co.	187,884	3.12	7/48
Continental Insurance Co.	75,000	1.24	j
Inland Steel Corp.			
Directors	627,354	3.59	
J.L. Block	190,626	1.09	9/58
P.D. Block, Jr.	163,194	0.94	2/60
L.B. Block	139,734	0.80	5/58
A.M. Ryerson	68,850	0.39	4/50
E.L. Ryerson (hon. director)	148,482	0.85	7/54
Cleveland Cliffs Iron Co.	759,000	4.35	f
Interlake Iron Co.			
Directors	41,337	1.84	
E.A. Jones	25,400	1.13	3/59
P.R. Mather (ex.)	75,200	3.35	1/48
Mather Iron Co.	357,041	15.90	8/56
International Business Machines Corp.			
Directors	339,078	1.86	
E.E. Ford	113,412	0.62	1/60
S.M. Fairchild	99,866	0.55	12/59
T.J. Watson, Jr.	60,472	0.33	8/59
J.K. Watson	33,757	0.18	3/58
A.K. Watson (officer)	64,460	0.35	3/61
Watson family (total)	548,000	3.00	cc
Mass. Investors Trust*	180,288	0.99	h
Continental Insurance Co.	127,884	0.70	j
International Packers			
Directors	38,466	1.38	
First National City Bank	885,000	31.75	f
(As voting trustee for Armour & Co.)			
International Paper			
Directors	454,815	3.41	
Ogden Phipps	329,722	2.47	10/58
L. Dalsemer	53,760	0.40	(12/59)
Long family	144,388	1.08	dd
Chase Manhattan Bank (est.)	474,906	3.56	ee
Rockefeller Foundation	72,800	0.55	r
Mass. Investors Trust	311,472	2.34	h
International Shoe			
Directors	291,656	8.59	
A.W. Johnson	69,088	2.03	3/52
O.F. Peters	58,561	1.72	3/52
N.H. Rand	56,980	1.68	3/60
J.L. Johnson	49,045	1.44	4/51
H.H. Rand	40,037	1.18	1/52
Johnson and Johnson			
Directors	2,950,360	49.80	
R.W. Johnson	1,447,110	24.43	2/54
J.S. Johnson	596,003	10.06	3/59
R.W. Johnson, Jr.	439,390	7.42	4/59
H.S. McNeil	190,194	3.21	(9/59)
R.L. McNeil	148,210	2.50	(9/59)
Kaiser Aluminum and Chemical			
Directors	28,098	0.19	
Kaiser Industries Corp.	6,581,079	43.84	1/60
Kennecott Copper Corp.	1,925,000	12.82	f
Kaiser Industries Corp.			
Directors	10,934,702	47.78	
H.J. Kaiser, Jr.	4,273,452	18.67	2/59
H.J. Kaiser	3,170,766	13.85	2/59
E.F. Kaiser	1,957,770	8.54	2/59
D.V. McEachern	637,221	2.78	2/59
E.E. Trefethen, Jr.	512,529	2.24	4/56
A.B. Ordway	382,939	1.67	2/59
H.J. Kaiser Foundation	3,546,188	15.50	1/59
Sue Mead Kaiser	1,954,549	8.54	2/59
J.F. Reis (officer)	441,614	1.93	2/59
C.P. Bedford (officer)	412,789	1.80	2/59

Kerr-McGee Oil Industries			
Directors	534,864	22.33	
R.S. Kerr	240,813	10.05	11/59
D.A. McGee	144,000	6.00	ff
J.B. Saunders	46,120	1.92	5/61
T.M. Kerr	25,326	1.06	9/58
F.W. Strauss	19,075	0.80	11/59
F.C. Love	19,069	0.80	9/58
Dean Terrill	12,633	0.53	5/59
R.S. Kerr, Jr.	12,170	0.51	10/58
Grace B. Kerr	183,596	7.66	2/57
Mass. Investors Growth Fund	88,900	3.67	h
Wellington Fund	50,000	2.09	h
Lehman Corp.	50,000	2.09	h
Investors Stock Fund	47,700	1.99	h
Kimberly Clark			
Directors	606,845	6.95	
W.P. Schweitzer	235,231	2.69	9/58
J.S. Sensenbrenner	168,835	1.93	5/59
Ernst Mahler	110,518	1.26	1/60
J.R. Kimberly	73,904	0.85	8/59
J.L. Sensenbrenner (ex.)	126,997	1.45	2/56
S.F. Shattuck (ex.)	73,232	0.84	5/56
Investors Mutual	130,000	1.49	h
Mass. Investors Trust	118,800	1.36	h
Koppers Co.			
Directors	134,663	5.87	
R.K. Mellon	115,732	5.05	3/56
Investors Mutual	70,000	3.05	h
Investors Stock Fund	40,000	1.74	h
Lehigh Portland Cement			
Directors	244,227	5.81	
J.S. Young	100,120	2.31	9/58
R.A. Young	86,219	2.05	10/57
R.R. Bear	31,200	0.74	6/51
J.M. Huebner	23,573	0.56	12/59
Insurance Co. of N. America	49,000	1.16	u
M. Lowenstein			
Directors	652,079	22.96	
Leon Lowenstein	446,700	15.72	9/57
Robert Bendheim	83,792	2.95	2/56
J.M. Bendheim	64,260	2.26	5/52
L.S. Gilmour	16,116	0.57	12/54
A.L. Lowenstein Estate	733,125	25.81	f
Mack Trucks			
Directors	143,291	5.24	
H.L. Fierman	65,625	2.40	11/59
C.A. Johnson	38,850	1.42	2/60
W.R. Kaelin	31,156	1.14	11/59
Central Securities Corp. (Controlled by C.A. Johnson)	197,000	7.20	h
Martin Co.			
Directors	100,819	3.44	
G.M. Bunker	73,741	2.52	1/60
J.B. Wharton, Jr. (ex)	18,522	0.63	10/56
United Funds, Inc.	97,300	3.32	h
Wellington Fund	84,000	2.87	h
Investors Stock Fund	80,900	2.76	h
Fidelity Fund, Inc.	58,800	2.01	h
G.L. Martin estate (est.)	295,684	10.09	3/55; gg
McDonnell Aircraft			
Directors	392,987	23.87	
J.S. McDonnell	355,706	21.61	4/59
W.R. Orthwein, Jr.	12,196	0.74	11/57
C.W. Drake	10,326	0.63	3/55
McGraw-Edison			
Directors	631,114	11.26	
Charles Edison	145,840	2.60	2/60
M.M. McGraw	120,656	2.15	10/56
A. Bersted	92,312	1.65	5/52
D.S. Elrod	90,774	1.62	(1/59)
W.E. Kerr	74,567	1.33	(7/59)
J.W. Overstreet	69,872	1.25	(2/59)
Profit Sharing Trust	392,000	7.00	u
W.D. Kyle, Jr. (ex.)	29,308	0.52	10/55
Fundamental Investors	115,000	2.09	h
United Funds, Inc.	112,500	2.01	h
Investors Mutual	104,700	1.87	h
Affiliated Fund	79,000	1.41	h
Investors Stock Fund	60,000	1.07	h
Mead Corp.			
Directors	400,756	7.90	
G.H. & H.T. & N.S. Mead	334,638	6.61	hh
A.L. Harris	39,768	0.78	12/57
R.J. Blum (officer)	52,382	1.03	3/58
Fundamental Investors	110,000	2.17	h
Investors Stock Fund	63,144	1.25	h
Incorporated Investors	54,600	1.08	h
Insurance Co. of N. America	57,694	1.15	u
Merck and Co.			
Directors	350,802	3.30	
A.G. Rosengarten, Jr.	189,080	1.78	11/59
G.W. Perkins	113,885	1.07	12/59
Merck family trusts	350,184	3.30	8/57
Merck family (direct)	389,952	3.67	ii
Mass. Investors Trust	125,225	1.08	h
Merritt-Chapman and Scott			
Directors	241,571	4.15	
L.E. Wolfson	166,100	2.85	7/59
P.H. Hershey	40,000	0.69	2/59
Minneapolis-Honeywell Regulator			
Directors	338,880	4.77	
H.W. Sweatt	84,415	1.21	5/59
C.B. Sweatt	64,810	0.93	5/59
R.P. Brown	62,503	0.90	1/59
M.C. Honeywell	41,120	0.59	11/52
J.J. Wilson	40,660	0.58	12/58
Tri-Continental Corp.	125,500	1.79	h
Minnesota Mining and Manufacturing			
Directors	3,650,965	21.46	
J.G. Ordway	1,625,068	9.56	12/59
W.L. McKnight	927,854	5.46	2/60
A.G. Bush	619,935	3.65	6/59
R.H. Dwan	321,400	1.89	(12/59)
G.H. Halpin (officer)	125,820	0.74	8/59
R.P. Carleton (ex.)	192,240	1.12	1/51
Monsanto Chemical			
Directors	550,335	2.38	
Edgar Monsanto Queeny	319,386	1.38	11/55
C.A. Thomas	92,805	0.40	1/60
Queeny family trust (est.)	542,183	2.34	ii
Owens Illinois Glass Co.	338,130	1.46	f
T.H. Barton (ex.)	96,486	0.42	1/59
Motorola			
Directors	384,945	19.48	
R.W. Galvin	356,295	18.04	f
E.H. Wavering	10,450	0.53	2/51
P.V. Galvin estate	97,403	4.93	f
Galvin family (total hold.)	646,000	32.70	z
Investors Mutual	55,000	2.78	h
Prudential Insurance Co.	35,250	1.79	i
Investors Stock Fund	30,900	1.56	h
Television Electronics Fund	23,400	1.18	h
National Cash Register			
Directors	173,913	2.30	
S.C. Allyn	103,598	1.37	11/58
E.A. Deeds (hon. Chmn.)	175,877	2.32	1/52
National Distillers and Chemical			
Directors	37,266	0.36	

Panhandle Eastern Pipeline Co.	1,500,000	14.44	f
National Gypsum			
Directors	179,546	3.26	
C.F. Favrot	50,894	0.93	7/59
M.H. Baker	49,551	0.90	1/60
Investors Stock Fund	80,000	1.45	h
One William Street Fund	61,200	1.11	h
National Steel			
Directors	239,357	3.18	
Leon Falk, Jr.	117,746	1.56	1/60
T.E. Millsop	46,460	0.62	9/57
L.S. Mudge	44,720	0.59	9/58
Descendants of E.T. Weir	158,000	2.10	8/55
G.R. Fink (ex.)	64,270	0.85	4/55
M.A. Hanna Co.	2,001,390	26.65	f
Mass. Investors Trust	165,000	2.19	h
Continental Insurance Co.	147,500	1.96	i
Ohio Oil			
Directors	83,470	0.60	
J.R. Donnell	40,220	0.29	2/50
J.C. Donnell II	33,430	0.25	2/52
Rockefeller Foundation	200,000	1.43	r
Mrs. Alta Rockefeller Prentice	154,344	1.10	d
David Rockefeller (est.)	101,000	0.72	d
L.S. Rockefeller (est.)	101,000	0.72	d
Winthrop Rockefeller (est.)	101,000	0.72	d
Other Rockefeller holdings (est.)	793,000	5.67	kk
Investors Mutual	278,144	1.99	h
Olin Mathieson Chemical			
Directors	2,409,575	18.04	
J.M. Olin	888,673	6.65	1/59; mm
S.T. Olin	811,434	6.07	4/58;
Edward Block	184,913	1.38	mm
C.H. Palmer	146,626	1.10	4/58 3/59
R.G. Stone	101,150	0.76	1/52; nn
E.F. Williams, Jr.	96,700	0.72	(1/55)
Voting Trusts	1,018,230	7.62	f, pp
Owens-Corning Fiberglass			
Directors	177,330	2.67	
Harold Boeschenstein	132,430	1.99	6/59
James Slayter (officer)	80,195	1.21	7/59
J.M. Briley (officer)	48,000	0.72	7/59
Corning Glass Works	2,115,000	31.81	f
Owens-Illinois Glass Co.	2,100,000	31.58	f
Owens-Illinois Glass Co.			
Directors	179,504	2.49	
W.E. Levis	67,412	0.93	2/59
J.P. Levis	29,100	0.40	7/59
Allied Chemical Corp.	400,000	5.54	f
Affiliated Fund	100,000	1.39	h
Parke, Davis and Co.			
Directors	60,990	0.41	
Buhl family (est.)	999,258	6.74	qq
Investors Mutual	225,000	1.52	h
Affiliated Fund	165,000	1.11	h
Mass. Investors Trust	150,000	1.01	h
Peabody Coal			
Directors	1,005,589	10.39	
M.C. Kelce	836,095	8.64	2/60
T.L. Kelce	120,880	1.25	9/60
C.P. Arnold (officer)	175,873	1.82	7/56
R.O. Park (officer)	102,000	1.05	8/58
Donald Johnston (officer)	71,105	0.73	8/58
R.F. Barrow (officer)	63,917	0.66	6/58
C.M. Guthrie (officer)	83,224	0.86	1/61
United Funds, Inc.	200,000	2.06	h
Tri-Continental Corp.	100,000	1.03	h
Chas. Pfizer and Co.			
Directors	622,865	3.80	
G.A. Anderson	322,350	1.97	11/58
J.E. McKeen	130,500	0.80	9/59
Fundamental Investors	300,000	1.84	h
Investors Mutual	251,400	1.54	h
Mass. Investors Trust	230,000	1.40	h
Phelps Dodge Corp.			
Directors	85,324	0.84	
C.E. Dodge	62,206	0.61	9/56
Newmont Mining Co.	296,238	2.92	f
M.A. Hanna Co.	80,000	0.79	f
Mass. Investors Trust	250,000	2.46	h
Continental Insurance Co.	107,000	1.05	i
Philco Corp.			
Directors	85,745	2.10	
R.F. Herr	24,953	0.61	1/59
Profit Sharing & Savings Plan	449,270	11.02	11/59
Investors Mutual	80,356	1.97	h
Affiliated Fund	67,000	1.64	h
Pittsburgh Plate Glass			
Directors	3,204,505	31.59	
Pitcairn family (3 dir.)	3,075,356	30.31	1/46; (12/59)
R.K. Mellon	108,500	1.07	6/47
Pittsburgh Steel			
Directors	9,764	0.62	
J.H. Hillman and Sons (Holding co. for Hillman family)	401,124	25.28	1/60
Quaker Oats			
Directors	196,090	5.32	
John Stuart	67,150	1.82	11/52
R.D. Stuart	52,418	1.42	4/52
R.D. Stuart, Jr.	18,179	0.49	2/54
Ralston Purina			
Directors	465,395	7.17	
Donald Danforth	424,515	6.39	11/52
W.H. Danforth family (est.)	104,075	1.60	1/54
Rayonier, Inc.			
Directors	182,413	3.21	
C.B. Morgan	90,600	1.60	1/60
R.M. Pickens (officer)	64,993	1.14	5/57
Hammermill Paper Co.	366,868	6.47	f
Incorporated Investors	412,000	7.26	h
United Funds, Inc.	163,450	2.88	h
Affiliated Fund	105,060	1.85	h
Fundamental Investors	103,000	1.81	h
Investors Stock Fund	103,000	1.81	h
Investors Mutual	91,150	1.61	h
Revere Copper and Brass			
Directors	10,012	0.38	
American Smelting & Refining	938,148	35.15	f
Investors Stock Fund	60,000	2.24	h
Fidelity Fund, Inc.	32,000	1.20	h
Wellington Fund	29,500	1.10	h
Rexall Drug and Chemical			
Directors	365,353	9.53	
J.W. Dart	210,120	5.48	9/55
V.F. Taylor	32,548	0.85	8/56
W.T. Lillie	23,072	0.60	8/52
John Bowles	22,524	0.60	12/60
P.A. Draper	20,600	0.54	7/54
United Funds, Inc.	55,000	1.43	h
Reynolds Metals			
Directors	391,903	2.31	
J.L. Reynolds	106,049	0.63	10/59
D.P. Reynolds	96,310	0.57	10/59
W.G. Reynolds	69,709	0.41	10/59

