Industrial Price Policies'

OR some years America has been searching for the key to lasting prosperity. Some felt that they had discovered it in 1929. But the past nine years have shown that they were badly mistaken. Unemployment and poverty are still with us. Many of our great industries usually run far below capacity. It is clear that we have not yet, as a country, found the secret of economic stability.

Why should we have idle factories and unemployment, even in comparatively good times? Why should manufacturers and merchants find it hard to sell their goods in a world in which most people are ill-fed and badly clothed? These are questions on which the Brookings Institution shed some light in its study of the relation between the distribution of income and economic progress.² This study did not attempt to draw up a plan for a new kind of economic world. It recognized that the problem was far too complex to solve by any single scheme.

The Paradox of Prices

Special attention was paid, however, to the possibility of increasing the buying power of people with low incomes by reducing prices. It was suggested that in order to attain full efficiency an industry must pass on to the consumer as completely as possible the benefits obtained from new inventions and mass production. Lower prices would put the common necessities of life—food, clothing, and houses—within the

Summarized in Income and Economic Progress, Public Affairs Pamphlet

No. 1 (Revised Edition, 1958).

¹ This pamphlet is a summary prepared by Maxwell S. Stewart of Industrial Price Policies and Economic Progress, by Edwin G. Nourse and Horace B. Drury, published by the Brookings Institution, 1938.

reach of millions who are underfed, badly clad, and inadequately sheltered. A huge new field for business growth would be opened which should provide opportunity for both labor and capital.

Many business men have accepted this proposal without question. Others have dismissed it as impractical. They say, in effect: "We are not in business for our health. If we don't set prices as high as the traffic will bear, and thus insure profits, business will slow down and the supply of capital will dry up."

Before we make up our minds which of these views is more sound from the standpoint of general business policy, it would be wise to look at the price situation somewhat more closely. It is clear that prices cannot be separated from costs and profits. Only by examining the way in which prices are set, and some of the special factors determining prices, can we say definitely where and to what extent it is possible to lower prices and how this will promote economic progress.

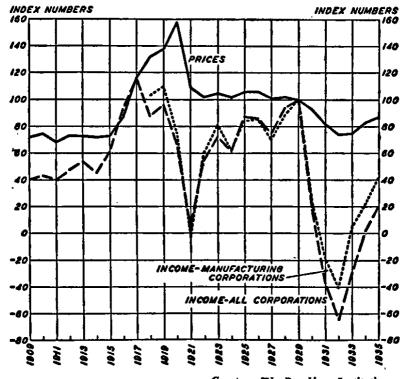
PRICES AND PROFITS

SOME business men justify the policy of holding prices up on the ground that this is necessary if profits are to be made. And they add, correctly enough, that business activity is dependent on profits. As long as profits seem to be rising, business will expand. New capital will be brought in; new labor will be hired. But once profits begin to fall off, growth is checked. Economic stagnation sets in.

It is often felt that prices high enough to insure a large profit on each article sold are necessary to insure a profitable business. A survey indicates, however, that this is not always true. The accompanying chart shows the course of prices and the net income of manufacturing corporations between 1909 and 1935. You will note that although prices dropped nearly 10 per cent between 1921 and 1929, there was a sharp rise in

INDEXES OF WHOLESALE PRICES OF FINISHED PRODUCTS AND OF NET INCOME OF ALL CORPORATIONS, 1909-35, AND OF NET INCOME OF MANUFACTURING CORPORATIONS, 1918-35





Courtesy, The Brookings Institution.

net income during this period. Again in the pre-War period, 1909-1914, there was no consistent upward movement of finished goods prices; and yet these, too, were years of increasing profits. In one sense, indeed, it may be considered that the receipts of the manufacturer actually were decreasing in the pre-War as well as in the post-War period. For it happens that the period between 1909 and 1914 was one in which raw material prices rose while the prices of manufactured articles were stationary, whereas the reverse was true after

the War. So it is probable that the manufacturer made less on each article in the pre-War period, though gross income was high in raw material producing industries. On the other hand, wages barely kept pace with the rise in prices in this early period, while they rose considerably in the 20's when prices were falling.

Unquestionably, periods of mounting prices have frequently been periods of large profits. But that the profits of industry are affected by many other factors besides prices is clearly brought out by these two illustrations of periods when profits rose substantially, though prices were either falling or, at most, stationary. The evidence shows conclusively that high prices do not always mean high profits. Nor must low profits necessarily result from low prices.

What About Costs?

But, you say, how can this be? Does not a cut in prices without a cut in wages or other costs necessarily mean less income and hence smaller profits? It could not be otherwise if a business concern sold just the same amount of goods at the new price as at the old. This, however, is not usually the case.

Let us take as an example a radio selling for \$60. The manufacturer makes, we will say, a profit of \$12 a set. If the price is reduced to \$50, he would make, you might say, a profit of only \$2. If he sold 10,000 sets a year his profit in the first case would be \$120,000. After lowering the price, would not this profit be cut to \$20,000 a year?

The answer, of course, is that 10,000 sets was all that could be sold at \$60, but there is no such limit at \$50. If his competitors do not reduce their prices, he will take much of their business. But even if they do meet his price, a new market for radios would be uncovered among the many families who did not have enough money to purchase \$60 radios. And the more sets sold, the cheaper it should be to make them. Thus

while 10,000 cost \$48 apiece to manufacture, it should be possible to turn out 25,000 at substantially lower price, say, \$42 apiece. If this were done it would mean a profit of \$200,000, which is almost double that which was made at \$60 a set.

