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What Is a Reasonable Profit?

By Stuart Chase

There has been a new word coined from the exigencies of the times. It is not to be found in the dictionary, but it is upon everybody's lips and in everybody's newspaper. It is the word "profiteer."

Under the rules of the prevailing economic system, men do not organize their fellows for productive work except in the hope of making profit. Profit for these organizers is thus, at the present time, the very life-blood of the economic mechanism. To accuse all profit-takers of being "profiteers" is unjust and ridiculous. Take away profit and you have no incentive to produce goods under the present system. So long as this system endures, therefore, it would seem to be of considerable importance to distinguish between those profit-takers who claim a just and reasonable margin between their costs and selling prices and those profit-takers who claim an unreasonable margin and upon whom the stigma of the "profiteer" may justly fall. This is a distinction not only vital to the people who feel themselves the victims of extortion, but also vital to the statesman who, in the interests of the general public, attempts to curb the profiteer by law. It is the object of the present survey to determine, if possible, what shall constitute a "reasonable" profit, and particularly the technical methods underlying such determination.

Initially it is clear that the question of reasonable profit is intimately bound up with the question of reasonable price. In regard to a whole industry the two questions are indissoluble and identical, although in regard to a given company they may sometimes be considered separately. A fair price is built upon a true cost of production plus a fair profit, and thus it is obvious that such a price cannot be fixed until costs are found and a fair profit is determined. An attempt to fix prices without an investigation of the reasonableness of profits is a leap into the dark; so it may be said that the determination of what constitutes a reasonable profit underlies the question of what constitutes a fair price.

PRECEDENTS

In America we have long recognized that profits should be limited in the case of certain natural monopolies. In the case of many public utilities—such as gas companies, power plants, water companies and municipal transportation—it is a matter of common agreement that competition is an inefficient and wasteful method of operation. Public utility boards have been regulating profits, through the medium of fixing rates and limiting returns to investors, in enterprises of this nature for many years. The interstate commerce commission, according to the same general theory, has passed upon the reasonableness of rates charged by common carriers.

The exigencies of the war inaugurated a wide-spread movement on the part of the federal government toward regulation of profits and prices in a number of industries and according to a variety of methods. Thus the railroads were taken over and operated by the government, while railroad shareholders were compensated on the base of what congress determined to be a reasonable return. The Lever act imposed certain restrictions upon producers and manufacturers of food-stuffs, such as guaranteeing the price of wheat, fixing milling margins per barrel of flour and regulating the profits of the packers. The fuel administration fixed coal prices on the basis of costs. Munitions and supplies required by the government were purchased to a large extent on the "cost plus" basis, the "plus" representing what was thought to be a reasonable profit. Finally the treasury department through the excess profits and war profits taxes very clearly attempted to approach the question of reasonableness in regard to all corporations, partnerships and individual business.

While many of the limitations imposed by the government upon industrial profits during the war have been abrogated, the excess profits tax remains, and the continued high cost of living, with the resulting public unrest, has led the government to institute a nation-wide campaign against excessive profit-taking in the necessities of life. Therefore, it is safe to say that the termination of the war has by no means terminated the efforts of the government as representing the general public to define and in certain cases insist upon a reasonable profit.

But in spite of the growing tendency to determine what shall

constitute a reasonable profit, an examination of the methods heretofore adopted indicates that the question as a whole has not as yet been subjected to comprehensive analysis from either the economic or the business point of view (except perhaps in the case of public utilities), and such methods as have been tried have been largely experimental, often varying widely among themselves, and on occasions working great hardship and injustice to the parties under regulation or review. Seldom have these methods been constructed according to such a standard that the public could have definite assurance that a truly reasonable level of profit was being maintained.

Statement of the Problem

Primarily the modern organization of industry should be considered. If American industry were operating on the basis of free competition the question of reasonable profits could hardly be said to exist. Under free competition any profit that a competitor can make, having by definition no special advantages, may be said to be a reasonable one. Economic theory argues that when the profits of a free competitor become large, new capital tends to enter that field, increase the supply and thus automatically check an unduly high rate of return. The law of supply and demand is said to operate to keep profits at a moderate level. It is an open question, however, to what extent free competition obtains in modern industry as now organized. The pure condition contemplated by the classical economist is not often found in fact. Free competition has given way in many basic industries to the establishment of pools, rings, combinations, "gentlemen's agreements," "interlocking directorates" and other forms of monopoly or semi-monopoly. One has but to mention anthracite, sugar, oil, steel, harvesting machinery, packing, as well as numerous working agreements in smaller industries, to realize how far free competition has been undermined. Furthermore, certain natural, geographical, transportation, credit, protective tariff and other conditions seriously hamper the free play of pure competitive forces. We can recognize, therefore, at least three types of industries—the monopoly, the semi-monopoly and the competitive. Let us consider the probable effect of a profit regulation in each case.