R.S. Reynolds, Jr.	58,876	0.35	6/59
U.S. Foil Co.	8,014,055	47.36	f
Reynolds Corp.	501,380	2.96	f
(Voting stock in U.S. Foil is owned by Reynolds family)			
Incorporated Investors	420,700	2.49	h
Richfield Oil			
Directors	23,500	0.58	
Cities Service Co.	1,257,977	31.15	f
Sinclair Oil Corp.	1,223,581	30.29	f
Stock Purchase Plan	97,123	2.41	u
Rockwell-Standard			
Directors	309,694	5.75	
G.T. Pew	105,566	2.15	1/60
Willard F. Rockwell	65,616	1.22	7/59
A.G. Wallerstadt	45,569	0.85	11/52
W.R. Timken (est.)	105,758	1.96	7/51;rr
H.H. Timken (est.)	31,246	0.58	7/51;rr
Rohm and Haas			
Directors	506,829	45.37	
Otto Haas	287,571	25.75	11/52
Trust for F.O. & J.C. Haas	184,309	16.50	2/60
E.C.B. Kirsopp	10,517	0.94	8/59
Louis Klein	7,067	0.63	12/53
Haas Foundation (est.)	110,000	9.80	f
Haas family (total hold.)	692,500	62.00	z
Mass. Investors Trust	17,293	1.55	h
Lehman Corp.	12,581	1.13	h
St. Regis Paper			
Directors	451,861	4.82	
L.S. Pollack	128,366	1.37	(4/59)
J.B. LeClere	94,406	1.01	(4/59)
J.C. Pace	93,180	1.00	5/52
R.K. Ferguson	33,150	0.35	5/57
Eastern States Corp.	800,700	8.55	h
(controlled by R.K. Ferguson)			
Incorporated Investors	114,100	1.22	h
Schenley Industries			
Directors	1,075,471	18.26	
L.S. Rosensteil	918,800	15.60	7/60
T.C. Wiehe	100,353	1.70	10/58
Scott Paper			
Directors	416,013	5.26	
T.B. McCabe	298,055	3.76	12/59
R.H. Rausch	35,955	0.45	5/58
Signal Oil and Gas (class B voting stock)			
Directors	554,851	62.84	
S.B. Mosher	469,830	53.20	12/59
J.W. Hancock	49,850	5.65	5/60
R.H. Green, Jr.	25,038	2.84	1/50
Skelly Oil			
Directors	3,819	0.07	
Mission Corp.	3,412,280	59.38	f
(Controlled by Getty family)			
Investors Mutual	90,000	1.56	h
Mass. Investors Trust	71,000	1.23	h
Tri-Continental Corp.	65,000	1.13	h
A.O. Smith			
Directors	166,073	8.06	
L.B. Smith	164,022	7.96	12/50
Smith Investment Co.	1,096,000	53.14	f
(Holding co. for the Smith family-includes holdings listed under L.B. Smith)			
United Funds, Inc.	25,700	1.26	h
Socony Mobil Oil			
Directors	15,132	0.03	
Rockefeller Foundation	300,000	0.62	r
David Rockefeller (est)	901,466	1.85	kk
Winthrop Rockefeller (est)	901,332	1.85	kk
L.S. Rockefeller (est)	872,389	1.80	kk
Abby Rockefeller Mauze (est)	204,000	0.42	kk
J.D. Rockefeller 3rd (est)	191,250	0.39	kk
Other Rockefeller (est).	3,037,648	6.25	kk
Standard Oil of California			
Directors	134,133	0.21	
Rockefeller Foundation	200,000	0.32	r
Abby Rockefeller Mauze (est)	632,062	1.00	kk
J.D. Rockefeller 3rd (est)	632,062	1.00	kk
N.A. Rockefeller (est).	587,086	0.93	kk
Rockefeller family (total)	3,162,000	5.00	ss
Standard Oil Co. (Indiana)			
Directors	1,475,979	4.13	
Jacob Blaustein	1,407,714	3.94	(4/57)
Rockefeller Foundation	1,000,000	2.80	r
Alta Rockefeller Prentice	710,700	1.99	kk
Other Rockefeller (est).	746,568	2.08	kk
Standard Oil Co. (New Jersey)			
Directors	224,617	0.10	
Rockefeller Foundation	6,000,000	2.77	r
Standard Oil Co. (Ind.)	2,883,519	1.33	f
N.A. Rockefeller (est).	988,140	0.46	kk
J.D. Rockefeller 3rd (est)	988,140	0.46	kk
Abby Rockefeller Mauze (est)	988,140	0.46	kk
Other Rockefeller (est).	12,284,723	56.67	kk
Stauffer Chemical			
Directors	1,746,745	19.14	
John Stauffer	729,185	7.99	12/55
Christian de Guigne	340,494	3.73	1/59
August Kochs	213,577	2.34	6/60
R.C. Wheeler	133,232	1.46	12/59
Christian de Dampierre	132,257	1.45	4/59
G.C. Ellis	104,452	1.15	5/59
Hans Stauffer	78,870	0.86	6/59
Mitzi S. Briggs	675,956	7.41	9/56
Chemical Fund	130,600	1.43	h
J.P. Stevens			
Directors	420,060	10.14	
R.T. & J.P. Stevens, Jr.	260,008	6.27	8/56; 2/58
W.J. Carter	29,451	0.71	6/59
K.W. Fraser	29,209	0.70	10/48
Sun Oil			
Directors	1,841,556	14.94	
J.H. Pew	710,939	5.76	2/60
J.N. Pew, Jr.	640,624	5.20	8/57
W.C. Pew	334,026	2.71	4/58
Glenmede Trust (Pew fam.)	3,387,443	27.48	f
Pew Memorial Foundation	2,610,968	21.18	1/55
Ins. Co. of N. America	148,963	1.22	h
Superior Oil			
Directors	131,019	31.03	
W.M. Keck	103,296	24.46	2/60
H.B. Keck	26,146	6.19	1/52
W.M. Keck, Jr. (ex.)	26,759	6.31	7/52
Keck family (total hold.)	216,600	51.30	z
Lehman Corp.	8,500	2.01	h
Incorporated Investors	5,000	1.18	h
Swift and Co.			
Directors	80,603	1.35	
H.H. Swift	50,025	0.84	2/49
Swift family (total)	403,000	7.00	tt
Affiliated Fund	125,000	2.10	h
Textron, Inc.			
Directors	280,520	5.87	
Royal Little	160,242	3.35	10/58
H.E. Goodman	51,001	1.07	12/59
K.L. Lindsey	35,750	0.75	9/59
Thompson Ramo Wooldridge			
Directors	228,438	7.32	
Simon Ramo	49,589	1.59	11/58
D.E. Wooldridge	45,335	1.45	11/58

H.L. George	35,885	1.15	11/59
S.L. Mather (ex.)	24,488	0.78	3/55
Ins. Co. of N. America	52,000	1.67	u
Television Electronics Fund	48,500	1.53	h
Tidewater Oil			
Directors	22,301	0.16	
Mission Development Co.	6,612,339	47.73	f
Getty Corp.	1,987,448	14.35	f
Mission Corp.	458,886	3.47	f
(All controlled by Getty family)			
Timken Roller Bearing			
Directors	632,319	11.87	
H.H. Timken, Jr.	214,745	4.03	7/57
W.R. Timken	197,399	3.71	7/57
J.M. Timken	185,785	3.49	7/57
Joint trust for the above	24,200	0.45	7/57
A.A. Welsh and Co.	694,328	13.04	f
(Nominee for Cleveland Trust Co.)			
Fundamental Investors	125,000	2.35	h
United Funds, Inc.	75,000	1.41	h
Union Bag-Camp Paper			
Directors	409,467	5.55	
J.L. Camp, Jr.	101,175	1.37	7/57
H.D. Camp	88,189	1.19	5/59
W.M. Camp	85,006	1.15	1/60
J.M. Camp	67,734	0.92	(7/58)
Alexander Calder	45,137	0.61	8/59
Other Calder family (est)	509,100	6.90	s
Fundamental Investors	125,000	1.70	h
Wellington Fund	83,000	1.12	h
One William Street Fund	76,000	1.03	h
Continental Insurance Co.	85,500	1.16	i
United Merchants and Manufacturers			
Directors	329,299	5.49	
Lawrence Marx, Jr.	189,349	3.16	11/59
M.J. Schwab	48,895	0.82	(12/59)
J.W. Schwab	45,980	0.77	5/58
Fidelity Fund, Inc.	187,000	3.03	h
Affiliated Fund	100,000	1.67	h
U.S. Gypsum			
Directors	149,615	1.86	
S.L. Avery	117,350	1.46	12/51
Descendants of W.A. Avery	278,575	3.47	uu
Mass. Investors Trust	200,000	2.49	h
Fundamental Investors	100,000	1.24	h
Continental Insurance Co.	135,000	1.68	i
U.S. Plywood			
Directors	86,757	3.58	
Simon Ottinger	48,043	1.98	9/59
Louise Ottinger	127,504	5.26	8/52
Descendants of Lawrence Ottinger	144,750	5.97	11/54
Affiliated Fund	90,000	3.71	h
United Funds, Inc.	27,000	1.11	h
Upjohn			
Directors	3,223,890	22.94	
D.U. Dalton	667,090	4.75	(2/59)
W.J. Upjohn	579,928	4.13	11/60
R.A. Light	433,937	3.09	9/59
D.G. Gilmore	415,975	2.96	9/61
R.H Light	403,808	2.88	8/59
P.S. Parish	190,844	1.36	(10/59)
M.U. Light	136,712	0.97	4/59
E.G. Upjohn	85,906	0.61	11/59
Upjohn family (total)	8,434,000	60.00	vv
West Virginia Pulp & Paper			
Directors	524,399	10.20	
Sidney Frohman	204,217	3.97	(1/59)
D.L. Hopkins	79,436	1.54	7/52
C.E. Frohman	73,109	1.42	1/60
W.G. Luke	59,000	1.15	10/53
D.L. Luke III	15,292	0.30	11/57
Wheeling Steel			
Directors	27,304	1.30	
Cleveland Cliffs Iron Co.	102,432	4.89	
Stock Thrift Plan	9,500	0.45	u
Whirlpool Corp.			
Directors	667,064	10.74	
M H. Murch	275,772	4.44	(3/58)
F.S. Upton	180,308	2.90	2/55
Elisha Gray II	76,400	1.23	3/59
W.G. Seeger	59,590	0.96	1/52; ww
J.S. Hall	56,321	0.91	1/52; ww
Radio Corp. of America	1,158,563	18.65	f
Sears, Roebuck and Co.	1,027,013	16.64	f
One William Street Fund	70,400	1.13	h
Worthington Corp.			
Directors	98,871	5.91	
H.P. Meuller, Sr.	58,415	3.49	9/58
Howard Bruce	18,738	1.12	10/54
H.H. Ramsey	10,903	0.65	11/58
One William Street Fund	51,300	3.07	h
United Funds, Inc.	46,000	2.75	h
Prudential Insurance Co.	40,600	2.43	i
Youngstown Sheet and Tube			
Directors	85,464	2.46	
S.L. Mather	25,224	0.72	9/56
Fred Tod, Jr.	24,500	0.70	7/52
Cleveland Cliffs Iron Co.	176,500	5.07	f
Mass. Investors Trust	125,000	3.60	h
Incorporated Investors	49,400	1.42	h
Fundamental Investors	45,000	1.29	h
Singer Manufacturing (first listed in 1960)			
Directors	597,303	13.38	
S.C. Clark	574,188	12.86	(8/60)
F. Ambrose Clark	533,387	11.94	1/61

Explanatory Note:

The 141 corporations included in part I are selected from a total of 232 included in the overall study. The basis of selection was the existence of concentrated ownership to the extent of securing potential working control in the corporation in question. This point has been discussed in the text of the article. It is, of course, possible to question the listing in this category of about 14 or 15 of those actually included. Nonetheless, at least 126 corporations must be so classified.

The organization of the table is alphabetical by name of corporation. In the first column the name of the relevant stockholder is listed, in the second column the number of shares held as of Dec. 31,1959, and in the third column the per cent of shares outstanding represented by the indicated holder. Finally, the last column gives the reference enabling the determination of the listed holding. Immediately under the name of each listed corporation the total holding of all directors of the corporation is listed. In the case of almost all of the listed corporations, we have indicated as a sub-heading the few largest holders among the directors. In all cases we have listed director's shareholdings which exceed 0.50% of the total stock outstanding. To illustrate, refer to the Aluminum Co. of America. The directors of Alcoa hold 2,664,081 shares representing 12.64% of the outstanding stock as of Dec. 31, 1959. The largest holders among the directors are R.K. Mellon and R.A. Hunt.