This is a somewhat simplified illustration of what has repeatedly been achieved in recent years in the radio and automobile industries. The same principle also applies to other businesses, though the advantage is not always so large. Much depends on the kind of article. Radios, for example, are not necessities. People will get along without them if they cost too much, Or, conversely, if the price is lowered, they will use quite a few more of them. The demand for steel rails, on the other hand, is not greatly affected by changes in price. A small cut would not lead to the building of more railroads.

Often a change in price will not make any immediate difference in the demand for an article. But after a time it will often be found that the article at this lower price can be substituted for something wholly different. For instance, a reduction in steel prices might not lead to a large immediate increase in the use of steel. Yet after a time it might be found that it was cheaper to use steel in prefabricated houses, or the paving of roads, where other materials had previously been used.

CORPORATIONS AND PRICES

THE low cost of many manufactured articles today is possible only because they are turned out in large quantities. In the last fifty years the development of great corporations has made possible important economies in production and distribution. Because of these economies, these corporations have been in a position to reduce prices materially. But it often happened that they were so large that they found that they could fix prices pretty much as they pleased. As a result we find them experimenting with diametrically opposite price policies. Their experience with

these different policies should go a long way in answering our questions as to the relation between prices, profits, and general progress.

Oil

Many of the early corporations were formed largely for the purpose of creating a monopoly in order to raise prices. Oil furnishes a good example. Up to 1872 the price of petroleum had declined rather steadily. In that year, however, the Standard Oil Company, as yet comparatively small, sought through the newly formed Petroleum Refiners' Association to raise the price. This association controlled nearly 80 per cent of the country's equipment for refining oil. Between June and November, 1872, it advanced the price from 23 to 27 cents a gallon. Profits, which had been about 1½ cents a gallon in 1871, were increased to 4 or 5 cents a gallon. Although there is every reason to believe that the association intended to go even further in increasing prices, the plan failed when a boost in the price paid the owners of the wells led them to flood the market with crude oil.

A few years later the Standard Oil Company gained direct control of about 90 per cent of the country's refining capacity and was ready to try again. This time the price of oil was doubled within six months. As a result the Standard Oil Company paid a dividend of \$3,248,650.01 in 1877 on its capitalization of \$3,500,000. One of its stockholders later said on the witness stand that it might have paid the dividend twice over and had money to spare.

This experiment collapsed in 1879 as a result of opposition at home and competition from abroad. A third attempt was made a year later. But this, too, failed when unexpected competition developed. In later years the Standard Oil Company continued to dominate the market and maintained relatively high prices, though it was more careful about raising them. This situation continued, interspersed with struggles

with the "independents," until the Standard Oil Company was dissolved in 1911.

Other Trusts of the 90's

The story of the Standard Oil is in many respects typical of the period. Most of the other combinations formed before the late 90's followed the practice of charging all the traffic would bear. These included the Diamond Match Company, formed in 1880, the National Cordage Company, the United States Leather Company, and the whiskey, sugar, and tobacco trusts. In most cases, however, the effort finally broke down. The history of the American Window Glass Company, which was organized in 1899, is particularly interesting in this connection. In 1903 the company was able to secure the patent for a machine which would eliminate the need for hand blowing. But instead of contenting itself with the prosperity which would naturally have fallen to it through an orderly sharing of the benefits of the new process with consumers, it attempted, through excessive price cutting, to drive the handblowing manufacturers out of business. The results were disastrous. The glass blowers accepted a reduction in wages and competed successfully with the new company. Later the independents joined forces with the trust in an attempt to raise prices, but this movement also failed. New independents with still better methods of manufacturing appeared, so that the American Window Glass Company was eventually reduced to a second-rank concern.

Aluminum

Aluminum developed along a somewhat different pattern during this early period. In 1888, the Pittsburgh Reduction Company was formed to make aluminum by a new patented process which greatly reduced the cost of making the metal. The first small batch of aluminum turned out by this company was sold at \$5 a pound. But the price was reduced rapidly

during the next ten years in hope of selling larger amounts. In 1891 it was cut to \$1.21, in 1892 to 85 cents, and by yearly cuts of never less than 7 cents, to 33 cents in December, 1897. Then for ten years the cuts ceased. In December, 1905, the price was raised to 35 cents; a year later it was advanced to 40 cents; then reduced in 1908 to 32 cents. European competition drove it down to 20 cents in 1911.

Although it cannot be said that the Pittsburgh Reduction Company, later rechristened the Aluminum Company of America, consistently passed on to its consumers the benefits of improved methods, its record was better than most of the trusts of its day.

These cuts in prices led to tremendous increases in the use of aluminum and, incidentally, to a gratifying growth in profits. The production of aluminum rose a hundredfold between 1889 and 1900, and an additional ninefold between 1900 and 1913. The company declared a stock dividend of 100 per cent in 1904 and another of 500 per cent in 1909.

Corporations in the Post-War Period

The trust-busting activities of Theodore Roosevelt and his successor checked the growth of consolidations and mergers for some years. It was not until after the World War that a second wave began. But the big business of the 20's seems, in general, to have learned from the experience of the earlier period. Distinctly fewer efforts were made to impose prices that were unfairly high. Abuses existed, but they were less flagrant.