In the case of monopolies, the fixing of a reasonable level of

profits tends to fix reasonable prices to the consumer at the same time. The monopolist is not over-rewarded, nor is the consumer forced to pay more than a fair price. The reason for this lies in the obvious fact that a monopoly by definition arbitrarily fixes prices, as its operations lie beyond the effective sphere of supply and demand. Knowing to what level its profits must be kept, the monopoly can within certain limits adjust prices accordingly. In the field of public utilities (such as the municipal gas company or electric light company) the operation of this principle is clear and simple.

When we turn, however, to semi-monopolies, such as the combination of the great packers for example, the principle becomes more complicated. A certain amount of competition is present, supply and demand do operate to a limited extent, and it is by no means certain that a limitation of profits would necessarily affect prices and directly benefit the consumer to any great degree. In the case of the great packers, with their interest in many things besides the meat business, the limitation of meat profits might well result in concentrating their activities in and devoting their capital to other enterprises.

In competitive industries subject to the law of supply and demand, a profit regulation can have no effect on prices unless each individual company in the industry sells at a different price to correspond with its own earning capacity—a situation clearly grotesque and impracticable. Prices in a competitive industry are set by the costs of the "marginal" or "bulk-line" companies, and in that a regulation of profits would not affect those marginal companies, with their high costs and low profits, the economic price would not be affected by the regulation, although low cost companies might be forced to sell at prices varying with their profits, which would be an absurd situation. England during the war, however, regulated profits in competitive industries by creating a giant pool which took all competitors' goods at cost, sold the goods at a flat price more than to cover all costs and distributed the profits back to the companies.

It should be pointed out that an arbitrary limiting of profits in a more or less competitive industry tends toward the discouragement of efficiency in low cost companies. Such companies will not be disposed to keep their costs down if no additional profit is to be

gained thereby. There is a real and delicate problem to face in this regard, for a profit regulation that makes for inefficiency and waste obviously defeats the social purpose for which it is primarily instituted.

The Definition of Profit

Profit from the economic standpoint and from the investor's or business standpoint has a different connotation.

According to the usual economic definition, profit is the entrepreneur's reward for his productive ability. Strictly speaking that only is regarded as profit which is over and above the normal ground rent chargeable for the land or natural resources which the entrepreneur uses (regardless of whether he owns or leases such property) and over and above the normal interest charge for other capital, including money, credit and improvements, which he uses (regardless of whether he owns, borrows or leases such property.)

"Net profit" as defined by the investor, on the other hand, is the amount of gross revenue which remains after providing for all legitimate costs, and after allowance has been made for rent and interest on property actually leased or money actually borrowed.

The economist contemplates the return on the whole business, postulating that all property which the business uses—whether such property is borrowed, leased or owned by the stockholders—constitutes the total investment from which profit is ultimately derived. Certain portions of this investment demand rent, others demand interest, what remains is the economic profit earned by the total investment.

The investor on the other hand contemplates the return on the stockholders' or owners' capital only. He defines investment as the owners' equity in the business, usually termed "net worth" and measured by capital stock and surplus combined. After paying all costs, plus rent and interest, what remains is the net profit earned by virtue of the owners' net worth. The economist thinks from the standpoint of the industry as an economic unit regardless of who owns it. The investor thinks from the standpoint of the owner of the business who receives the profit in cash or its equivalent.

It is unquestionably true that the investor's definition of profit

is the one that is most in use to-day and the one which the public best understands. Furthermore, from the bookkeeping point of view it is very unusual for a given enterprise to allocate its earnings as between rent, interest and pure economic profit, and accordingly if the economic definition were to be followed in fixing a reasonable return it would necessitate a considerable modification in current bookkeeping methods. In the circumstances it is probable that the investor's definition of profit is the more convenient for the task in hand.

Erection of a Standard for Defining Reasonableness

Having thus outlined the problem and examined in some detail the elements which enter it, it remains to be seen what course should be followed. As a representative of the general public, the statesman desires to reduce prices, prevent swollen fortunes, and at the same time does not wish to discourage industry or to be unfair to individual companies.

In his attempt to define what shall constitute a reasonable profit, he is at once confronted with two questions:

1. What shall be the standard base employed for determining profit in its relation to reasonableness?
2. What shall be the specific rate of profit allowed on this base?