In the reference column we have indicated the reference by the following technique: if a date is given, e.g., 8/54, it is the date of the published monthly report of the Securities and Exchange Commission. This reference is formally as follows: *Official Summary of Securities Transactions of Officers and Directors of Listed Companies,* Securities and Exchange Commission, Washington. Thus, in the case of Alcoa, we have used the report published in the March, 1957 issue of *Official...* for the holding of A.V. Davis. As discussed in Appendix II, we have always used the most recent (prior to 1/60) published report of the individual in question. In some cases, however, there does not exist a published report of a person's holdings. In these cases it has been necessary to examine the SEC files directly and, when these reports are used, we have so indicated by placing parentheses about the *report date*. For example, the holding of H.P. Patterson in American Machine and Foundry was found in SEC files and was for the report date November, 1959. This is indicated in our notations as (11/59). The remaining references use the alphabet symbols a, b, ... thru vv, ww, xx. The list of references of this type follows this note.

Finally, we note that holdings of investment companies in excess of 1.60% of the outstanding stock of a given corporation are listed as are similar holdings of insurance companies. This refers only to investment companies and insurance companies in the sample group as indicated in the text. In certain cases, respect for the truth demands that we include certain other holdings even though such holdings are not by officers or directors. If the individual in question is a former director, now retired, then we have used the notation (ex.) to indicate ex-director. In some cases, as that of A.V. Davis in Alcoa, the individual has been given a title even though he is no longer on the board. Typical is the title Honorary Chairman or Honorary Director. In a few cases it has proved necessary to use old data, such as TNEC data, in the absence of more recent information. Such cases are denoted by the notation (est.) for estimate. The data shown in these few cases should be used with care as it is probably subject to some error.

Finally, Appendix III lists the many holding companies (as distinct from investment companies) appearing on the list of prominent holders and attempts to show who controls them. Thus, one has ability to track down the ultimate source of power in the few cases where holding companies provide the basis for ultimate control.

The list of references for Part I follows— a) *Moody's Public Utility Manual,* Moody's Investors Service, 1960. b) Schedule of Securities Owned, 1960. c). *Moody's Industrial Manual,* Moody's Investors Service, 1960. Held under trust agreement between North American Solvay, Inc. (American branch of the Belgian company, Solvay and Cie) and First National City Bank. d) *The Distribution of Ownership in the 200 Largest Nonfinancial Corporations,* Monograph No. 29, Temporary National Economic Committee, Investigation of Concentration of Economic Power, Washington, 1940. Estimate based on number of shares held as reported in this monograph taking into account subsequent stock splits and stock dividends only. e) *Moody's Industrial Manual,* 1960. Nominee for unknown investor. Possibly the investment banking house of Dillon, Read and Co. f) *Moody's Industrial Manual,* 1960. g) *Moody's Bank and Finance Manual,* 1960. Controlled by Dillon family of Dillon, Read and Co. h) *Moody's Bank and Finance Manual,* 1960. j) Annual Report, 1960 or Schedule of Securities, 1960. k) *Moody's Industrial Manual,* 1960. Selection Trust, Ltd. is an English corporation with extensive influence in South Africa, the Rhodesias and elsewhere. m) *Official Summary of Transactions of Officers and Directors,* Securities and Exchange Commission, October, 1938. Distribution from trust created under the will of Joseph Boyer, one of the founders of Burroughs Corp. n) Based on Dec. 31, 1958 holdings, at market value, of $5,940,000 in common stock. Consolidated Electrodynamics has been subsequently brought into Bell and Howell as an operating division. It is of some interest to note that C.H. Percy, President of Bell and Howell, is a director of Burroughs. See *Moody's Industrial Manual,* 1959 for holdings of Consolidated Electrodynamics. p) Indicated is the source giving the holdings of Camille Dreyfus who died on September 9, 1956. It is presumed that his widow, brother and the Dreyfus Foundation benefited from the bulk of the indicated holding. q) *Fortune,* May, 1960, p. 81. Includes holdings of D.J. Thomson, L.C. Thomson, R.B. Robertson, R.B. Robertson, Jr., H.T. Randall listed above. r) Annual Report, 1959. s) *Official Summary ...,* Securities and Exchange Commission, December 31, 1935. t) TNEC, Mono. No. 29 (see ref. d above). Based on holdings in Pittsburgh Coal Co. and terms of subsequent merger with the Consolidated Coal Co. u) Annual Report, 1959. w) *Fortune,* May, 1960,

p. 228. x) *New York Times*, May 12, 1958, y) Both share in 375,250 shares held by family holding companies. Half of this total has been assigned to each. z) *Moody's Handbook of Widely Held Common Stocks*, First 1x99 Edition, Moody's Investors Service. aa) *Fortune*, December 1957. bb) *Fortune*, November 1960. cc) *Fortune*, September 1956. dd) Based on holdings in Long Bell Lumber and terms of merger with Int. Paper (see Long Bell Lumber, 3/52 and *Moody's Industrial Manual*). Does not include holdings of R.A.L. Ellis, the family representative on the International Paper board of directors. ee) Extimate based on report in 4/42. Use with caution. ff) *Fortune*, March 1959. gg) Based on holdings of G.L. Martin before his death. Disposal of the shares is not clear. hh) Combined holdings including holding of Mead Investment Co. in which they all share. See 1/51; 2/51; 4/51; (6/59). jj) See 8/57; *New York Times*, Jan. 18, 1959; *SEC Statistical Bulletin*, May 1958 (secondary distributions). kk) See note on Rockefeller family holdings at end of table. mm) Includes shares held in voting trust. nn) Based on holdings in Mathieson Chemical and terms of subsequent merger with Olin Industries. pp) Exclusive of holdings of directors of shares held in these voting trusts. qq) Based on holdings of L.D. Buhl, A.H. Buhl (see 6/51; 12/35). A.H. Buhl, Jr. is currently the largest stockholder among the directors. rr) Based on holdings in Timken Detroit Axle. Subsequently merged with Standard Steel Spring to form Rockwell-Standard. Holding shown based on terms of merger and subsequent stock div. ss) *Fortune*, November 1958. tt) R.A. Gordon, *Business Leadership in the Large Corporation*, University of California Press, 1961. uu) *New York Times*, Feb. 4, 1959; see also 12/49. vv) *Fortune*, July 1959. ww) Based on holdings in Seeger Refrigerator and terms of subsequent merger to form Whirlpool-Seeger (name finally changed to the present Whirlpool Corp.). xx) *Fortune*, May 1952, p. 109. Includes related Doan family. Estimate is based on reported 18% holding in 1952.

A note on the treatment of the Rockefeller family holdings.—No member of the Rockefeller clan (current generation) is either a director or officer of the various Standard Oil companies. Thus, a search of the SEC *Official Summary*... is fruitless. In addition, the secretiveness of major stockholders, like the various members of the Rockefeller family, prevents a detailed accounting of the holdings of the six elders of the clan. However, we need not give up hope for it is possible to track down some information, though admittedly incomplete, and try to piece together a consistent picture. Therefore, we have listed holdings of various Rockefeller family members in each of the oil companies where holdings are of importance. The source is the TNEC report as previously indicated. In addition, we have listed holdings of the Rockefeller Foundation as of Dec. 31, 1959. Finally, we lump under the vague category "Other Rockefeller holdings" the shares owned by John D. Rockefeller, Jr. and his wife, both since deceased. However, his second wife is alive and, as we shall see, received a portion of his holdings. This last procedure will now be justified.

When John D. Rockefeller, Sr. died his estate was appraised at only $25,000,000, only a small fraction of the value of the securities he once owned. What had happened to his vast holdings? A newspaper report provides the answer:

> *"Before the elder Rockefeller died in 1937 at the age of 97, he had transferred most of his vast estate to his son and to the philanthropic interests in which both were engaged."* (*New York Times*, May 12, 1960, p. 27)

Thus, he managed to escape the estate taxes by means of gifts before his death. His son, John D. Rockefeller, Jr. held the vast blocks of stock in the Standard Oil companies until late 1934 when he began establishing trusts for his children. It is of more than passing interest that he reduced his holdings at a time when it would have been necessary for him to report his holdings under the Securities Exchange Act had he retained ownership of the shares. However, he retained direct ownership of the bulk of the shares. In 1940 he established the Rockefeller Bros. Fund through the gift of securities then valued at $59,000,000. Many years later, in 1957, his fortune was estimated at between $400 million and $700 million. When he died in 1960 his fortune was appraised at roughly $150 million. Again, a newspaper report provides an explanation:

> *"John D., Jr. had further reduced the size of his estate by setting up trust funds long before his death for his six children and twenty-two grandchildren. The children receive the income from the trusts, and at their deaths, the principal will go to their children."* (*New York Times*, May 20, 1960, p. 1)

Furthermore, the estate which John D., Jr. left was equally divided between the Rockefeller Bros. Fund and his widow. The property held for his widow in trust will be distributed to his five sons at her death.

Hence, John D. Rockefeller, Jr. had followed the clever example of his father and had disposed of the largest fraction of his estate before his death and avoided confiscatory estate taxes. Since the precise terms of the various trusts are not public property we cannot make any estimate of the distribution of holdings among the surviving members of the clan aside from the information revealed in the TNEC report. Hence, these holdings are clearly held for the benefit of Rockefeller family members and are grouped under the heading "Other Rockefeller family holdings." It is also clear, though, that almost all shares indicated in the TNEC report remain under the control of the family, though a large portion of the shares provide income for various philanthropic activities and do not provide income for the use of family members.

Large stockholdings and directors holdings in major industrial corporations: Part II*

Corporation & largest shareholding	Number of shares	Per cent of outstanding shares	Reference
ACF Industries	4,337	0.31	
Television Electronics Fund	50,000	3.52	a
Acme Steel	44,528	1.60	
C.D. Norton (D)	22,543	0.81	9/59
Allis Chalmers Mfg.	28,592	0.31	
Television Elect. Fund	85,000	0.94	a
American Can Co.	117,722	0.75	
Estate of Paul Moore	264,000	1.68	11/55; b
American Cyanimid	66,648	0.31	
Wellington Fund	77,800	0.37	a
American Motors	63,457	1.07	
G.W. Romney (D)	24,685	0.42	8/59
American Radiator and Std. San.	23,288	0.22	
Sharon Steel Corp.	96,632	0.83	c
American Smelting & Refining	16,219	0.30	
Mass. Investors Trust	155,000	2.85	a
American Tobacco Co.	16,062	0.25	
Affiliated Fund	75,000	1.15	a
Anaconda Co.	15,474	0.14	
Tri-Continental Corp.	50,000	0.48	a
Armstrong Cork Co.	53,065	1.05	
Wellington Fund	107,000	2.11	a
Atlantic Refining	28,315	0.31	
Mass. Investors Trust	135,000	1.49	a
Avco Corp.	136,714	1.33	
Victor Emanuel (D)	51,033	0.50	10/59
Bendix Corp.	76,786	1.50	
Investor's Mutual	96,150	1.89	a
Bethlehem Steel	32,693	0.07	
Mass. Investors Trust	720,000	1.58	a
Boeing Airplane	64,493	0.86	
Television Elect. Fund	44,370	0.59	a
Borden Co.	84,111	1.72	
Investor's Mutual	34,424	0.70	a
Borg-Warner Corp.	121,873	1.36	
Television Elect. Fund	45,000	0.50	a
Budd Co.	82,028	1.89	
Grascom Bettle (D)	33,500	0.77	8/59
California Packing	83,429	1.70	
Investor's Mutual	152,808	3.11	a
Carrier Corp.	28,582	1.40	
Affiliated Fund	62,000	3.04	a
Caterpillar Tractor	185,187	0.68	
Mass. Investors Trust	330,000	1.21	a
Chrysler Corp.	41,524	0.47	
Fundamental Investors	90,000	1.03	a
Colorado Fuel and Iron	44,483	1.19	
Charles Allen, Jr. (D)	27,194	0.73	11/57
Continental Can Co.	63,505	0.52	
Owens-Illinois Glass Co.	334,813	2.72	c
Corn Products Refining Co.	52,905	0.49	
Continental Insurance Co.	111,700	1.02	d
Crown Zellerbach	368,511	2.67	
J.D. Zellerbach (D)	107,862	0.78	10/59
Crucible Steel	24,732	0.64	
United Funds, Inc.	30,007	0.78	a
Curtiss-Wright	31,000	0.40	
Television Electronics Fund	50,000	0.65	a
Douglas Aircraft	32,543	0.85	
United Funds, Inc.	71,600	1.88	a
Dresser Industries	37,074	0.79	
Fundamental Investors	78,000	1.66	a
Eastman Kodak	185,172	0.48	
Mass. Investors Trust	222,000	0.58	a
Eaton Mfg.	161,521	3.36	
Television Electronics Fund	80,000	1.67	a
Fairbanks Whitney	97,614	1.31	
Theodore Blumberg (D)	60,012	0.81	3/59
Fiberboard Paper Products	34,922	2.00	
Affiliated Fund	49,000	2.80	a
Food Machinery and Chemical	135,698	1.95	
Wellington Fund	120,000	1.73	a
General American Trans.	48,823	0.89	
Investor's Mutual	60,000	1.09	a
General Dynamics	127,732	1.28	
Television Electronics Fund	45,000	0.45	a
General Electric	76,937	0.09	
Mass. Investors Trust	350,000	0.40	a
General Foods Corp.	103,026	0.84	
Marjorie M. Post	290,270	2.37	7/58
Gillette Safety Razor	150,068	1.61	
Mass. Investors Trust	230,000	2.47	a
Glidden Co.	27,818	1.20	
Investor's Mutual	35,000	1.52	a
B.F. Goodrich	113,079	1.26	
Mass. Investors Trust	165,000	1.83	a
Goodyear Tire and Rubber	200,650	0.61	
Mass. Investors Trust	988,380	2.98	a
Granite City Steel	26,123	1.22	
Tri-Continental Corp.	50,000	2.34	a
Hercules Powder	45,352	0.54	
Chemical Fund, Inc.	116,600	1.38	a
International Harvester	30,249	0.22	
Cyrus McCormick	223,069	1.61	12/50
International Tel. and Tel.	162,603	1.05	
Affiliated Fund	142,000	0.91	a
Johns Manville	30,954	0.37	
Company Stock Purchase Plan	140,711	1.66	e

* See explanatory note at end of this part.

