hand, the "risk" the investor in the drug industry faces is that the chances are poor that drug companies will earn a rate of return as low as the average return in the aluminum industry. In fact, there is only one chance in six that they will earn a rate of return of below 9 percent, whereas there are four chances out of six that they will earn between 9 and 26 percent, and one chance in six that they will earn over 26 percent. Clearly, then, it is nonsense to infer from the Conrad-Plotkin variance measure of risk that the drug industry is riskier than the aluminum industry in terms of attracting new capital.

Losses, or even low profits, are practically unheard of among large drug companies. In this respect the drug industry is practically unique among important American industries. Figure 2 shows for 22 major industries the percent of the time the 8 largest companies fell in various profit rate categories during the period 1954–1966.[22] Large drug companies not only earned a higher return than any other of the major manufacturing industries shown, but none of the drug companies ever experienced losses during the period, nor did any companies experience profit rates below 5 percent. Only two other industries enjoyed this distinction, petroleum refining and cigarettes.

Companies in most manufacturing industries had profit rates ranging between 5 percent and 15 percent. By considering this range to represent a sort of "norm," we can visualize the extent to which large drug manufacturers departed from it. Over the period 1954–1966, the 8 largest drug manufacturers were in this range about 25 percent of the time and none ever fell below it. On the other hand, 75 percent of the time the leading drug manufacturers earned profits exceeding 15 percent, and fully 17 percent of the time they had profit rates exceeding 25 percent.

No other industry matched drugs in the frequency with which companies had profit rates exceeding 15 percent. In only three other industries—motor vehicles, computing machines and aircraft—did large firms have profit rates exceeding 15 percent more than 50 percent of the time. On the other hand, all but four of the remaining 18 industries had profit rates exceeding 15 percent less than one-fourth of the time. Finally, some companies in all but two of the 21 industries outside drugs earned below 5 percent at least part of the time. These contrasting patterns cast serious doubt on the proposition that large drug companies face a serious risk of incurring losses.

Figure 3 illustrates the profit experience of leading drug companies in each year during the 1954–1966 period. Most importantly, it shows a pattern of persistently high profits. None of these large companies earned below 5 percent in any year, and in only four years did any company earn between 5 percent and 10 percent; three of these years were in the beginning of the period—1954, 1955, and 1956. Since then, only in 1962 did a company earn below 10 percent. And in the last three years only a small percentage earned below 15 percent.[23]

[22] This information was obtained from the Federal Trade Commission reports on *Rates of Return for Identical Companies in Selected Manufacturing Industries*. The same industries were used as for Figure 1; namely, those in which the 8 largest companies had combined assets of $1 billion or more in 1966. The total assets of the 8 largest firms in each industry were grouped in 5 profit categories for each year, 1954 through 1966. The combined assets of all firms within each category were totaled over the 13-year period and divided by the total combined assets in all categories over the period. The result was a weighted percentage of the number of companies among the 8 largest firms in each industry earning profits in each of the 5 profit categories during the period 1954–1966.

[23] The profit experience of the 29 drug companies used in the Conrad-Plotkin analysis does not differ materially from that of the eight leaders. In only two years (one company in each case) did any of the companies earn less than 5 percent. Over the period 1954–1965, the 29 companies fell in the various profit rate categories as follows:

| Profit Rate (Percent): | *Percent of time companies in category* |
|---|---|
| 25 and over | 22.5 |
| 20 to 25 | 13.6 |
| 15 to 20 | 31.8 |
| 10 to 15 | 19.3 |
| 5 to 10 | 12.7 |
| Below 5 | 0.04 |