In the oil industry, for example, the situation was completely changed. Following the dissolution of the Standard Oil Company, the separate corporations which resulted gradually became independent in fact as well as before the law. Large new independents, such as the Texas Corporation, the Gulf Oil Corporation, and the Consolidated Oil Corporation, arose to challenge the leadership of the Stand-

ard companies. Today the Standard Oil Company of New Jersey remains the second largest industrial corporation in the country, but there are eighteen other large oil concerns whose total worth is three and a half times that of the company that once dominated the field. As a result of this competition, prices have dropped to relatively low levels and would have doubtless declined even further if oil production were not regulated by federal and state laws. Occasional efforts have been made by some of the larger companies to push prices up, but the attempts have failed, either because of competition or government action.

Aluminum in the 20's

On the other hand, the Aluminum Company of America, which has remained the only producer of the metal in the United States, put through no less than seven advances in price between 1922 and 1925. This brought aluminum back to 28 cents a pound—not far below its 1897 level. As might be expected, this rise materially checked the growth of the industry. The output of virgin aluminum in 1925 was only 140,000,000 pounds as against 138,000,000 in 1920. Most noticeable was the effect on the automobile industry. In 1920 the average automobile, not including the Ford, took 120 pounds of aluminum. But as the price increased, substitutes were found. By 1925 only 40 pounds were used per car.

In 1926 the Aluminum Company began a series of price reductions. Use of the metal was again stimulated, being twice as large in 1937 as in 1925. Although aluminum prices are still higher than they were right after the war, they were kept to relatively low levels in the boom of metal prices which took place in 1928-29 and again in 1937. Whatever temptation to price-boosting may have been provided by the fact that the Aluminum Company enjoyed a virtual monopoly was held in check by the growing competition from rival metals, as well as the possibility of competition from abroad.

Monel, stainless steel, magnesium, and copper are used in place of aluminum for many purposes. It is not possible to fix a price for aluminum without regard for that of these other metals.

What is true of aluminum is even truer elsewhere. Although there were many new mergers in the 20's, competition became more intense. Monopoly was less frequent than at the turn of the century. Back in 1904, Moody estimated that 78 of the 92 leading trusts controlled 50 per cent or more of the output within their industries. Later studies suggest that he may have overstated the importance of these companies. But there can be little doubt that the situation has changed decidedly in the last thirty years.

The Decline of Monopoly

The "giants" of today are rarely as important within their industries as their predecessors at the turn of the century. A list of these "giants" drawn up a few years ago contains 89 names in industry and mining. Each of these concerns is worth more than \$90,000,000, and several are above the billion mark. Very few, however, are true monopolies. No less than 20 out of 89 are to be found in the petroleum industry alone. Another 11 are in the iron and steel industry. Four are in automobiles, 4 in tires, 4 in tobacco, 4 in coal, 3 each in copper, meat packing, and paper. This accounts for 56 of our 89 "giants." They are scattered in nine great industries where they not only compete against other "giants," but also against a multitude of smaller firms.

In each of six other industries there are two corporations large enough to be on our list. This leaves only 21 companies, with 14 per cent of the total capitalization, which do not have to compete directly with another "giant" in the same field. And by no means all of these enjoy a monopoly or near monopoly. On the contrary, most of them are in highly competitive industries in which they control much less than half

COMPETITION BY GIANT CONCERNS IN MAJOR INDUSTRIES





















Each symbol represents one concern worth 90 million dollars or more

PICTORIAL STATISTICS, INC

of the total output. Actually, there are only two firms, the Aluminum Company of America and the United Shoe Machinery Corporation, which are practically sole producers. Two or three other concerns, such as the Pullman Company, have a monopoly in one product but meet competition in others.

This shows that there is a trend away from monopoly and that this trend is due in large measure to technical developments. In the present-day world, attempts to boost prices and keep them at an unfair level are in danger of defeating themselves. Applied science is likely to find other means of progress. The man who today tries to fence in an industrial highway and exact an unfair toll from all wayfaring consumers courts disaster. The chemist will build a detour around him, the physicist will dig a tunnel under him, or a biological overpass will be constructed. He may think he has throttled competition, but it will spring up again from new directions. Business is beginning to learn and respect this basic law.

LOWER PRICES—MORE SALES

IF a certain firm, let us call it the Smith Manufacturing Company, wishes to increase its sales, it may follow any one of several courses. It may increase its budget for advertising; it may introduce new models, or add new gadgets to make the product more attractive; it may introduce installment selling; or offer free inspection service. Or it may reduce the price of the articles which it wants to sell. Each involves a temporary sacrifice of money in the hope of getting increased business. There is no rule by which business men can know definitely which method to try. One may prove effective in one set of circumstances, while another may be successful under other conditions. But it may at least be argued that price reduction is better for business as a whole than any of these other measures.

This may seem like a counsel to commit suicide to the average business man. "If I am not making money now," he asks, "how on earth can I expect to make money if I cut prices?"

How Prices Can Be Cut

To this there is no simple answer. Clearly prices cannot be cut without regard to costs. But there is more than one way of making goods which are within reach of the consumer's pocketbook without losing money. The study shows that this has been done many times by American business men, and that it can be done again.