Jones and Laughlin Steel	96,182	1.23	
Cleveland Cliffs Iron Co.	170,719	2.18	c
Kennecott Copper	33,264	0.30	
American Smelting & Ref.	100,481	0.91	c
Libby-Owens-Ford Glass	194,260	1.85	
Mass. Investors Trust	190,000	1.81	a
Libby, McNeill and Libby	27,243	0.64	
A.J. Hoefer (D)	12,167	0.28	1/57
Liggett and Myers Tobacco	11,395	0.29	
Affiliated Fund	72,000	1.83	a
Lockheed Aircraft	221,428	3.08	
R.E. Gross (D)	144,272	2.00	9/57
Lone Star Cement	105,196	1.35	
Mass. Investors Trust	149,200	1.92	a
P. Lorillard	107,128	1.63	
United Funds, Inc.	120,000	1.83	a
National Biscuit Co.	12,340	0.19	
Estate of Paul Moore	167,300	2.62	f; b
National Dairy Products Corp.	172,244	1.23	
H.W. Breyer, Jr. (D)	86,157	0.61	9/57
National Lead	103,441	0.89	
Continental Insurance Co.	76,300	0.65	d
North American Aviation	33,933	0.42	
Investor's Stock Fund	150,000	1.85	a
Otis Elevator	117,715	2.85	
Television Electronics Fund	71,600	1.73	a
Philip Morris	101,231	3.07	
H.S. Cullman & J.F. Cullman, 3rd	69,430	2.11	12/59; 10/59
Phillips Petroleum	177,896	0.52	
Phillips Investment Co.	560,000	1.63	1/48
Procter and Gamble	125,439	0.61	
Chemical Fund, Inc.	72,300	0.35	a
Pullman, Inc.	17,758	0.77	
Mass. Investors Trust	105,000	4.55	a
Pure Oil	76,635	0.88	
Investor's Mutual	116,000	1.33	a
Radio Corp. of America	72,648	0.52	
Investor's Mutual	167,800	1.20	a
Raytheon Co.	59,373	1.73	
C.F. Adams (D)	32,644	0.95	7/58
Republic Steel Corp.	65,704	0.42	
Cleveland Cliffs Iron Co.	486,228	3.09	c
R.J. Reynolds Tobacco	147,882	0.74	
Affiliated Fund	260,000	1.30	a
Sinclair Oil	30,793	0.20	
Mass. Investors Trust	125,000	0.81	a
Sperry Rand	215,877	0.76	
H.F. Vickers (D)	158,491	0.56	1/58
Standard Brands	61,420	0.93	
Mass. Mutual Life Ins. Co.	20,000	0.30	g
Standard Oil Co. (Ohio)	17,077	0.35	
One William Street Fund	40,000	0.82	a
Sterling Drug	23,864	0.30	
Chemical Fund, Inc.	27,000	0.34	a
Studebaker-Packard	18,262	0.27	
H.E. Churchill (D)	8,512	0.13	1/60
Sunray Mid-Continent Oil	187,479	1.05	
Fundamental Investors	200,000	1.12	a
Texaco, Inc.	692,226	1.14	
Mass. Investors Trust	537,642	0.89	a
Union Carbide	125,291	0.42	
Continental Insurance Co.	172,400	0.57	d
Union Oil of Cal.	205,123	2.50	
Stewart family trust	129,186	1.58	5/61
Union Tank Car	8,463	0.24	
Rockefeller Foundation	100,000	2.84	h
United Aircraft	33,934	0.53	
Fundamental Investors	75,000	1.17	a
United Shoe Machinery	46,414	2.00	
S.W. Winslow, Jr. (D)	20,828	0.90	4/60
U.S. Rubber	77,672	1.36	
United Funds, Inc.	109,800	1.92	a
U.S. Steel	126,457	0.23	
Mass. Investors Trust	560,000	1.04	a
Westinghouse Air Brake	13,160	0.31	
Television Electronics Fund	35,000	0.83	a
Westinghouse Electric	30,127	0.17	
Mass. Investors Trust	110,000	0.63	a
White Motor Co.	57,290	2.86	
R.F. Black (D)	17,950	0.90	12/59
Wilson and Co.	31,836	1.41	
United Funds, Inc.	48,000	2.13	a

Explanatory note

Listed in part II are 91 corporations in which the evidence did not indicate highly concentrated holdings by directors or other large stockholders. This does not imply that centers of control do not exist in these corporations but rather that the data collected was inconclusive. However, in the case of certain of the corporations centers of control are already apparent. For example, the Zellerbach family appears to exercise leadership in Crown Zellerbach Corp. even though the holdings of J.D. Zellerbach and H.L. Zellerbach account for less than 2.00% of the stock in this company. The dominance of the Zellerbach family was firmly established in the TNEC report. Similarly, in Union Oil of Cal. the Stewart family appears to dominate. Again, the Gross family of Lockheed Aircraft holds a little better than 2.00% of the stock of that company, at least in so far as the two Gross family members on the board are concerned. Several other cases of this type will also be noted by the reader. It was felt that for the sake of completeness a separate appendix listing corporations in which a lesser degree of concentration was noted should be added.

Listed above is the name of each corporation together with the holdings of directors (both number of shares held and shares held as a fraction of the outstanding stock). In addition, the identity of the largest shareholding is listed beneath the name of the corporation with shares held, etc. The pattern for listing references is the same as used in Appendix II. It should also be noted that the largest shareholding is almost invariably an investment company or insurance company. This largest shareholding may not, in fact, be the largest holding but rather is the largest holding that could be determined from publicly available materials.

References for part II — a) *Moody's Bank and Finance Manual, 1960*. b) Paul Moore died on Dec. 19, 1959 so that his holdings are not included in our tabulation of director's holdings. The shares which he held were subsequently sold in a secondary offering. c) *Moody's Industrial Manual, 1960;* d) *Annual Report, 1960.* e) *Annual Report, 1959;* f) Temporary National Economic Committee, Monograph No. 29, *The Distribution of Ownership in the 200 Largest Non-financial Corporations,* U.S. Government Printing Office, Washington, 1940. g) *Schedule of Securities, 1959.* h) *Annual Report, 1959.* *Note:* (D) indicates director of the corporation of interest.

Appendix I: Discussion of table VIII and computational method

The raw data for 1928 was available in the indicated source book and is reproduced intact. The 1958 data however, presented numerous difficulties. In the first place, the indicated source book contained only the *number of returns* in each dividend income size category and did not contain data on the fraction of total dividend income received by all members of each dividend income class. Fortunately, the data was presented in a manner which lent itself to a ready computation. That is, the number of returns in each dividend income class were distributed according to *gross income class.* In addition, data was also available yielding the total dividend income by all returns in each gross income class receiving dividends. The model chart below (copied directly from the indicated source book) shows the raw data as available:

Gross Income Class	Size of Dividend Income	
	Under $100	$100 under $200
$600 under $1,000	31,060	16,709
$1,000 under $1,500	42,434	22,919
$1,500 under $2,000	33,498	25,931

Naturally, this is only a small portion of the chart in the source book but it does convey the nature of the available data, e.g., 31,060 returns showed dividend income of less than $100 (but larger than zero dividend income) in the gross income class $600 to $1,000. Using the given data (including the amount of dividend income received by all dividend receiving returns in each gross income class) it is possible to compute an *average* dividend income for each entry of the chart and then form a sum according to size of dividend income to obtain the results under discussion. Since it seems likely to the author that the assumed averages for the larger income classes might be more in dispute than say the lower income classes (especially in view of the exhibited degree of concentration), reproduced below are the computed average dividend incomes for the dividend income class $100,000 or more and for gross income classes in excess of $100,000.

Gross Income Class	Assumed Average Dividend Income
$100,000 under $150,000	$119,485
$150,000 under $200,000	150,249
$200,000 under $500,000	174,741
$500,000 under $1,000,000	513,934
Above $1,000,000	1,618,223

It is my firm belief that these figures are conservative if at all in error. This opinion is based on the fact that the computation was performed in several different ways yielding results varying only slightly. The totals used are the set indicating the smallest extent of concentration. In conclusion, it should be noted that data of the sort discussed in this appendix were, at one time, normally published in the Treasury Department's *Statistics of Income* but have not been published in recent years. One wonders what information might be revealed if the Treasury Department were to resume publication of these data.

Appendix II: The compilation of directors holdings

The major source for the holdings of the more than 3,000 directorships in the sample corporations has been the *Official Summary of Securities Transactions of Officers and Directors*, Securities and Exchange Commission, published monthly since December, 1935. The method is actually very simple: one compiles a list of directors (in our case from *Poor's Register of Officers and Directors, 1960*) and searches back through old monthly SEC reports to find the most recent transaction (in our case prior to December 31, 1959). Unfortunately, the SEC has changed its publication policy over the years so that in recent times one is not always guaranteed the existence of a published report on each individual. More precisely, the SEC no longer publishes so-called "initial reports" (required when an individual becomes an officer or director for the first time). Thus, we were unable to find about 450 shareholdings in the published reports. Fortunately, one has recourse to the SEC files where almost all the missing reports were found.

While we have mentioned the reports we have not indicated how they are so useful. The report contains, under present law, a complete list of securities owned by the officer or director in the corporation in question. If the individual sells or buys shares he must report the transaction to the SEC together with his holdings following the transaction. Thus, by diligent labor it is possible to piece together the holdings of all of the directors in a given corporation as of a known date. And this is most important, that our data be entirely comparable from corporation to corporation. For this reason, December 31, 1959 was chosen as our target date. Since a few reports date back as far as the early 1950's and 1940's it has been necessary to take careful account of stock dividends and stock splits. Even for the more recent report dates such splits must be taken into account. Thus, all stock splits and stock dividends subsequent to a given report date but prior to Dec. 31, 1959 have been taken into account. In the few cases where it has been necessary to use 1960 reports we have taken into account such events during that year and have, of course, adjusted the shareholdings appropriately.

It should be noted that the report date and the publication date are quite distinct. That is, an individual may report holdings as of, say, May 1957 during early 1958. His published report may then appear in the March 1958 issue of *Official Summary...* for a transaction which took place ten months earlier. Most often a given monthly issue will contain reports concerning transactions during the previous month. Thus, we find the largest number of reports for a given month in the Jan. 1960 issue but valid as of Dec. 1959. The source for stock splits and stock dividends has been *Moody's Dividend Record*, Cumulative Edition.

Shortcomings of the data

The major shortcoming of this type of data, of course, is that one has no guarantee of finding either the largest holding in a given corporation or the control block of stock. This is because the officers and directors need not report holdings of all relatives. Further, in those cases where the controlling group is indirectly represented on the board there is no available information on the overall holding of the group. Given the aura of secrecy surrounding the identity of stockholders, this comes as no surprise. However, it is particularly annoying to find that trust holdings of banks in a corporation need not be reported if a director of the bank is a director of the corporation in question. A strict interpretation of the law, it would seem, would require the disclosure of this information. As a case of some interest concerning the existence of large blocks of stock, consider the revelations after the death of Howard Gould: it became known that his estate contained, among other things, some 300,000 shares of U.S. Steel—certainly one of the largest blocks of stock in that giant corporation. Yet, one wonders how many other blocks of this size exist. The publicly available data is too scanty to permit a full scale attack on this problem.

The other major shortcoming of the data is the possibility of errors. For example, the burden of the reporting responsibility lies with the reporting individual and not the SEC which merely publishes data. Thus, errors do appear and are subsequently corrected in later volumes of the *Official Summary* ... Of much greater importance, though, is the recent policy of the SEC to withhold publication of certain types of reports. Thus, if we rely entirely on published reports it is almost certain that errors will appear. However, it is important to have a measure of the magnitude of most errors. A careful check of widely separated (timewise) reports revealed no substantial errors. In fact the only errors amounted to less than one per cent in the number of shares held and would certainly not effect our figures on the fraction of outstanding shares owned. In summary, all of the major errors appear to yield estimates of shares held on the low side, even though when trust holdings are listed we do include holdings of this type under the individual's name. This, in spite of the fact that several persons may benefit from the trust. But because we approach the problem of control we need to know overall holdings of a family or group potentially in control of a corporation. Even in such cases there is no guarantee that all holdings are listed. Therefore the holdings shown in our tabulation are surely not all beneficial holdings but rather give some idea of the relative investment position of various individuals, families or groups.

Appendix III

We list here some eighteen corporations which must be regarded as "special cases". That is, systematic information of the type shown in our table of large stockholdings was not obtained. The reasons together with some information, are given below.

Domestic Subsidiaries of Foreign Corporations

It was felt that these corporations should be excluded from study because we are concerned primarily with the domestic pattern of ownership and control: *Shell Oil* (majority of stock owned by the Royal-Dutch Shell group of companies); *Lever Bros.* (sub. of Unilever, the giant British-Dutch chemical concern); *J. Seagram and Sons* (sub. of Distillers Corp.-Seagrams, Ltd.)

Stock Controlled by the Attorney General

General Aniline and Film (stock seized by the Alien Property custodian at the beginning of World War II as a result of the fact that I.G. Farben, the giant German cartel, owned the bulk of the stock).

The four corporations listed above have been excluded from the overall study entirely. That is, our examination of interlocking directorates and the like will not take into account these four corporations. The remaining fourteen, however, will be considered on an equal footing with the 232 corporations in which it was possible to collect data on the directors' holdings.

Corporations Controlled by Domestic Corporations

Substantially all of the stock of these two corporations is owned by only three domestic corporations with whom these corporations have an especially close relationship. For all practical purposes they may be regarded as operating subsidiaries of the parent concern: *Chemstrand* (Jointly owned by Monsanto Chemical and American Viscose); *Western Electric* (99.82% of the stock owned by American Telephone and Telegraph).

Privately Held

In these corporations no stock is publicly held. All stock is privately owned and no other individual may purchase shares in the open market: *Norton Co.*

(Stock held by descendents of the founding families including Jeppson and Higgins families); *Springs Cotton Mills* (Owned by E.W. Springs family.)

Others

In these ten corporations all or a portion of the stock is publicly held but are not listed on an exchange. Thus, the shares are traded over-the-counter usually indicating the fact that much of the stock is "closely held." Where information is available we have indicated the controlling group. Since shares in these corporations are not listed it is not possible to compile lists of the holdings of directors.

