

INDUSTRIAL ORGANIZATION AND
THE INDUSTRIAL STATE

By

Marshall Hall¹

The New Industrial State² is the title of an immensely popular book by Professor Galbraith which argues that the textbook explanation of the theory of the firm and market or the economist's view of Industrial Organization is irrelevant to an understanding and explanation of the twentieth century American industrial structure. Professor Galbraith is not alone in his view of the irrelevancy of much of the theory of the firm to the current industrial scene and in this paper we shall (a) describe the current industrial structure, (b) examine some of the newer theories of Industrial Organization and their conclusions, and (c) comment on the relevance of the received doctrine of the theory of the firm to the existing industrial framework. The focus here is primarily on the manufacturing sector but our findings apply, with modification, to the financial and trade sectors.

The Existing Industrial Structure

The three key features of the existing industrial structure which are responsible for the view that a "new industrial state" exists are (1) the dominance of the economy by the large firm, (2) a high degree of industry concentration, and (3) the separation of ownership and control in the management of the important firms in the economy. The empirical evidence lends strong support to this structural characterization of the economy.

Table 1 leaves little doubt as to the dominance of the large firm in the manufacturing sector. The largest 100 firms account for 46% of the assets in this sector and there are some 180,000 incorporated firms and 240,000 proprietorship and partnership firms in the manufacturing sector. Roughly the same picture would emerge if sales, profit or employment were used instead of assets.

¹ Marshall Hall is Associate Professor of Economics, Washington University, St. Louis, Missouri.

² Galbraith, John Kenneth, The New Industrial State. Boston: Houghton Mifflin Co., 1967.

Table 1

Concentration of Total Manufacturing Assets,
Fourth Quarter 1962

Corporate Size Group	Assets (Millions)	All Manu- facturing (percent)	Corporations Only (percent)
5 Largest	36,447	12.3	12.5
10 Largest	54,353	18.4	18.7
20 Largest	73,825	25.0	25.4
50 Largest	105,421	35.7	36.2
100 Largest	136,222	46.1	46.8
200 Largest	165,328	55.9	56.8
500 Largest	199,894	67.6	68.7
1000 Largest	221,279	74.8	76.0
Corporations with assets over \$10 million <u>a/</u>	\$237,410	80.3	81.6
All Corporations <u>b/</u>	291,022	98.4	100.0
Total Manufacturing Businesses <u>c/</u>	295,690	100.0	

a/ There were 2,041 manufacturing corporations in operation the first quarter of 1963.

b/ This group includes about 180,000 manufacturing corporations.

c/ Includes asset estimates for approximately 240,000 manufacturing proprietorships and partnerships.

Source: Bureau of Economics, Federal Trade Commission.

Industry concentration is a crude but widely used measure of the existence of competitive, oligopolistic or monopolistic industries. High concentration implies oligopoly or monopoly, low concentration implies competition. Considerable variation exists in the degree of concentration among industries. In the motor vehicles and equipment industry, for example, the four largest firms account for 83% of the assets of the industry, whereas the largest four firms in the furniture industry account for less than 10% of the assets. The significance of highly concentrated industries in the economy is evident, however, from the fact that the largest four firms in the following industries account for at least 40% of the assets -- motor vehicles and equipment, aircraft and parts, other transportation equipment, primary iron and steel, instruments and related products, dairy products, bakery products, basic industrial chemicals, petroleum refining, rubber and plastic products, alcoholic beverages and tobacco. ^{3/} If the criterion of concentration were broadened to include, say, the largest 20 firms in each industry controlling more than 50% of the assets, many more industries in addition to those above would be included. Industry concentration or oligopoly is therefore quite prevalent, although quite a few industries exist that would be classified as unconcentrated or generally competitive.