Changing the Type of Goods

We do not need to look far, for example, to discover that many articles cost more than they need to because they are made unnecessarily expensive. The difficulty you may have encountered in trying to buy an automobile without unwanted and costly gadgets is a case in point. The redesigning of an article so that it can be sold at a lower price does not necessarily mean that it must be made into an inferior product. The price can often be reduced merely by more intelligent planning. If the materials used in it are expensive, there should be a search for cheaper materials. If the design is complicated, possibly it can be made simpler. And the new product may turn out to be both cheaper and better than the old. Here are a few examples; many more could be cited.

A few years ago, a Milwaukee manufacturer of plumbing supplies was told by a large mail-order house that it must have a brass hose nozzle at a stated low price. Brass is expensive, and it seemed impossible to make a nozzle at the price named. Faced by the necessity of doing something, the manufacturer hit upon the idea of reducing the length of the nozzle by one half. The new nozzle served its purpose as well as the old and could be made far more cheaply.

Even more striking is the case of a mail-order house that found that it could make a stove with a large oven practically as cheaply as with a small oven. While making the change in the oven—which was a decided aid to the housewife—it made several other improvements in the stove by simplifying its design. The stove was then offered to the public at a much lower price. This company was able, within a few years, to increase its share in the nation's stove business from 1½ or 2 per cent to about 12 per cent. And it made money in so doing.

Model T

The old Model T Ford remains the classic example of an article made to fit the consumer's pocketbook. In many respects this car was built at the sacrifice of quality. Yet on other and more important counts, it was better than most other makes. It was light and cheap to operate. It stood up as long as most people wanted to keep their cars. Although it finally went out of date when it became possible to make more luxurious cars at a slightly higher price, the possibilities in that direction are not necessarily exhausted. The appearance recently of several new makes of very light cars suggests that a new effort may soon be made to reopen the lower price field.

Large-Scale Production

If no change can be made in materials or design, it still may be possible to reduce costs through an increase in output. So much has been written about the advantages of mass production, that it is often assumed that only large corporations can produce efficiently. This is sometimes but by no means always true. Small firms, especially when they concentrate on one or two articles, are often more efficient than large ones.

A complicated product such as an automobile can be made most cheaply by a large company. Expensive machines

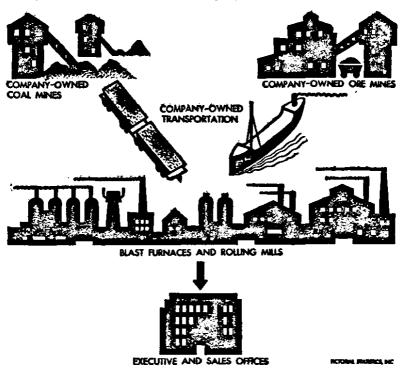
are required for many different types of work. It is obviously more efficient to use these machines for 1,000,000 cars a year than for 10,000.

But a smaller plant may be better for a relatively simple product. One of the most striking price reductions in recent years has been in small electric motors—the type used in washing machines. In 1925 a quarter horsepower motor cost about \$15 wholesale. By 1036 it could be bought for around \$5. The campaign to reduce the cost of making electric motors was perhaps carried farthest by one company which made nothing but small motors. It worked out a method by which the same pieces, so far as possible, were used in one-sixth, one-fourth, and one-third horsepower motors. The whole factory was organized for making these three machines, and it sold a large share of the country's supply of small motors. A larger plant, which made motors along with a dozen other articles, might not have been so efficient. Though the company which made these motors is itself small, it should be observed that it is at present a subsidiary of a large automobile company.

Advantages of the Large Corporation

Under many circumstances the larger corporation has great advantages. This is true whether it be organized vertically or horizontally. Vertical organizations are built up by combining the successive stages of manufacture from the obtaining of the raw material to final finished articles. One corporation may have mines, systems of railroads, plants for refining the raw material, as well as a number of factories for turning out different, but related, finished products. The United States Steel Corporation is an illustration of this type of corporation. Horizontal organizations contain a number of plants engaged in a single stage of the industrial process. The large railway systems are horizontal corporations, as are many of the utility companies.

A VERTICAL CORPORATION



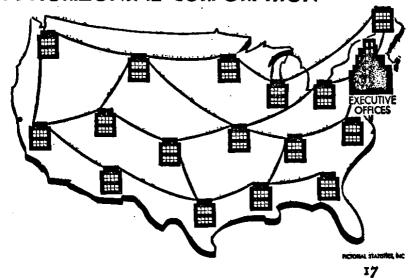
Although most of the earlier horizontal corporations were formed for the purpose of boosting prices, such combinations in recent years have placed greater emphasis on low costs through large-scale operation. Vertical organization also permits its own distinctive types of economy. It may make it possible to plan the industry as a whole so as to make the most use of each factory and each machine. The branches producing raw materials can be reasonably sure of selling their products. The finishing plants are certain of all the raw materials they need as cheaply as the company can produce them. The costs of advertising, salesmanship, transportation, and financing and other overhead can be borne by the business as a whole.

Large-scale production of either type makes it easier to hire specialists, and to establish research and testing laboratories. One of the large mail-order houses, for example, paid \$10,000 to a celebrated artist to design its refrigerator. This would amount to a dollar for each refrigerator if only 10,000 were produced and sold. But it would be only 10 cents each if sales reached 100,000, and 1 cent on sales of a million.