American-Marietta—Hermann family owns all class B stock equivalent to 21.8% of the voting power. See *Moody's Industrials*, 1960; *Anheuser-Busch*—Busch family holds 65% of the outstanding stock and is clearly in control. See *Life*, May 2, 1955; *Carnation Co.*—More than 50% of the stock held by E.H. Stuart family, founders of the company. See *Business Week*, Oct. 4, 1947, pp. 96ff.; *Kaiser Steel*—Kaiser Industries holds 79.97% of the stock. See *Moody's Industrials, 1960*. A majority of the stock of Kaiser Industries is held by the H.J. Kaiser family. See our table of large stockholdings; *Eli Lilly*—Non-voting class B stock is publicly held. However, the common stock, with sole voting power, is privately held by the Lilly family among others; *Lone Star Steel*— Little precise data is known. But E.B. Germany, president of Lone Star, holds about 1.50% of the stock personally and numbers among the five largest holders. See *Business Week*, March 29, 1952, p. 66. Among the institutional investors, United Funds, Inc. hold 1.30%. See *Moody's Bank and Finance Manual*, 1960; *McLouth Steel*—Until his death, D.B. McLouth was the largest holder with 12% (possibly more). Little is now known; *Sherwin Williams*—Largest holder is Cyrus S. Eaton. Other large holders are not known; *Time, Inc.*—See Nov. 1960 issue of *Fortune* for listing of all holders of more than one per cent of the stock. Included are the Luce family, Larsen family, and H.P. Davison. *Weyerhaeuser Co.*—TNEC data revealed that the Clapp, Weyerhaeuser, McCormick and Bell families held the controlling stock. The same individuals, in several cases, remain in the leadership of this company. It may be presumed that their position in the company has not substantially changed. However, the Kieckhefer family has a large holding resulting from the merger of Eddy Paper Co. and Kieckhefer Container Co. into Weyerhaeuser. The Kieckhefers have representation on the board of directors.

Appendix IV

Listed below are 21 holding companies which play an important role in the control of some of the corporations under study. In each case we attempt to identify the largest stockholding interests. We have also indicated the corporations in which the company in question holds important blocs of stock. The pattern used in this listing is the same as used in the table of large holdings in the sample corporations. Namely, where a date is indicated we refer to the published monthly reports of the *Official Summary* ... mentioned previously. Other references are noted by letters of the alphabet with a complete list of these references given at the end of this appendix. Finally, we indicate the per cent of voting common stock held as of Dec. 31, 1959 as well as the number of shares held by each of the presumably important stockholders.

American Manufacturing Co. (owns 18.25% of Merganthaler Linotype, see below)			
Webster Investors	161,234	34.46%	a
Century Investors	59,320	12.68	a
G.W. Wattles	53,800	11.50	b
Central Securities Corp. (owns 7.20% of Mack Trucks)			
C.A. Johnson	269,511	31.90%	1/60
Century Investors (owns 37.8% of Webster Investors, see below; 12.68% of American Mfg. Co., see above; 1.05% of Merganthaler Linotype, see below)			
G.W. Wattles	88,930	59.27%	2/51
Robert Pulleyn	4,500	3.00	10/49
W.W. Cohu	2,000	1.33	9/51

Christiana Securities Corp. (owns 26.63% of E.I. du Pont de Nemours)			
Delaware Realty & Invest	49,000	32.67%	10/52
Irenee du Pont	7,301	4.87	1/51
W.S. Carpenter, Jr.	1,643	1.10	1/52
6 other directors	2,483	1.65	c
Coca Cola Int'l. Corp. (owns 27.27% of Coca Cola Co.)			
Woodruff Foundation	21,558	14.53%	9/59
Piedmont Securities Co.	14,344	9.67	4/51; d
Winship Nunnally	2,580	1.74	12/59; e
Delaware Realty & Investment (owns 2.66% of Du Pont and 32.67% of Christiana Securities Corp., see above)			
H.B. du Pont	72,300	10.62%	12/50; f
Lammot du Pont Copeland	52,299	7.69	1/60; f
S. Hallock du Pont	23,482	3.45	2/58; f
W.W. Laird	17,737	2.61	5/58; f
W.K. Carpenter	16,250	2.39	2/51; f
Irenee du Pont, Jr.	14,887	2.19	1/57; f
Pierre S. du Pont, 3rd	5,095	0.75	8/59; f
Sharp family trust	85,000	12.50	12/50; f
Eastern States Corp. (owns 8.55% of St. Regis Paper)			
R.K. Ferguson	164,621	28.78%	9/59; f
Getty Oil Co. (owns 14.35% of Tidewater Oil; 58.55% of Mission Development Co., see below; 49.54% of Mission Corp., see below)			
J. Paul Getty	---	79.05%	a
Hammermill Paper Co. (owns 6.4% of Rayonier, Inc.)			
D.S. Leslie	32,158	2.60%	1/56
N.W. Wilson	30,576	2.48	10/58
10 other directors	29,604	2.41	c
M.A. Hanna Co. (owns 25.11% of Consolidation Coal; 26.65% of National Steel Corp.)			
Class B (voting stock)			
G.H. Love	23,871	2.32%	10/51
G.M. Humphrey	23,000	2.23	9/52
R.L. Ireland	11,445	1.11	10/51
10 other directors	10,060	0.98	c
Hanna family (min. est.)	40,000	3.88	g
Mather Iron Co. (owns 15.90% of Interlake Iron Co.)			
Privately held, probably by members of Mather family, among others.			
Merganthaler Linotype (owns 24.20% of Electric Auto-Lite)			
American Manufacturing Co.	106,420	18.25%	12/59
Webster Investors	68,125	11.65	12/59
Century Investors	6,137	1.05	12/59
Mission Corp. (owns 59.38% of Skelly Oil; 3.47% of Tidewater Oil)			
Getty Oil Co.	---	49.54%	a
Mission Development Co. (owns 47.73% of Tidewater Oil)			
Getty Oil Co.	---	58.55%	a
Missouri-Kansas Pipe Line Co. (owns 12.96% of Panhandle Eastern Pipe Line Co., see below)			
Common (elects, as a class, four of seven directors)			
W.G. Maguire	74,134	18.22%	10/51
SOFINA (Belgium)	73,794	18.13	11/51
A.G. Logan	8,470	2.08	5/54
Class B (elects, as a class, three of seven directors)			
W.G. Maguire	146,037	36.49%	10/52
Newmont Mining Co. (owns 4.61% of Continental Oil; 2.92% of Phelps Dodge Corp.)			
Boyce Downey	51,025	1.80%	11/59
Theodore Schulze	41,764	1.48	10/60
11 other directors	21,538	0.76	c
Margaret Thompson Biddle	288,744	10.22	6/56
Mass. Investors Trust	138,000	4.89	h
Continental Insurance Co.	80,000	2.83	i
Panhandle Eastern Pipeline (owns 14.44% of National Distillers and Chemical Corp.)			
Missouri-Kansas Pipe Line Co.	819,040	12.96%	j
Portsmouth Corp. (owns 17.15% of Cleveland-Cliffs Iron Co.)			
C.S. Eaton	82,377	7.59%	2/58
D.G. Baird	28,233	2.60	2/59
W.R. Daley	27,117	2.50	3/58
M.J. Zivian	21,000	1.93	10/59
F.A. LeFevre	10,000	0.92	8/59
Eaton-LeFevre holding cos.	35,400	3.26	2/58
Reynolds Corp. (owns 2.96% of Reynolds Metals)			
U.S. Foil Co.	---	53.50%	a
U.S. Foil Co. (owns 47.36% of Reynolds Metals; 53.50% of Reynolds Corp., see above)			
Reynolds family owns all outstanding voting stock. However, non-voting class B stock is publicly held.			
Webster Investors (owns 11.65% of Merganthaler Linotype and 34.46% of American Manufacturing, see above)			
Century Investors	100,900	37.79%	10/58
G.W. Wattles	76,330	28.60	10/58
Everett Meyer	10,000	3.75	10/58

References a) *Moody's Industrials*, 1960. b) *Fortune*, May 1960, p. 226. c) Various reports in *Official Summary* ... d) Piedmont Securities Co. is believed to have been dissolved. The fate of these shares is not at all clear. However, this holding company is known to be the property of the Woodruff family which is obviously the important family in Coca Cola Co. e) Based on reported proportionate ownership of Coca Cola Co. shares through Coca Cola Int'l. Corp. f) Based on estimate of 680,000 outstanding shares. g) Based on reported holding of L.C. Hanna, Jr. in 1/49. h) Includes holding of Mass. Investors Trust and Mass. Investors Growth Stock Fund. See *Moody's Bank and Finance Manual*, 1960. i) *Annual Report*, 1960. j) *Moody's Public Utilities*, 1960. It is stated in this reference that this holding represents control.

The third part of "Stock ownership and the control of corporations," discussing the individuals who control the corporations studied and analyzing the relationship of these men to the institutions they control, will appear in the next issue of New University Thought.

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Stock ownership and the control of corporations: part III

by Don Villarejo

Editors' comment: We here present part three of a New University Thought *research project by one of the editors of the magazine. Parts one and two of this study, which appeared in the previous issue, discussed stock ownership in general and the problem of control. This material is presented with the view that an analysis of the large corporations and the individuals prominent in them is necessary for an understanding of contemporary American society. Don Villarejo, author of "American investment in Cuba" which appeared in the first issue of* New University Thought, *is a graduate student in physics.*

In Parts I and II of this study we placed heavy emphasis on the identification of large stockholdings in a group of major corporations. We were interested in the distribution of stock ownership in general as well as in the 232 industrial corporations chosen for detailed study. The major results were summarized in tabular form and presented together with the body of our report. In Part III of this study we shall be concerned with the individuals who hold these shares as well as with certain key figures in the economic power structure. More precisely we shall study the characteristics of the directors of these corporations. In addition, we shall expand the concept of "community of interest" as first stated in Part II of this study to include phenomena other than mere *individual* pecuniary interests.

At the outset certain technical points need mention. First, we shall refer to the 232 corporations chosen for study as the *sample* corporations. The interested reader is referred to Appendices I and II of Part II of this article.[1] Second, an individual has been regarded as a director of a sample corporation if he was a director on December 31, 1959.[2] Thus, in keeping with the method of Parts I and II of this article we seek data valid as of a known date for each of the sample corporations. This is especially important when dealing with individuals serving as directors of corporations because of the rather large turnover of directors (due primarily to deaths, retirements and the like). Third, when we refer to an individual's shareholding or the market value of his holding we mean data valid as of December 31, 1959.

The board of directors

As we have indicated in Part I of this study, the corporate board is elected by the shareowners of the corporation. In theory, the board selects the management which in turn operates the company. Thus, the corporate board is the key instrument of the corporate power structure, for it is the board that bridges the gap between those who own property and those who operate it. As such, it is hardly surprising to find many substantial property holders serving on the corporate board. But are property owners the only ones who serve as directors? Actually not, as we shall see. In addition to property owners, we find lawyers, commercial bankers, investment bankers, insurance company executives, educators, corporate executives and many others serving on the boards of the sample corporations (we even find a sprinkling of retired generals and admirals as well as the former president of the Farm Bureau Federation). In order to grasp the complexities of the corporate power structure let us turn to an examination of these various types.

1. *Propertied Rich:* In this category we find those directors with a large and continuing stockholding in one or more of the sample corporations. By "large and continuing" we mean inherited or otherwise acquired holdings which grant the owner a measure of control. Specifically excluded are persons employed by the corporation in executive capacities who have acquired large holdings during the period of their employment. In Part II we encountered an example *par excellence* of what we mean by "propertied rich," namely Richard K. Mellon, whose holdings in the sample corporations exceeds $425 million. Another example is William du Pont, Jr. who owns 1,269,488 shares of E.I. du Pont de Nemours and Co. with a market value of $335 million.[3] We also include as propertied rich those members of wealthy families serving as directors though their personal holdings may be comparatively small. A good example is provided by P. S. du Pont, III, whose holdings in du Pont amount to only 3,864 shares (market value of a little over $1 million).[4]

A second category of propertied rich is that of directors without enormous holdings in the sample corporations but who have large holdings in other corporations. An example of this type is furnished by Allan P. Kirby who is a director of International Telephone and Telegraph Corp. and who owns 38,783 shares of IT&T (market value $1.5 million). However, Mr. Kirby also owns 300,100 shares of the New York Central Railroad Co., some 363,185 shares of F.W. Woolworth Co. and more than 1,000,000 shares of the Allegheny Corp. In sum his holdings are worth nearly $300 million.[5] Clearly, such persons number among the propertied rich though the bulk of their holdings are not in the sample corporations.

It is evident that those who enjoy a position among the propertied rich serve as directors in the sample corporations as a direct consequence of their ownership of property. In fact, many of these directors are decendents of the persons who launched these great enterprises and they continue, as a result of their inherited wealth, to represent their families' interests. It is no surprise, therefore, to find Firestones, Fords, Mellons, du Ponts, Rockefellers, Dows, Heinzes and the like in this group.

2. *Investment Bankers:* The individuals termed investment bankers are those directors who are partners in one or another of many investment banking houses which raise new capital for the giant enterprises. We include brokers and dealers in this category as well. A typical case of an investment banker is provided by C.B. Harding, a senior partner in the

well known firm Smith, Barney and Co. Mr. Harding is also a director of both Cerro de Pasco Corp. and Scott Paper Co.

An investment banker may serve as a corporate director in one of several capacities. First, he may represent substantial holdings by the banking firm itself, by one of the firm's other partners, or by clients. Second, and more often, he represents the firm's connection to the money market. That is, the banker may represent a firm that handles all stock and bond offerings when the corporation in question needs new capital. A third, and much less obvious function is closely related to the first: a banker may represent financial interests with important stakes in the corporation which he serves as a director. An example of this type follows. In discussing the recent management changes at Studebaker-Packard Corp., *Fortune* magazine commented in passing:

"*In the reorganization, Harold Churchill, a long-time Studebaker engineer who had been president under Hurley, became chief executive,* though the real control was now in the hands of the New York bankers."[6]

If we examine the board of directors of Studebaker-Packard we find that J. R. Forgan of Glore, Forgan and Co. and F.J. Manheim of Lehman Bros. serve as representatives of these controlling interests.