The separation of ownership and control refers to a situation where ownership is so diffuse that those who own the firm (hold the common stock), being so many, are divorced from the management of the firm. The most recent measure of the separation of ownership and control finds that as of 1963, 169 of the largest 200 firms in the manufacturing sector were management as distinct from ownership controlled. ^{4/} Management controlled firms are defined as firms where no individual, family, group of business associates or other firm owns 10% or more of the stock of the corporation. In the majority of the 169 firms, the largest percentage of shares controlled by any one group or individual was considerably below the 10% limit. It should also be remembered that the top 200 firms account for about 56% of the assets of the manufacturing sector. (See Table 1.)

The above facts are generally accepted--the economy is dominated by a few firms in concentrated industries and the separation of ownership and control is prevalent.

^{3/} Ibid.

^{4/} Ibid.

The New View of Industrial Organization

The structural characteristics discussed above permit firms, the proponents of the new view argue, to control the market and determine either price or output. Furthermore, they eschew profit maximization for a variety of other goals, the most important of which are survival and growth.

Control of the market stems in the first place from the power vested in the firm by virtue of its oligopoly position. This control is further strengthened, however, by the great size of the corporations, vast advertising expenditure which generates shifts in the demand curves and the affluence of much of contemporary America which makes the populace susceptible to advertising.

The separation of ownership and control is the key variable in the demise of profit maximization and the emergence of survival and growth, among others, as the goals of the firm. The importance of the survival goal reflects the fact that firms cannot entirely forsake the profit motive but once having made enough profit to survive, they may, if they wish, trade more profit for a faster growth rate. Many reasons are put forward to explain why non-owner managers prefer growth to profit maximization. Growth is regarded as the one great panacea for all economic ills as everybody under growth can have more and nobody need have less, and it is therefore natural for management freed from the owners to adopt this goal. As firms grow, the need for management increases and growth thus emerges as a tool designed to perpetuate the management class by providing jobs for their own kind. Moreover, the returns to management, absolutely large though they be, are but a tiny portion of the revenues of the firm making increases in management's salary highly inelastic (close to zero) with respect to increases in profit above the survival level. It is further argued, although the empirical evidence is less than conclusive, that technology and the nature of the capital market provide scale economies which make all giant firms the efficient firms.

The proponents of this new view of Industrial Organization do not necessarily prefer the changed structure and its performance but they argue that it is inevitable and that policy ought to be adopted with reference to the new industrial state rather than an outdated structure 5/. They are emphatic and unanimous in their criticism of the textbook view of firm structure and performance regarding it as capable only of describing a non-existent economy and of offering policy solutions to non-existent problems.

5/ Ibid.

It is perhaps worthwhile to sketch out the theory and policy that the economists of the "new industrial state" now find irrelevant. The underlying rationale of the received doctrine is that there is a definite and predictable relationship between market structure and performance. If the market structure is competitive, good performance in the form of ideal resource allocation, minimum cost, lowest price possible, income distribution along marginal productivity lines, "etc.," will be forthcoming; if the structure is not competitive, one can in general expect departures from good performance. To insure good performance, it will on occasion be necessary to coerce firms into a competitive structure or to persuade them to behave as if they were competitive (anti-trust laws) or regulate their performance via a set of directives (regulatory agencies) or via outright government ownership and production. The key institutions in this kind of system are private property and consumer sovereignty, the market where prices get determined by the interaction of demand and supply. The central and virtually the only goal is profit maximization.

The Relevance and Irrelevance of Traditional Theory

At first glance it appears that since the structural characteristics -- bigness, concentration and separation of ownership and control -- are beyond dispute, the proponents of the new industrial state have carried the day. Furthermore, the great panacea -- growth -- is in operation at the micro level of the firm, so why rock the boat. It is our suspicion, however, that the new industrial state, to the extent that it behaves as described above, is a bad performer in the traditional areas of resource allocation, income distribution and market power.

In the new view, the two crucial elements with respect to resource allocation and income distribution are the increased advertising expenditure generated by the desire to control the market and maintain or increase a given firm's share of the market and expenditures designed to encourage growth at the expense of profit.