Capacity Operation

Efficiency in modern industry demands the use of up-todate, specialized machines, skillful workers, careful planning, and a business organization large enough to make use of these special advantages. But there is still another requirement which must not be forgotten. The plant and equipment must at all times keep its operations at approximately full capacity. Many of the overhead costs of a business—including interest, the cost of management, the maintenance of equipment, and the costs of selling—remain about the same regardless of whether the firm is operating at half or full capacity. As more

A HORIZONTAL CORPORATION



and more of the capacity of the plant is used, the overhead is spread over a larger area and is less for each article. Where companies are running full time, the advantage of increased sales is, perhaps, not so great. But even such firms can often reduce their costs considerably by operating on a larger scale. For in enlarging their plants in order to increase their output, they usually have an opportunity to install more modern and more efficient types of machinery.

In America's Capacity to Produce,¹ it was estimated that only about 80 per cent of our existing plant capacity was used even at the peak of prosperity in 1929. There was more than enough labor which was either idle or ineffectively employed to run these plants; and there was frequently great need for the products which they were equipped to turn out. But a serious kink in price policies hindered the use of these idle plants and idle men in fulfilling these unsatisfied needs.

Shifting the Overhead

Often the failure to reduce the price of a particular article is due to an artificial method of assessing the overhead costs. An automobile company, for example, may have two lines of cars—an expensive luxury car and a low-priced car. A slight change in the price of the expensive car would have little effect on the number sold, but a small cut in the price of the cheaper car might enable it to compete with the Fords, Chevrolets, and Plymouths, thus greatly increasing the possibility of sales. Assuming that the company is not working full time and that it has assessed the overhead equally against the two cars, it might be wise to charge a larger share of the overhead against the luxury car and less against the cheaper one.

Recently a meat packer, with more initiative than his fellows, suggested that the same idea be applied to meats. He proposed that the price of the more expensive cuts, used chiefly by the well-to-do, be increased slightly to absorb the

³ By R. G. Nourse and Associates, The Brookings Institution, 1934, Washington, D. C.

overhead costs now charged against the cheaper cuts. Any meat that was not sold at the new price would then be used for sausage which would be sold at reduced prices. Thus, he argues, more people would be able to buy meat, the basic price to the farmer would be maintained, and the packer would gain through increased sales. The idea can be applied in many fields. The great untapped American market lies at price levels just under those now existing. No one can really know how great this market is for a particular product until it has been explored.

Special Price Concessions

Sometimes this market can be tapped without cutting prices for the regular trade. One of the most common ways of doing this is the "remnant sale." This permits a manufacturer or merchant to rid himself of surplus stocks at certain periods in the year. Manufacturers also use store basements and cut-rate stores to aid them in getting rid of their excess supplies.

The utilities have a special problem. They must have enough equipment to handle seasonal peaks which are far above ordinary requirements. Electric light companies, for example, must be able to meet the unusually heavy demand for current on the night of December 21, even though summer's needs are much less. Much more current is also used in the evening than at any other time of day. They have attempted, therefore, to stimulate the use of electricity in off hours by what amounts to cut prices. Special rates are offered to encourage the use of electric sweepers, stoves, refrigerators, and other equipment. Still lower rates are granted to factories and other consumers using electricity primarily for power.

Some Exceptions

In this matter of price, as in all other matters affecting

business, there is no ironclad principle. As a general rule, more goods can be sold at a low price than at a high one. But this is not always true. Certain goods are regularly sold on "snob appeal." People buy them out of a desire to be "different." They would lose interest if the price were low enough for every Mrs. Smith and Mrs. Jones. The old Rolls Royce car was a rather extreme example. Nor is this attitude to be found only among the well-to-do. Many persons with small incomes are so set in their belief that a high price means good quality that they ignore a bargain when it is offered. This is particularly true of cosmetics, tooth paste, and other toilet articles, for which the average person spends comparatively little. Many persons have an almost superstitious faith in certain brands, and fear that a low price means a reduction in quality.

When American manufacturers first began making highquality cosmetics, they found difficulty in selling them at low prices in competition with foreign goods whose high price was thought to mean high quality. Later, the American companies raised their prices to the level of the foreign articles, and to their surprise and delight their sales increased by leaps and bounds.

Some manufacturers, however, have found a way to take advantage of this preference for high prices among some groups, and at the same time reap the advantages of price reduction. They have maintained the price on their standard brand, but have offered the same article in a cheaper package at a considerably lower price. Often the cheaper article does not even have the manufacturer's name on it, but is issued under a distributor's brand.

The situation is again different in the case of food. Most families among the well-to-do will not eat any more merely because the price is reduced. But earlier Brookings studies¹

³M. Leven, H. G. Moulton and C. Warburton, America's Capacity to Consume, 1934; and H. G. Moulton, Income and Economic Progress, 1935; The Brookings Institution, Washington, D. C.

have shown that there are millions of families among the lowincome groups who would greatly increase their use of fruit, vegetables, dairy products, meat, and even bread, if prices were low enough for them to afford more. A reduction in the cost of plain but wholesome foods would not only mean a healthier, stronger population, but would help farmers and food dealers.