3. *Commercial Bankers:* In this category we find officers of the nation's great commercial banking houses. Commercial bankers are found on corporate boards less frequently than are investment bankers. A case of this type is provided by H.C. Alexander, Chairman of the Board of Morgan Guaranty Trust Co. and a director of the following corporations in the sample group: American Viscose, General Motors, Johns-Manville, Standard Brands.

While commercial bankers are often preoccuppied with deposits (note that a giant industrial corporation means millions of dollars in deposits for some commercial bank), many commercial bankers serve as corporate directors in their role as fiduciaries. That is, since the trust departments of these giant banks act as trustees for $66 billion worth of common stock, the banker actually represents a large stockholding over which he is bound to be concerned.[7]

4. *Lawyers:* In this category we find the partners of the handful of law firms which handle the legal matters of many of the large corporations. Also we find more "independent" lawyers, i.e., those not connected to one of the large law firms. Deliberately excluded are "inside" lawyers, i.e., those who are essentially employees of the corporation. An example of the first type is provided by D.B. Steimle, a partner in the law firm Shearman and Sterling and Wright. Mr. Steimle is a director of Air Reduction Co. and his firm is general counsel for that corporation. Thus, the corporation lawyer brings his special skills to the corporate board just as the investment banker brings his.

Another category of lawyers is provided by those who serve as trustees of large estates. Thus, C.M. Robertson, a director of J.I. Case (and also a member of the Case board's executive committee) serves as trustee for several estates, amongthem the following: Estate of Charles L. McIntosh, Estate of Anne Hamilton McIntosh, Estate of H.A.J. Upham, and others.

In this capacity, the lawyer is representing property.

5. *Insurance Company Executives:* These are officers of the major life and property insurance companies. Since the giant insurance companies not only hold common and preferred stock of many of the sample corporations, but also hold large portions of the bond issues of these same enterprises, it is hardly a surprise to find their executive officers among the directors. Furthermore, it appears as though insurance companies (with millions to invest every week of the year) are rapidly increasing their holdings of common stock in many corporations.

To grasp the indebtedness of certain corporations to the giant insurance companies we may take the example of the Prudential Insurance Company of America which holds, among its more than $5 billion in industrial bonds, notes for $126 million and $150 million from the Olin Mathieson Chemical Corp. and Union Carbide Corp. respectively. Simultaneously, we note that C.M. Shanks, President of the Prudential, holds a directorship in Union Carbide. The presence of insurance company executives on the boards of the sample corporations is a reflection of the growing role of insurance companies as a source of capital.

6. *Local Businessmen:* These directors are important businessmen in communities where their corporations have major plants. Thus, J.T. Wilson, Chairman of the Board of the First National Bank of Kenosha, Wisconsin, is a director of the American Motors Corp. which has its giant Rambler plant in Kenosha.

Evidently, such directors serve more as a matter of what we might call prestige, than in a functional capacity. But, quite often, the local businessman is an important link to the community in which the corporation operates, serving some purpose in this way.

7. *Corporation Executives (corporations in sample, CS):* In this category we find the many executives of the sample corporations who also serve as directors of the corporation which employs them. Most often, these persons have been employed by "their companies" for the bulk of their business careers. In some cases, they may actually have built up sizable shareholdings in the corporations. However, such persons, even though they are now wealthy, began their careers without the advantage of large property holdings. These persons are the true members of the so-called managerial class. Their median income is probably in excess of $70,000 annually and though they are building up big holdings they are by and large dependent on a salary income.

8. *Corporation Executives (corporations not in sample, CNS):* In this category we have those professional executives who, while directors of one or more of the sample corporations, are also executive officers of one of the major non-financial corporations not included in our sample. Thus, F.C. Brown, President of Schering Corp., is a director of ACF Industries. The function of such executives on the boards of sample corporations is not at all clear. It is significant, however, that we find cases of important suppliers having representation on the boards of their purchasers and vice versa.

Again, certain executives represent large holdings of stock in the sample corporations while others provide counsel on special matters of current interest to the corporation.

9. *Former Officers:* Included are retired executives of the sample corporations as well as a handful of persons from non-sample corporations. Often, their directorships are a kind of token honor for concluded careers with the company. In other cases they undoubtedly provide counsel either to management or to the board.

10. *Miscellaneous:* We find here all those who cannot be placed in any of the preceding categories. In particular, we find educators such as F.L. Hovde, President of Purdue University and a director of both General Electric and Inland Steel; we find retired army officers such as General Douglas MacArthur who is Chairman of the Board of Sperry Rand; we find public relations experts such as Stanley Resor who is a director of Scott Paper and also chairman of J. Walter Thompson. While certain of these types have special functions in respect to the ordinary activities of the corporation, some are simply directors because of their contacts (Who in the Pentagon would turn away from a retired general who comes to promote the latest in military hardware?) or because of their prestige value.

However, a separate group deserves special mention and attention. These are the persons who while not large property owners themselves, merely represent the holdings of certain individuals or families. An example is in order: J.M. Kingsley is the president of Bessemer Securities Corp. To the ordinary citizen, this organization might appear to be some kind of corporation specializing in investments. He is quite correct, but he is off target. In fact this company is the literal nerve center of one of this nation's major family fortunes: Bessemer Securities Corp. is a private holding company for the Phipps fortune. Owning property worth $300 million, the company is popularly known as the "office" among members of the clan. The "office" handles *all* family finances for the seventeen separate families of the current Phipps generation. If a family member wants to buy a yacht, he has the office write out a check and handle the details. More important, the office is actually a network of more than seventy-five enterprises designed to take advantage of every possible tax loophole. Moreover, the stock of Bessemer Securities is held in trust by another Phipps family agency, the Bessemer Trust Co. In the words of *Fortune*:

"The corporate structure of Bessemer Securities was complicated in the extreme, embracing seventy-six or more subsidiary enterprises organized for tax purposes or special projects, but in essence it was the money machine for Bessemer Trust Co., the family trust." [8]

Such are the measures taken to preserve property intact through the generations of propertied rich.

Analysis of directors

Now that we have a firm idea of the types of individuals serving as directors of the sample corporations as well as an understanding of their functions on the board, we turn to an analysis of the 2,784 individuals who occupy directorships in these companies. Presented in Table I is the distribution of these individuals according to the categories outlined above.

Table I: Distribution of directors in sample corporations

Category	Number of Individuals
Propertied Rich	520
Investment Bankers	134
Commercial Bankers	100
Lawyers	118
Insurance Company Executives	24
Local Businessmen	78
Corporation Executive (CS)	1,240
Corporation Executive (CNS)	149
Former Officer	246
Miscellaneous	75
Undertermined	100

Explanatory note: As previously indicated we have included only individuals who were directors of the sample corporations on December 31, 1959. In making the classification indicated we have used the annual reports of the corporations as well as Standard and Poor's *Register of Officers and Directors*, 1960 and *Who's Who in Commerce and Industry*, various years. The last category, "undertermined", represents the 100 persons for whom it was impossible to find sufficient biographical data to permit classification. Also, if there seemed to be any ambiguity of classification we placed the individual in this category.

Perhaps the most obvious feature of this distribution is the rather large number of active and retired executives. Indeed more than one-half of all persons were of one of these two types. This is a reflection of the professionalization of management, a subject which has been the topic of much discussion in recent years. As industrial corporations grew and developed in complexity, more skilled persons were required to keep affairs running smoothly. Moreover, the rapid technological developments of this century have placed greater demands on the management of large concerns. Decisions based on technical understanding became more frequent and the demands on management increased in direct proportion. Thus, a very large fraction of these executives rose through the ranks as specialists of one sort or another. Of course, there are quite a few old-fashioned bureaucrats in this group as well. Nonetheless, it seems apparent, to the author at least, that this trend to professionalization will continue, particularly as automation takes hold.

No less important than the executives, and perhaps more important, we find that nearly one-fifth of the sample group are members of the propertied rich. That is, those who hold large blocks of stock in many of the sample corporations participate actively in the formulation of basic policy. Of the 520 in this category, no less than 197 *also* serve as executives of the corporations in which their interests are located (we include chairman of the board in this category). Thus, in our sample, roughly two-fifths of the propertied rich participate as management in addition to being directors of the given corporation. At this point we should also note that exactly 50 of this group are persons whose property holdings are in corporations not in the sample group. Thus, the fraction of propertied rich who actively participate in management is actually somewhat larger than 40 percent.

A fact of equal interest is that 376 directors are genuine "outsiders" in that they represent established centers of interest outside the sample group. We refer to various bankers, lawyers and insurance company executives who bring special skills to the board or represent large investments. At this juncture we also note that 21 persons in the miscellaneous category are simply representatives of large individual property holders. With this in mind let us turn to an examination of the market value of holdings of the directors. The basic data is summarized in Table II.

Table II: Distribution of directors' holdings by market value

Size Class	Category of Director									
	I	II	III	IV	V	VI	VII	VIII	IX	X
$10,000,000 and above	99	0	0	0	0	0	0	1	0	3
$5,000,000-10,000,000	68	0	0	0	0	0	0	5	0	13
$1,000,000-5,000,000	198	3	8	2	0	2	3	37	1	110
$500,000-1,000,000	52	10	16	6	0	1	5	25	2	152
$100,000-500,000	50	33	33	18	5	17	12	78	27	445
Under $100,000	45	72	74	69	19	56	55	96	113	487
Unknown	8	0	3	5	0	2	0	4	6	30

Note: Shown are the number of persons with reported holdings in the indicated market value size class distributed by the category in which we have classified the director. No usable market value data could be found for 58 individuals of the sample group. Further, we have not shown the 100 persons not classified in the indicated categories (called "undetermined" in Table I). The key to the category symbols follows: 1 - Propertied Rich; 2 - Lawyers; 3 - Investment Bankers; 4 - Commercial Bankers; 5 - Insurance Co. Executives; 6 - Local Businessmen; 7 - Miscellaneous; - 8 - Former Officers; 9 - Corporation Executives (CS); 10 - Corporation Executives (CNS).

From the table we immediately see certain facts. First, 99 of the 103 persons with holdings in excess of $10 million in the corporations in which they are directors, are in the category propertied rich. This statement is nothing more than an expression of the fact that the propertied rich are rich indeed. Further, we observe that in all categories other than propertied rich, the distribution of holdings is sharply peaked at the lower end of the market value spectrum, that is, in these other categories the individuals have rather small holdings (though a holding of $100,000 must be considered large by any measure). Further, we find that these 99 propertied rich, each with holdings in excess of $10 million, own $5,173 billion worth of stock as compared with $7,128 billion for *all 2,784 directors.*[9] *Thus, these 99 hold 72.56% of the total value of stock held by all directors.* That this represents an enormous concentration of holdings should be obvious to all. But, further, if we take into account the holdings identified in Part II of this study which include shares owned by other non-director family members, trusts not included in the directors' totals and stock held by these directors in sample corporations in which they are not directors, then we find an additional $7,309 billion held by the propertied rich. In sum, this total of $14,437 billion for all directors represents 6.11% of all the outstanding common stock of all 232 sample corporations. Of this total a little over $13 billion represents holdings of the propertied rich alone. Moreover, if we now take into account the enormous amount of stock in certain holding companies, as well as stock held in bank-administered trusts that we were able to identify and, finally, stock held by sample corporations where the controlling interest is apparent, the sum reaches nearly 12% of the outstanding market value of common stock in our sample. This excludes the holdings of the insurance companies, investment companies (open-end), and the great bulk of the shares in bank-administered trusts and estates. The total figure is of course one of the great "unknowable" statistics in this field of inquiry. But the fact that such a large fraction of stock is so readily identifiable forces one to wonder just how much other stock is in the hands of the proportied rich, or controlled by them.

Because of the importance of the 99 very rich, we have included an appendix listing the holdings of these persons at the end of the body of this article.

In conclusion, then, we find various types of directors holding positions on the boards of the sample corporations. The majority of these persons are professional executives, but the propertied rich control the bulk of stock held by directors. Further, we find that a rather large fraction of the outstanding common stock of these corporations is controlled by those we term propertied rich.

Interlocking directorates

In Part II of this study we mentioned the phenomenon of interlocking directorates but postponed discussion of this important aspect of the inquiry. It is appropriate to take up this subject here.

"Interlocking directors" simply means that a single person holds directorships in two or more of the sample corporations. We must also take into account the presence of bankers and insurance company executives on the boards of the sample corporations, but for the present we shall limit ourselves to interlocks among the sample corporations and between sample corporations and financial corporations. This material could be presented in several ways. First, we might simply enumerate the various interlocks we find. However, the mere enumeration of this data would certainly fill the pages of this magazine, and then some. As a workable, and certainly more interesting alternative we shall confine ourselves to comments on some general features of interlocking directorates and then study a few simple cases in some detail.

First, we observe that the 3,196 directorships in the sample corporations are held by only 2,784 persons. Hence, a number of persons hold two or more seats in the sample corporations. More precisely, 303 individuals so interlocked hold 712 seats on these corporate boards. Of these, 221 hold two seats, 56 hold three seats and the remaining 23 hold four or more seats. But the really interesting result is that 65 of the interlocked persons are among the propertied rich, 79 among the corporate executives (CS) and 53 are among the groups of investment and commercial bankers and insurance company executives. Together, the propertied rich and financial interests account for more than one-third of interlocked individuals. A result of even greater importance is the fact that 31.86% of the individuals considered (we now refer to all 2,784 directors) are somehow interlocked with one or more banks, insurance companies, investment companies (both closed and open-end variety). In other words, nearly one-third of the total number of individuals serving as directors in the sample corporations are in personal contact either with banking interests or with those interests representing large holdings.

Let us now consider a few examples in some greater detail and attempt to shed further light on why interlocks occur. A first example is that of J.H. Phipps who holds directorships in W.R. Grace and Co. and Ingersoll-Rand Corp. In this case, Mr. Phipps is representing large family holdings in both corporations. Moreover, the Phipps family is intermarried with the Grace family so that we find J.P. Grace, a director and president of W.R. Grace and Co., on the board of Ingersoll-Rand and, in fact holding a large bloc of stock in both corporations. While intermarriage brings a new dimension to the discussion, we observe that these persons represent overlapping family financial interests, and this is the basis on which they hold several directorships in the sample corporations.