Advertising expenditures last year (1966) were \$16.5 billion, or the equivalent of all purchases by the Federal Government other than for defense. ^{6/} If these expenditures are primarily for the control of the market (Galbraith view) and the control of the market is necessary to the well being of the large concentrated firm, it is difficult to conclude other than that the current industrial structure is guilty of a severe misallocation of resources. Let the opportunity cost of the advertising be a doubling of the Federal Government's non-defense expenditure and the effect of the misallocation in this current period of all too scarce government funds is laid bare. The impact on income distribution is also profound as it is the factors in advertising (multiplier effects aside) which will receive payment from the advertising industry. The labor factor in advertising is usually highly trained and misallocation of resources to advertising will at least in the short run drive up the salary return to advertising labor.

^{6/} Ibid.

The misallocative effects of a growth policy at the expense of profit maximization is impossible to assess in the static framework of this analysis and consequently we make no comment on growth and resource allocation. The income distribution effects are, however, less difficult to analyze. Advertising may to some extent increase industry demand but as Schumpeter long ago declared, and the increase in expenditures for research and development suggests, it is the new product (highly advertised) which is the growth product. The search for new products requires expenditure on highly trained personnel. These highly trained personnel tend to develop goods that have a high technological input. The returns to factors with technological skill will therefore increase. Should the product be capable of production via automation techniques, the returns to technology increase yet further with the consequent realignment in incomes. It is important to point out that the above is not an anti-technology, anti-research and development argument. Its stress is on the goods with a high technology component which would not have been produced had the society's industrial structure not pushed growth at the expense of other possible uses to which increased profit may have been devoted. The net effect of the above could very well explain the situation of unemployment for lower skilled and shortages of the highly trained that is supposed to exist in the U.S. in the 1960's.

The market-political power problem is the time honored one of how to keep giant corporations from becoming so powerful that they dominate the nation both politically and economically. To many the military industrial complex, where large firms seek (legitimately) to influence the government's production and purchase of new armaments, is the wave of the future 7/. This close relationship between firm and government agency with no clear cut goals frightens many, however, as in the process the market is completely shut out and even the semblance of consumer sovereignty is lost.

It is time now for the major question. Does the textbook view give us answers and policies about the current industrial structure or should we abandon it as Galbraith and others suggest. The textbook answers to the structural problems outlined earlier are well known -- discourage concentration and acts (predatory practices) which discourage competition and where necessary regulate or nationalize industries. These are old saws, however, and the Sherman Act goes back to 1890. The proponents of the old view must answer the question of why, with the existence of anti-trust regulatory agencies and the many treatises on the virtues of competition, the structure that emerges is bigness with oligopoly. The answer to this question is also well known -- economic theory and the anti-trust laws have only

7/ Ibid.

too rarely been tried. The record is there for all to see. The Justice Department and the Federal Trade Commission rarely seek to bring divestiture and dissolution suits against the major firms. The inevitable that Galbraith refers to is nothing more than laxity in enforcing the laws 8/. It may very well be true, as was stated in a recent hearing before the Subcommittee on Antitrust, that the Federal Trade Commission and the Justice Department for political reasons will refrain from pushing antitrust policy as vigorously as they would like 9/. One cannot, however, use this view to argue that something else ought to be tried, as the political realities will still be present. This does not, however, mean that we should not continue to seek for new institutions to help solve the current problems - government owned firms in a basically private industry or treating a portion of advertising expenditures as taxable income may do much to ease the pressure of bigness.

If it is inevitable that the giant firms will continue to grow in increasing dominance and that industries must grow more and more concentrated, it seems impossible that the vulgar halfway house of the military-industrial complex could lay claim to an ideal situation. Outright socialism may even be preferable to this behind closed door operation. For now, however, we call for a strong and vigorous prosecution of anti-trust laws.

8/ Ibid.

9/ Ibid.