TWENTIETH CENTURY PRICE-MAKING

A HUNDRED, or even fifty, years ago there was little that the individual industrialist could do about prices. The situation was much as it is for the farmer today. The farmer has little to say about the prices he receives. He turns his crops over to a broker or commission man, and the amount of money he gets is determined by world conditions. In the relatively simple world of a century ago, practically all goods were brought to a market and sold. Prices were set in the process of sale. If there were more goods of a certain type than could be sold at the day's price, the price would drop. Or, if there were a shortage of goods, prices would be bid up and the goods would go to the highest bidder. These high prices, in turn, would encourage a larger production of the article.

Under these circumstances there could be no such thing as a policy of pricing. Each man simply took care of himself as best he could. If he could find himself "a better 'ole," he would presumably try to get into it. Some people insist that prices are still made the same way. They try to apply the principles of this premachine age to the huge corporations and financial agencies of today. But this has been too much an attempt to stretch old theories to fit new facts. Many of the most important new facts have been left out because they proved inconvenient, or have not been noticed.

The Role of the Executive

In particular there has been a tendency to ignore the special role of the modern industrial executive. He is different from anyone in the simpler economy. An executive of a large corporation is not a thousand farmers, or a thousand craftsmen, with their servants and apprentices, rolled into one. He has distinctive qualities which have, in the main, only emerged within the last fifty years. Since the study shows that prices are at the foundation of our modern industry, it is evident that the industrial executive holds an extremely strategic post. His ideas regarding prices are of utmost importance in determining the exact amount to be charged for hundreds of articles. We need to examine this new industrial price-making process closely if we are to understand the mainsprings of our economic system.

Instead of accepting the price determined by supply and demand, the modern industrial executive sets a price and adjusts his production to that level. He, rather than the market place, becomes the regulator of economic activity as far as his part of the business world is concerned. He thus takes upon himself the responsibility for the standard of living for an ever-growing proportion of our people. Much as he may hate the phrase, he becomes the economic planner of our society, instead of merely one who adapts himself to an automatic price mechanism.

The Mechanical Approach

Executives approach this responsibility in at least two different ways. To some, with literal minds and naïve mental processes, the way to make a schedule of prices is simple and obvious. It is the same as that followed by the handicraft man of a century ago. Many executives establish their prices merely by adding the costs of materials, labor, machinery, and various overhead costs. When these have been added together

and a "proper" loading for profit added, you have your price. Q. E. D. The cost accountant will produce records to show what costs must be recovered if the business is not to close up shop.

If goods do not sell at the price set, only two courses are open. One is to intensify promotional activity. The other is to curtail production. Since labor and raw material are the chief items of the cost in a modern factory, it is often possible for an executive to protect profits by cutting down output. He simply refuses to accept business which will not pay its own way.

It need hardly be pointed out that this approach has as its primary goal the protection of capital. It is certainly not concerned with the long-run welfare of the consumers, who must forego some of the goods which our resources make it possible to produce. Nor is it concerned with the wage earners. Each reduction in output means fewer jobs. Since workers make up the bulk of our consumers, this class gets it coming and going. Such attempts to safeguard profits mean high costs, high prices, and unemployment. If we were to separate the price-maker from the plant-builder, the price-maker might say that it was not his fault the plant was partly idle; that it should not have been built so large in the first place. Actually, however, the men who decide what to build are the same as those who decide prices. So there is no escaping from responsibility. The selling right hand knows what the building left hand does, but the two are badly coordinated.

Despite its limitations, many persons still hold to this mechanical approach. It finds roots especially in cost accounting, which has recently been elaborated into a "science of industrial management." Those who take this view fail to realize that economic life is a process of interrelated growth in which the values of cost items are as much the result of the price of the article as the cause. We have seen that the overhead cost of each article, for example, depends on how much

of its capacity is used. The possibility of increasing efficiency also depends on the methods of production used.

It is not strange that business men who find themselves in danger of losing money on the conventional cost accounting basis should try to protect themselves by partially shutting down, even though this means shifting their losses to their workers in the form of unemployment. Executives have to try to make profits if they are to keep their jobs. But it is now becoming clear that this answer to the price problem is hardly more satisfactory in the long run to the owner than it is to the workers. He soon finds that he has not really escaped the burden at all by trying to shift it to the workers. For the cost of unemployment comes back to him indirectly through increased taxes for relief, unemployment insurance, protection against crime and sickness, and through the loss of labor efficiency and morale. He finds he must pay for the rusting and aging of his machines during idle periods. And, above all, he finds that what he and other owners have saved on their payrolls ultimately comes home to roost in the form of reduced buying power for their products. Thus the solution of capital's problem, as well as of labor's, can be found only in keeping our factories operating at full capacity.

The Dynamic Approach

Fortunately, more and more business men are turning to another type of price-making which involves none of the above disadvantages. Much of the progress of American business since the Civil War has been due to this dynamic approach to the problem of pricing. Instead of adding costs together in order to arrive at a price, aggressive business men have started with the needs of the consumer, and his ability to buy, and then set about finding a way to satisfy these needs at a price the consumer can afford to pay. In essence they say:

"These are the orders which the consuming department of our society places with the producing department. It is our task as

executives to keep the plants going so that these orders may be filled. We must devise a way which will so economize in the process that the order can be filled. So long as people have unsatisfied wants and we have available productive resources, a way shall be found to bring them together. That is what business is: not policing an idle plant."