An equally significant example is provided by William Ewing, a general partner of the investment banking firm Morgan, Stanley and Co. Mr. Ewing is a director of American Can Co., American Viscose Co. and J. I. Case Co. All three companies are generally regarded as being allied with the so-called Morgan interests (a group centered about the financial and industrial enterprises built by J.P. Morgan). Morgan, Stanley and Co. was created in the early 1930's representing the Morgan solution to the new laws divorcing investment banking from commercial banking. This divorcement decree was pushed through by the new deal as a direct consequence of the great market crash of 1929. The Morgans' response was to divide their forces between J.P. Morgan and Co., the commercial bank (since merged with Guaranty Trust Co., another commercial bank in the Morgan group), and Morgan, Stanley which was to be the investment bank. H.S. Morgan is a general partner in Morgan, Stanley and Co. while the other descendent in this generation, J.S. Morgan serves as a director of Morgan Guaranty Trust Co. The presence of Mr. Ewing on the boards of American Can, Viscose, and Case is a reflection of the continuing Morgan interest in these enterprises. At this point we note with some interest that J.S. Morgan serves as a director of American Can's major rival, the Continental Can Co.

Let us now consider the connections of a specific corporation in detail. In particular we study the giant General Electric Co.'s relationship to major financial institutions. In Table III are listed the directors of GE together with some of their directorships in financial corporations.

Table III: Financial interlocks of directors of General Electric

Name	Company
S.S. Colt	Bankers Trust Co. Mutual Life Ins. Co. of New York
D.K. David	Ford Foundation, Vice-Chmn.
C.D. Dickey	Morgan Guaranty Trust Co. New York Life Ins. Co.
John Holmes	Continental Ill. Bank & Trust Co.
G.W. Humphrey	National City Bank of Cleveland M.A. Hanna Co.
J.E. Lawrence	State Street Investment Co.
G.H. Love	Mellon National Bank and Trust Co. M.A. Hanna Co.
G.G. Montgomery	Bankers Trust Co. American Trust Co.
H.S. Morgan	Morgan, Stanley and Co.
R.T. Stevens	Mutual Life Ins. Co. of New York
R.W. Woodruff	Morgan Guaranty Trust Co. Metropolitan Life Ins. Co.
Remaining directors (without major financial interlocks)	
Henry Ford II	Ford Motor Co. (Pres.)
F.L. Hovde	Purdue University, Pres.
T.B. McCabe	Scott Paper Co., Pres.
N.H. McElroy	Procter and Gamble, Chmn.
R.J. Cordiner	Chmn. of GE
Robert Paxton	Pres. of GE.

Aside from the fact that the GE board of directors is graced by two former secretaries of major government bureaucracies (McElroy is a former Secretary of Defense, Stevens a former Secretary of the Army), we see that certain financial interests have considerable representation on the top levels. Two directors of Morgan Guaranty Trust, two directors of Bankers Trust Co., a partner in the firm Morgan, Stanley and Co., give the Morgan interests five seats. If we also recognize the fact that the Stevens family of J.P. Stevens and Co. is closely allied with the Morgan group, then the Morgan group enjoys one-third of GE seats. Since this giant corporation was launched by J.P. Morgan himself, it is not surprising to find that his interests still have considerable representation.

In addition, investment companies, other banks and life insurance companies are interlocked with the GE board. If we recall from Part I of this study that more than 20% of GE common stock is held in the trust departments of major banks, then the fact that so many directors of that corporation are connected with these financial institutions comes as no real surprise.[11]

Let us now turn to a case that seems to be quite different. As we have noted, the Rockefeller family continues to hold large blocs of stock in the Standard Oil companies. But no member of the family serves as a director of any of these companies. However, David Rockefeller serves as vice-chairman of the giant Chase Manhattan Bank (in which the Rockefeller family holds roughly 5% of the outstanding stock, David himself holding 135,756 shares of Chase Manhattan).[12] It is therefore of more than passing interest that Eugene Holman, Chairman of the Executive Committee of Standard Oil Co. (New Jersey) and F.O. Prior, Chairman of the Board of Standard Oil Co. (Indiana) are also Chase Manhattan directors. In this case, unlike the GE situation, the executives operating the oil companies sit as directors of Chase Manhattan at the nerve center of an important and wealthy family's operations.

At this point we can begin to see a pattern in the network of interlocking directorates. That is, alliances among the various corporations considered (both sample corporations and financial corporations) fall into a definite pattern based on *financial* connections. One also begins to see that certain groups or centers of interests appear. Rockefellers, Morgans, Mellons, du Ponts and the like each have little empires that close among themselves. On the other hand, this is by no means always the rule. It is equally clear that a large fraction of the companies considered may well be loosely allied to an existing power center and yet each of these enterprises has a power structure of its own. Consider the example of H.J. Heinz Co. which has been shown to be under the control of the Heinz family (recall that the Heinz family holds roughly 76% of Heinz stock), and yet H.J. Heinz II is a director of Mellon National Bank and Trust Co. (center of the Mellon power structure). Furthermore, J.A. Mayer, President of Mellon National is also a director of H.J. Heinz. Thus, the Heinz family is allied with the Mellon interests. But the power in H.J. Heinz is the Heinz family and not the Mellon family.

As our final example, let us try to get some feel for what is meant by a center of power by examining an outstanding instance in detail: the Mellon "group" of companies. This great fortune was founded by Thomas Mellon, a banker who made his money through shrewd and often ruthless dealings. Thomas Mellon was the father of Andrew W. Mellon and Richard B. Mellon. The four elders of the present Mellon clan are Richard K. Mellon, Paul Mellon, Mrs. Allan Mellon Scaife and Mrs. Ailsa Mellon Bruce. R.K. Mellon and Mrs. Scaife are the children of Richard B. Mellon while Paul Mellon and Mrs. Bruce are descendants of Andrew W. Mellon (Richard B. Mellon's brother). A *Fortune* survey of large American fortunes in 1957 indicated that all four of the current Mellon elders had personal fortunes in the range of $400 million to $700 million.[13] Our research indicates that this estimate is valid. In addition to these holdings, the children of these four persons have extensive holdings of their own (usually in the same companies: Gulf, Alcoa, etc.) In sum, the holdings of all family members is probably in the range of $3.5 billion.[14]

The major financial centers of Mellon power are two: Mellon National Bank and Trust Co. (eleventh largest commercial bank in the country), and T. Mellon and Sons (an investment management firm). Both Paul Mellon and Richard K. Mellon are directors of both concerns (Richard K. Mellon is chairman of Mellon National Bank and president of T. Mellon and Sons). In addition, Richard Mellon Scaife is a director of

Mellon National Bank (the Scaife family controls Scaife Co., a privately held, Pittsburgh-based industrial concern).

Thus, Mellon National and T. Mellon and Sons, is the core of the Mellons' power. Let us see the extent of Mellon influence. On the board of Mellon National we find directors of the following corporations in the Mellon group (the number in parentheses indicates the number of common directors):

Allegheny Ludlum Steel	(1)
Aluminum Co. of America	(4)
Consolidation Coal	(3)
Crucible Steel	(1)
Diamond Alkali	(2)
H. J. Heinz	(2)
Gulf Oil	(4)
Jones & Laughlin Steel	(4)
Koppers Co.	(3)
Pittsburgh Plate Glass	(3)
Pullman, Inc.	(1)
Westinghouse Air Brake	(4)
Westinghouse Electric	(5)

In addition, A.B. Bowden (Vice-President of Mellon National) is a director of Allegheny Ludlum Steel, I.N. Land (Senior Vice-President of Mellon National) is a director of Crucible Steel, A.V. Davis (director emeritus of Mellon National) is honorary chairman of Alcoa, and W.C. Robinson (also director emeritus of Mellon National) is a director of Westinghouse Electric.

Of equal importance, we find that these interlocked directors have themselves or represent large holdings in their respective industrial corporations. Thus a Mellon National director, R.F. Evans, chairman and president of Diamond Alkali, holds 171,740 shares in that company (equivalent to 5.90% of the outstanding common stock).[15] His brother, not a director of Mellon National, holds 113,267 shares of Diamond Alkali (3.91%).[16] H.J. Heinz II holds the position of chairman of H.J. Heinz Co. and holds 21.83% of the stock of Heinz.[17] Also, B.F. Jones III holds 40,750 shares of Jones and Laughlin Steel and, like H.J. Heinz, is a director of Mellon National.[18] Overall, the related Jones and Laughlin families hold roughly 14.15% of their namesake company.[19] Again, R.A. Hunt, chairman of the executive committee of Alcoa, holds 857,796 shares in that company (4.07%) and serves on the Mellon National board of directors.[20] Finally, W.P. Snyder, Jr. serves as a director of Crucible Steel (he is a member of the executive committee of the board of directors) and is also a Mellon National director. The importance of this relationship is seen when we realize that Shenango Furnace Co. (of which Mr. Snyder is chairman and which is controlled by the Snyder family) holds an estimated 132,000 shares of Crucible.[21] Thus, the propertied families allied with the Mellon interests have representation on the big bank.

If we examine the fiduciary services provided by Mellon National for this group of companies, we find that only Westinghouse Electric does not have its fiduciary services performed by the big bank. This is because the giant electric equipment firm is thought to be under the joint control of several "groups" and the Mellons are only partners in sharing control with others. In addition, First Boston Corp. (in which R.K. Mellon and Mrs. Scaife hold 112,500 shares) [22] underwrites the bond issues or stock issues of Jones and Laughlin Steel, Alcoa, and Gulf Oil.

It is, of course, difficult to convey the full extent of the power represented in the control of these corporations. But their combined assets total in the billions of dollars, they employ hundreds of thousands of persons and are key companies in oil, steel, aluminum, coal, glass, chemicals as well as electrical machinery.

One step away from the Mellon group itself, we find connections to other industrial corporations in our sample. In addition to the Mellons, the second important interest group in Consolidation Coal is the Hanna group which controls some 28% of this largest coal company in the United States.[23] Now Hanna also controls National Steel and has important investments in Texaco and Phelps Dodge. Moreover, G.H. Love, Chairman of both M.A. Hanna Co. and Consolidation Coal is a director of both National Steel and Mellon National. B.F. Fairless, former chairman of U.S. Steel is also on the Mellon board of directors. Thus, the nation's giant steel companies have representatives on the Mellon National board.

Finally, we are able to discern relations with other major centers of power. We observe that the Phipps family has a holding of 156,000 shares in Mellon National itself and a holding of roughly 800,000 shares of Gulf Oil.[24] Again, Remington Arms (a majority of this company's stock is held by E.I. duPont de Nemours) [25] holds 150,000 shares of Crucible Steel [26] Another important interest in Remington Arms is M.H. Dodge who owns 674,074 shares of that company and who married Geraldine Rockefeller, daughter of William Rockefeller (brother of John D. Rockefeller).[27] The descendents of William Rockefeller are believed to hold controlling shares in the First National City Bank of New York (indeed, J. Stillman Rockefeller is Chairman of the Board of First National City).

The giant Cleveland-Cliffs Iron Co. holds 170,719 shares of Jones and Laughlin Steel (H.S. Harrison, a V.P. and director of Cleveland-Cliffs holds a directorship in Jones and Laughlin Steel to represent this holding).[28] Since Cleveland-Cliffs holds large blocs of stock in Inland Steel, Youngstown Sheet and Tube, and Republic Steel, this means that continuous relationships exist between Mellon National and all of the major steel companies except Bethlehem Steel. It is clear that if one digs deeply into the facts of the situation, one finds relationships to many other interests (in the case of Cleveland-Cliffs it is the Eaton-Mather Wade families who have connections to the Mellon group). In summary then, we find definite connections of the Mellon group not only among companies within their immediate sphere of influence, but also to other major financial and industrial interests.

In this brief sketch of the problem of interlocking directorates we have tried to give a general characterization by example rather than a thorough and formal analysis. Our conclusions, however, are based upon much more data than has been presented here; the author can make a detailed statistical analysis available to interested persons. To conclude: we find extensive interlocking directorates between sample corporations and various financial corporations. These interlocks often indicate a pattern of connection through financial entities to certain centers of power.

The community of interest

The power structure we have observed in the sample corporations leads us to postulate the existence of working relationships among the corporations considered as well as among the individuals who dominate these enterprises. It is in this sense that we mean a "community of interest" has grown. Many of the corporations here considered were launched by a single family, and yet, over the years through mergers and acquisitions these enterprises have had to reach an understanding with other enterprises, as well as with financial interests controlling the lifeblood of capitalism, namely capital. An even more recent phenomonon has been the growth of new relationships among major previously separate interests. A good illustration of this point is shown in the merger of the Mellon Securities Corp. into the First Boston Corp. (First Boston is an investment banking firm formed from the investment banking departments of the old Chase National Bank and the First National Bank of Boston). Now First Boston is closely aligned with the Rockefeller interests and Mellon Securities was jointly owned by Richard K. Mellon and Sarah Mellon Scaife. Thus, an alliance was formed between two of the most powerful families in the economic elite of this country. Now the Gulf Oil Corp., controlled by the Mellon family, and the Rockefeller oil companies have several working relationships in operation. For instance, Gulf and Standard Oil (N.J.) share in the ownership of the Venezuela Gulf Refining Co. In addition, Gulf participates along with the Rockefeller companies in a number of other operations forming an important cornerstone of the international petroleum cartel.

Approaching the concept of "community of interest" from another point of view, the recent price-fixing scandals are another reflection of the growing "cooperation" among major corporations. It appears that administered prices may prove to be the rule rather than the exception among industrial corporations. As one steel executive defined competition: when prices of identical products are the same there is competition for quality! One wonders what happened to the old-fashioned (and strangely magical) "market" of classical economic theory.

What are the consequences of this growing community of interest? The first is the rather remarkable trend to mergers among so many of the giant industrial firms. Olin Mathieson Chemical was the result of a merger of Olin Industries, Mathieson Chemical and the later absorption of E.R. Squibb and Sons and Blockson Chemical Corp. General Dynamics resulted from the merger of the Electric Boat Co., Consolidated Vultee Aircraft (itself the result of a merger of Consolidated Aircraft and Vultee Aircraft and the later acquisition of Stromberg-Carlson and Liquid Carbonic Corp. Another consequence of the community of interest is the growth of jointly-owned subsidiaries of the giants. Dow-Corning is jointly owned by Dow Chemical and Corning Glass; Ormet is jointly held by Olin Mathieson and Revere Copper and Brass. These joint ventures even jump oceans to bring in European partners. Armco and Thyssen Steel of West Germany have jointly launched a subsidiary. An exhaustive enumeration of such ventures, however, would take many pages.