Outside Influences

We would not wish to suggest for a moment that Mr. Smith of the Smith Manufacturing Company has a free hand in fixing his prices. Every business man knows that this is far from the case. He is influenced by many things, not the least of which are the customs of his trade and the views of the business associations to which he belongs. Every trade has its rules and approved patterns of conduct. Most of these are designed to protect those already in the business. Some are intended to protect the consumer. Very few have been introduced for the purpose of promoting general economic progress. The heads of older and well-established businesses often oppose anyone who seeks to introduce a more efficient method of production. The method of setting prices, estimating costs, and distributing goods is usually fixed by tradition. Any attempt to break through this tradition is passively, or actively, opposed.

Most trade associations influence the pricing policies of their members directly or indirectly. This has become increasingly true in recent years, though the degree of influence differs widely. The credit department of a trade association may, for example, merely gather information on the financial standing of buyers and aid in speeding the collection of bills. But in many cases this department has modified the terms of contracts so as to influence prices. Similarly, the traffic department may simply collect and distribute rate schedules, or compile books of information for its members. Or it may assume an active role, determining the practice of the trade on the charging of freight rates or on special-delivery services, which necessarily affect prices.

Much the same may be said of such activities as the preparation of the rules of fair-trade practice, statistical activities, and cost-accounting work. None of these need affect prices. All of them may. In drawing up rules of fair-trade practice, the question of price is almost certain to be raised. Although anti-trust laws prevent trade associations from openly setting prices, the representatives of an industry, in defining fairtrade practices, must often indicate how much competition they think good for their respective industries. Such statements naturally influence an executive in determining his own price policy. The exchange of statistical information is usually defended on the ground that it gives the various concerns in an industry valuable information on which to plan production and distribution. But the gathering of such information may readily be developed to a point where it can be used as the basis for a joint plan for controlling production and prices. Similarly, cost-accounting activities are valuable in giving the executive a more accurate picture of the operation of his plant. But when a trade association develops a standard system of accounting, it follows that prices tend to be set by this standard formula. And the formulas are usually devised in such a way as to lead the executive to include in his calculation all charges which the dominant element in the association wishes to see taken into account.

The Government and Prices

Although there has been popular demand from time to time for the government to fix the prices of certain articles, the federal government interfered very little with the pricing of industrial goods prior to the N.R.A. Such laws as were adopted were chiefly concerned with preserving competition. The Sherman Anti-Trust Act of 1890 and the Clayton Act of 1914 were designed to prevent monopoly and price-fixing by trade groups. In order to make this legislation more effective the Federal Trade Commission was established in

1914. Its power to conduct investigations and to issue "cease and desist" orders has had considerable influence on pricing policies, chiefly in the direction of creating more active competition. As a modification of this principle, Congress passed the Miller-Tydings law in 1937. This permits manufacturers, under certain circumstances, to enter into a contract with distributors for the maintenance of retail prices.

In addition to the federal laws, many states have recently enacted what are known as "fair trade laws." These are similar but somewhat broader than the Miller-Tydings law. They permit producers to establish retail prices on a fairly large range of articles sold within the state. Many states also have "unfair trade laws" which seek to prevent "unfair" prices and "sales below cost." While the laws of the various states are much the same in purpose, both courts and administrative bodies have interpreted them differently, thus creating a complicated situation. They do, however, definitely limit business executives in determining their price policies.

Outside Financial Control

Banks also tend to exercise an influence over the price policies of industrial corporations. When an individual such as Edison, Eastman, Ford, McCormick, Chrysler, or Firestone sets up a company to make a product which he has created, he usually wants to serve the public. He looks upon the company as "his baby," and is interested in raising it to a life of the greatest possible usefulness. Often, however, the founder of a firm has to give up his control to the bankers who have loaned him the money necessary for growth. Bankers are interested primarily in the safety of the funds which have been entrusted to them. Wishing to take as few risks as possible, they tend to oppose the cutting of prices out of fear that the policy might not work out. Then, too, a bank can hardly be expected to lend money for new equipment to a concern to enable that firm to compete more effectively

against another company in which the bank is heavily interested. Henry Ford's long fight against outside financial assistance grew out of his desire to be free for new commercial and technical experiments.

The Copper Debacle

Occasionally, banks go so far as to manipulate stock and commodity prices for their own immediate ends. One of the most disastrous cases which suggests an influence of this type was the pegging of copper prices in 1929. For some years the price of copper had not averaged more than 141/2 cents a pound. Beginning in 1027, however, two industry-wide organizations, Copper Exporters, Inc., and the Copper Institute, which were dominated by two or three large companies, began to boost the price. By March 25th, 1929, copper reached 24 cents a pound. While this proved too high to maintain, the price continued to be pegged at a somewhat lower figure. From April, 1929, through March, 1930, it was kept at 17.8 cents despite the general collapse of business. When the whirlwind finally hit copper, little was left but wreckage. By December, 1932, the price had reached an alltime low of 4.8 cents a pound.

This attempt at price-pegging could not have been more badly timed. It occurred just when new low-cost mines were being developed in Mexico, South America, and Africa. Prices should probably have been lowered rather than raised. The depression merely put the finishing touches on an effort that already was doomed to failure.