Corporate cooperation has also begun to function on a different level. A consciousness has developed among the economic power elite of the public image of big business. Industry associations spend large sums creating what they call "confidence" in the free enterprise system. Millions more are spent to get the public to accept and understand the "business point of view." Again, as in the drug industry, a united front is formed to defend the industry as a whole from "government attack," the term the drug industry uses in referring to the investigation of the industry by the Kefauver anti-monopoly sub-committee.

One begins to wonder, in view of these facts, just how far this trend of cooperation will continue. There are hopeful signs that the Justice Department may prosecute a number of anti-trust and price fixing cases. These cases may show whether or not the trend can be stopped.

Concluding remarks

Before concluding a few points concerning the general scope and approach of this study are necessary. The first point relates to how much of the domestic economy is represented here: we have treated the 250 largest industrial corporations; these corporations account for 58.4% of the profits of all industrial corporations. To complete a truly encyclopedic investigation of this character, it would be necessary to treat transportation, utility, merchandising and financial firms in addition. We have deliberately chosen industrial corporations for a number of reasons. First, due to government regulations requiring railroads and utilities to report on large stockholders, much information concerning them is already easily available. On the other hand, merchandising and financial companies are relatively more concentrated in ownership than industrial corporations so that a study of them would tend to give a greater indication of concentration than is perhaps justified for the total economy.

A similar cautionary note should, perhaps, be made with respect to our list of the 99 propertied rich as a pinpointing of the economic "power elite." It should be remembered both that we have not included all kinds of companies nor the holdings of directors in companies of which they are not directors. In some cases, such as that of Allan P. Kirby, these other holdings can be quite extensive. Thus our figures for the directors will be on the low side, and the listing does not necessarily encompass all the wealthiest persons in the sample corporations.

Of course the problem of finding who are the real top "controllers" and decision-makers, or if in fact they operate as such, remains one of the key unknowns in this field. Unfortunately, although certain facts are generally acknowledged, this is a topic which at this stage must rely entirely upon inferences from incomplete data, "insider" rumors and the like, and therefore has no place in a study of this type.

Finally, it is very important for the reader to realize that our method has been a very cautious one. We have relied entirely upon data which are known with certainty. Guesswork is often necessary in this field due to the efforts made to keep many of the facts from public view, but we have avoided it, and with it that crutch of much work in economics, the "guess-timate." Therefore, our data must be regarded as a conservative estimate of the situation, even to the point of distorting the truth somewhat.

In this study we have attempted to show what seems to the author to be a rather simple fact: namely, in a free enterprise system, the means of production are privately owned, i.e., the great mass of the populace neither owns nor controls corporate stock but rather a relatively small group of persons, the propertied rich, both own and, substantially, control the giant enterprises of the nation. While the study has been hampered by the absence of publicly accessible source materials, it is clear that it is possible to make considerable headway in understanding that this is indeed true. On the other hand, many points will only become clarified with the revelation of information now withheld. That so much can be found on the basis of publicly available information provokes a strong desire to examine information hidden, and deliberately so, from public view.

1 *New University Thought*, Vol. II, No. 1, Autumn 1961, pp. 61ff.

2 We have used the following sources in compiling our list of directors: Annual Reports for all corporations, 1959; *Who's Who in Commerce and Industry*, various years; Standard and Poor's *Register of Officers and Directors*, 1960.

3 *New University Thought*, op. cit.

4 *Official Summary of Securities Transactions of Officers and Directors of Listed Corporations*, U.S. Securities and Exchange Commission, April, 1958.

5 *Time*, Vol. LXXVI, No. 24, Dec. 12, 1960.

6 *Fortune*, December, 1961, p. 158.

7 R.A. Gordon, *Business Leadership in the Large Corporation*, The Brookings Institution, Washington, D.C., 1945, p. 158. Gordon states: "One important fact about the representatives of commercial banks needs to be stressed. A good many of them serve on boards not because they are bankers but because their institutions represent trusts or estates holding large blocks of stock in the companies."

8 *Fortune*, October, 1960, p. 175.

9 Computed by the author from data presented in *New University Thought*, op. cit.

10 Based on data presented in *New University Thought*, op. cit. We have simply taken into account the holdings of corporations such as Christiana Securities an enterprise under the solid stock control of the du Pont family.

11 *New University Thought*, Vol. II, No. 1, Autumn 1961, p. 42, Table IV.

12 *New York Times*, July 6, 1960.

13 *Fortune*, November, 1957.

14 Estimated by the author. Using our data and TNEC data we arrive at a fair guess of $3.5 billion. For example, we estimate the total Mellon holding in Gulf Oil to be 42.60% as of December 31, 1959 and the Mellon holding in Koppers Co. to be 17.80%.

15 *New University Thought*, op. cit., p. 63.

16 Ibid.

17 Ibid, p. 64.

18 *Security Transactions* ..., January, 1959.

19 Based on data from TNEC and terms of the reorganization of the capital structure of Jones and Laughlin Steel in 1941.

20 *New University Thought*, op. cit., p. 61.

21 Based on data from TNEC.

22 See *Moody's Bank and Finance Manual*, 1960.

23 *New University Thought*, op. cit., p. 63.

24 Based on information contained in *Fortune*, November, 1960, p. 163.

25 See *Moody's Industrial Manual*, 1960.

26 Ibid.

27 See *Wall Street Journal*, July 31, 1961.

28 *New University Thought*, op. cit., p. 72.

The propertied rich: 99 directors with holding of more than $10 million in their companies

Appendix I

This appendix contains a listing of the 99 individuals who are directors of the sample corporations and who have holdings of $10,000,000 in the firms in which they are directors. We list the person's name, the name of the corporations in which the individual is a director, the number of shares held in each corporation and the total market value of the holdings as of December 31, 1959.

Director & corporations	No. of Shares	Market Value
Richard K. Mellon		$429,866,534
Aluminum Co. of America	1,587,476	
General Motors	240,000	
Gulf Oil	6,362,319	
Koppers Co.	115,732	
Pittsburgh Plate Glass	108,500	
William du Pont, Jr.		$335,144,832
E.I. du Pont de Nemours & Co.	1,269,488	
J.G. Ordway		$286,011,968
Minnesota Mining & Manufact.	1,625,068	
A.A. Houghton, Jr.		$235,451,870
Corning Glass Works	1,623,806	
U.S. Steel	NA	
Otto Haas		$209,926,830
Rohm and Haas	287,571	
Amory Houghton		$193,336,910
Corning Glass Works	1,333,358	
W.L. McKnight		$163,302,304
Minnesota Mining & Mfg.	927,854	
W.M. Keck		$136,454,016
Superior Oil	103,296	
Charles S. Mott		$134,070,000
General Motors	2,460,000	
A.G. Bush		$109,108,560
Minnesota Mining & Mfg.	619,935	
Benson Ford		$93,101,877
Ford Motor (Class B stock)	1,025,916	
R.A. Hunt		$91,335,274
Aluminum Co. of America	857,796	
W.C. Ford		$88,872,201
Ford Motor (Class B stock)	979,308	
R.W. Johnson		$87,550,155
Johnson and Johnson	1,447,110	
Nathan Pitcairn		$81,629,480
Pittsburgh Plate Glass	1,025,174	
H.F. Pitcairn		$81,623,030
Pittsburgh Plate Glass	1,025,093	
Raymond Pitcairn		$81,622,712
Pittsburgh Plate Glass	1,025,089	
Henry Ford II		$80,875,876
Ford Motor (Common)	71,900	
Ford Motor (Class B stock)	819,185	
General Electric	100	
A.B. Dow		$73,606,275
Dow Chemical	745,380	
J.C. Haas		$70,368,350
Rohm and Haas	96,395	
H.J. Kaiser, Jr.		$69,443,595
Kaiser Industries	4,273,452	
F.O. Haas		$69,400,370
Rohm and Haas	95,070	
A.P. Sloan, Jr.		$64,793,002
General Motors	1,185,156	
Jacob Blaustein		$62,115,380
Standard Oil Co. (Indiana)	1,407,714	
R.W. Galvin		$61,282,740
Motorola	356,295	
R.H. Dwan		$56,566,400
Minnesota Mining & Mfg.	321,400	
Lamont du Pont		$52,351,936
E.I. du Pont de Nemours & Co.	197,924	
H.J. Kaiser		$51,524,948
Kaiser Alum. & Chemical	0	
Kaiser Industries	3,170,766	
E.E. Ford		$49,702,809
International Business Mach.	113,412	
J.M. Olin		$47,655,090
Olin Mathieson Chemical	888,673	

John Stauffer		$47,123,581
Stauffer Chemical	729,185	
C.A. Dana		$45,809,300
Dana Corp.	1,050,000	
Curtiss-Wright	100	
Ogden Phipps		$44,759,762
International Paper	329,722	
Texaco	NA	
S.M. Fairchild		$43,766,774
International Business Mach.	99,866	
S.T. Olin		$43,534,098
Olin Mathieson Chemical	811,434	
Owens-Illinois Glass	200	
Bernard Peyton		$40,577,856
E.I. du Pont de Nemours & Co.	153,704	
C.L. McCune		$39,835,526
Texaco	456,193	
Armstrong Cork	18,000	
Charles Boettcher II		$39,715,761
Ideal Cement	1,256,841	
J.H. Pew		$38,390,706
Sun Oil	710,939	
J.L. Pratt		$36,641,658
General Motors	672,324	
J.S. Johnson		$36,058,182
Johnson and Johnson	596,003	
J.G. Pew		$34,593,696
Sun Oil	640,624	
H.B. Keck		$34,538,866
Superior Oil	26,146	
H.J. Heinz II		$33,455,804
H.J. Heinz Co.	368,659	
L.S. Rosensteil		$32,961,950
Schenley Industries	918,800	
S.C. Clark		$32,154,528
Singer Manufacturing	574,188	
E.F. Kaiser		$31,813,762
Kaiser Alum. and Chemical	0	
Kaiser Industries	1,957,770	
H.H. Dow		$29,256,268
Dow Chemical	296,266	
Arthur K. Watson		$28,249,595
International Business Machines	64,460	
D.U. Dalton		$27,767,621
Upjohn	667,090	
R.W. Johnson, Jr.		$26,583,095
Johnson and Johnson	439,390	
T.J. Watson, Jr.		$26,501,854
International Business Machines	60,472	
H.F. du Pont		$24,711,720
E.I. du Pont de Nemours & Co.	93,605	
T.S. Gary		$24,440,163
General Telephone & Electronics	290,522	
W.J. Upjohn		$24,139,503
Upjohn	579,928	
J.H. Phipps		$24,132,931
W.R. Crane & Co.	93,780	
Ingersoll-Rand	244,299	
T.B. McCabe		$24,055,755
Scott Paper	298,055	
Campbell Soup	7,500	
General Electric	2,500	
A.H. Diebold		$22,295,000
American Home Products	130,000	
Christian de Guigne		$22,004,425
Stauffer Chemical	340,494	
H.D. Doan		$20,307,246
Dow Chemical	205,643	
C.J. Strosacker		$19,851,416
Dow Chemical	201,027	
R.A. Light		$18,062,628
Upjohn	433,937	
W.C. Pew		$18,037,404
Sun Oil	334,026	
Donald Danforth		$17,829,630
Ralston Purina	424,515	
R.C. Firestone		$17,765,084
Firestone Tire and Rubber	128,718	
Edgar Monsanto Quenny		$17,725,923
Monsanto Chemical	319,386	
D.S. Gilmore		$17,314,959
Upjohn	415,975	
R.U. Light		$16,808,508
Upjohn	403,808	
W.P. Schweitzer		$16,701,401
Kimberly Clark	235,231	
A.G. Rosengarten, Jr.		$15,220,940
Merck and Co.	189,080	
J.P. Grace		$14,696,382
Ingersoll-Rand	141,012	
W.R. Grace & Co.	71,193	
Kennecott Copper	100	
M.C. Kelce		$14,631,662
Peabody Coal	836,095	
H.H. Timken, Jr.		$14,595,164
Timken Roller Bearing	222,811	
H.K. Hochschild		$14,590,206
Americal Metal Climax	601,658	
S.B. Mosher		$14,329,815
Signal Oil and Gas (Class B)	469,830	
L.K. Firestone		$14,017,902
Firestone Tire and Rubber	101,579	
August Kochs		$13,802,414
Stauffer Chemical	213,577	

W.R. Timken		$13,458,000
Timken Roller Bearing	205,465	
J.M. Timken		$12,697,285
Timken Roller Bearing	193,852	
W.A. Jones		$12,693,400
Cities Service	260,800	
Chrysler	2,000	
Richfield Oil	500	
R.S. Firestone		$12,479,207
Firestone Tire and and Rubber	90,429	
J.S. McDonnell		$12,449,710
McDonnell Aircraft	355,706	
P.S. Achilles		$12,448,285
Eastman Kodak	115,798	
A. Coors		$12,413,205
Ideal Cement	395,640	
R.S. Kerr		$12,100,853
Kerr-McGee Oil	240,813	
J.S. Sensenbrenner		$11,987,285
Kimberly Clark	168,835	
Norton Simon		$11,953,215
Hunt Foods and Industries	415,764	
H.W. Sweatt		$11,936,976
Minneapolis-Honeywell	84,415	
General Mills	1,800	
W.K. Warren		$11,696,422
Gulf Oil	318,270	
Sidney Frohman		$11,598,315
West Virginia Pulp and Paper	204,217	
R.W. Woodruff		$11,520,250
Coca Cola Co.	76,135	
General Electric	1,500	
H.S. McNeil		$11,506,737
Johnson and Johnson	190,194	
Leon Falk, Jr.		$11,185,870
National Steel	117,746	
S.L. Avery		$11,051,238
U.S. Gypsum	117,350	
R.G. Fairburn		$10,923,212
Diamond National	301,330	
R.F. Evans		$10,776,685
Diamond Alkali	171,740	
T.M. Evans		$10,668,375
Crane Co.	163,500	
G.A. Anderson		$10,637,550
Chas. Pfizer & Co.	322,350	
L.I. Doan		$10,170,460
Dow Chemical	102,992	

Note: The symbol NA refers to holdings undetermined and not available. The reader is referred to Part II, App. I of this article for source references.