No doubt there are several reasons why this ill-fated experiment was undertaken. But it seems significant that in 1928 and 1929 banking interests and the management of the Anaconda Copper Mining Company—the world's largest company—joined in promoting the sale of Anaconda stock. The story is too complicated to tell in detail. But it is known that the head of Anaconda and several of its directors were

also directors of the National City Bank and that the chairman of the bank was on the board of Anaconda. It was only natural that the bank would dislike to see the price of the metal lowered while it was selling vast quantities of stock. We have no way of knowing the strength of other influences at work to keep up the price of copper. But a situation in which a powerful bank has such great interest in maintaining prices, even temporarily, is far from healthy. And it is obviously difficult for a company to have a price policy which is in the interest of the country as a whole, if its executives or directors are under the influence of a financial institution which is more actively interested in window-dressing the market for securities than in long-run efficiency and development.

THE NEW BUSINESS LEADERSHIP

DESPITE outside influences such as we have described, business leaders are coming more and more to recognize the need for a constructive price policy. They have seen that the type of business man who dares to buck the traditional viewpoint has often been extraordinarily successful. Although they do not deny that a business executive has definite limits within which he must work, they insist that he has neither been robbed of the power of independent action nor freed from the responsibility that goes with it. Many quotations could be given showing the degree to which present-day leaders have recognized the importance of a more vigorous price policy. Mr. Ford's views are well known. They can be paralleled by those of other automobile executives. Mr. Alfred P. Sloan, Jr., says:

". . . stabilization means a higher price level. . . . (It) discounts individual aggressiveness and ability and penalizes the new and better to protect the vested rights of the past. . . . One thing is perfectly evident today. Those who have followed the practice of lowering the cost of goods and services are the

ones who show the smallest amount of unemployment and have, therefore, made the most progress toward recovery. On the other hand, those who have followed . . . the principle of stabilization have progressed the least."

The following is from "Industry's Platform for 1938," prepared under the auspices of the National Association of Manufacturers:

"The key to improved American living standards is an increasing flow of products to consumers. More desires—more demand—more goods—more employment. . . . Improved distribution means making more goods available at as low a price as the particular service demanded by purchasers permits."

Role of the Large Corporation

We have seen that modern industry is often best carried on in large units, although many small concerns will be found working with the large corporations. These small concerns could not get along very well without the large ones. All parts of the economic system are connected. The large corporation has an extremely important role to play. A small plant may be capable of full operating efficiency, yet be too small to carry out a plan for production and pricing that would contribute to economic progress. Daring, broad-scaled experiments require large advance contracts which are often impossible for small firms.

The executive of a large corporation plans not only for his own plant but, to a considerable extent, also for the smaller concerns which supply him with materials or parts. Some persons have said that so much power in the hands of a few individuals interferes with competition. Heretofore, we have looked to competition to serve as a sort of balance wheel in our economic system. But small-scale competition has passed from a large part of modern industry. We cannot return to it without reverting to a simpler, and

² In a chapter contributed to "Industrial Price Policies and Economic Progress," by J. George Frederick, For Top Executives Only, pp. 366-8.

less efficient, type of production. But our so-called captains of industry hold in their hands new possibilities of improving the distribution of goods. This does not mean the death of competition but the emergence of a new type. Competition is quite as keen, and more effective, when industrial giants marshal their mighty resources to perfect new techniques and new schemes of organization.

It is true that in the intoxication of their early power, many industrial leaders sought to suppress competition. But experience has taught its lesson. It has shown that efforts to pile up quick profits often lead to final disaster. As a result, business men are now coming to take a longer view. Those who do not, find their zone of activities increasingly limited. If prices are kept unjustifiably high, there is always the danger that a rival firm will adopt a more aggressive pricing policy and steal away most of the customers. There is also an increasing possibility that technical advance will bring competition from some unlooked-for quarter. And, finally, the consumer may seek protection from the government. The best way to be sure of government "interference" in business is to make the consumers feel that they are not sharing in the technical advance of industry.

The Challenge of Free Enterprise

We frequently hear that America was founded on the basis of freedom of economic enterprise—along with religious toleration and political democracy—and that the preservation of this free enterprise is "the American way." But it is important that we understand the nature of free enterprise under present-day conditions. Originally, it meant simply that the working population was allowed to make use of the natural resources of the country. With the growth of modern industry there is less individual enterprise and more piling up of activity in the hands of corporation executives. This places a heavy responsibility upon them to see that those

who can no longer employ themselves shall have an opportunity to get jobs. A sound pricing system would be one which makes jobs for all.

It is not suggested that business men play Santa Claus and turn over their wealth to the public, or even that they work for nominal pay. All that is asked is that which many progressive business men are already doing: finding ways to organize production so as to supply goods at prices which can be afforded by those who produce the goods.

If the American business man demands the right of freedom of economic enterprise, society may properly ask that he use that freedom in the public interest. This is the challenge which the industrial system makes to the industrial executive. If he cannot meet it, the system of free enterprise under capitalism is doomed to sickness, low vitality, and unproductiveness. This contrasts sharply with the rich natural resources, equipment, and man power that are at the disposal of the American people. THIS pamphlet is the 23rd of a series published by the Public ? Affairs Committee. The other titles available are listed on the back cover.

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