In other words, what percentage method or other method shall be used to measure the earnings of a given enterprise, and what shall be the exact percentage or other index qualification granted as "reasonable?"

The Necessity of a Standard

It is a matter of common knowledge that a given profit shown in terms of dollars and cents is often meaningless.*

* One important qualification needs to be noted in this connection. To quote J. A. Hobson, the English economist, in his book, "The Industrial System," page 196: . . . . we must distinguish the unit of cheap production where the highest rate of profit is got from the unit which, with a lower rate, yields a larger aggregate profit. A business which has been earning 12 per cent. on its invested capital of 300,000 pounds may grow to 500,000 pounds if it can earn 9 per cent. on this large capital. Since it is aggregate profit, at any rate above the minimum, rather than the highest rate of profit in itself, that furnishes the business motive to business men, it is evident that economic forces may thus drive businesses into sizes larger than the cheapest unit of production. This growth of uneconomically large businesses will normally occur in an industry where such growth may itself become an instrument for repressing competition, and so for preventing such a fall of prices as will lower profits to a minimum. In other words, if a manufacturing business, which in its "cheapest unit of production" size, at 300,000 pounds is subject to keen competition (because at such a size it cannot command the market), finds that, by doubling its size, or by combining with a competitor of the same size, it can absolutely or partially control the market, it will be profitable to make this enlargement, because, by holding up prices, it can thus secure a larger aggregate profit than by remaining at the "cheapest unit of production" size.

In order to give the figures significance and before critical judgment can be passed, they must be brought into relation with some other known factor of the enterprise, such as sales, investment or unit of output, and the rate or index of profitableness must be determined. This rate then becomes a yardstick which measures and compares the returns of the enterprise under examination with other enterprises in the same line of business and, if the index be general enough, with enterprises in other kinds of business.

Here is encountered a most important question, namely, the necessity of determining a standard which is as wide in its application as possible. While it may well be that one standard has great significance in a certain industry and another standard has great significance in a second industry, the fact that neither standard is applicable to both industries rules it out from the universal standpoint. Thus, as coal operators are in the habit of quoting their profit per ton, the packers their profit per dollar of sales and bankers their earnings per share of capital stock, it is obvious that these varying methods must, from the standpoint of universality, give way to some single standard that is applicable to all three businesses and capable of establishing a basis of comparability between them. If such a universal standard can be found, the whole question of determining reasonableness is immensely simplified. Certainly it would be our aim to find a standard applicable to all or, failing that, to most industries.

Re-examining for a moment the economist's definition of profit as the reward of ability, it would seem that profit in this sense does not flow so much from any particular investment or sales, or other dollars and cents standard, as from the individual character of the entrepreneur. In other words, the economic definition of profit might seem to call for a psychic human equation rather than any mathematical amount as a standard to which to relate profit. But a brief consideration of the facts indicates that this is a groundless assumption, for the ability of the entrepreneur finds an excellent measurement in the amount or rate of profit earned on a certain investment or other mathematical figure over and above the amount or rate that could be earned did the entrepreneur's special ability not come into play—i. e., on an

investment basis, the rate earned over and above the current interest rate.

If bankers and bondholders who lend money to a given enterprise are satisfied to receive only about the current interest rate, what is earned over and above this rate measures the special ability of the entrepreneur and is claimed by him and can be related in percentage terms to his investment.

A word as to the wisdom of profit regulation: if it could be proved that the entrepreneur would not exert his ability unless he was assured of a high reward for it, it might be disastrous for society to attempt any kind of profit regulation, as in so doing it would discourage the efficient means of its own subsistence, although the subsistence came high because of the profit included in the price. Under modern industrial conditions, however, it is doubtful if this proposition can be proved. Much of the profit made to-day flows from certain special privileges, or certain special conditions, rather than from the ability of the entrepreneur alone. Moreover, it is an open question whether or not the entrepreneur in these days of great corporate undertakings is not as much of a myth as the "economic man"—beloved by the academicians. Salaried managers have largely absorbed the functions of the old individual entrepreneur in many large-scale undertakings, and it is doubtful if industry would flag and weaken if the "reward of ability" were constrained by the state in the form of a reasonable regulation of profits.

Standards Now in Use

Many methods of calculating rates or indices of profit are in use. The problem immediately in hand is to determine which method is the soundest and of the most general application from the public standpoint for the purpose of gauging reasonableness.

The more common of the existing standards are the following:

1. The rate of profit on sales.
2. The rate of profit on costs.
3. The rate of profit per unit of output (per bushel, per gallon, etc.)
4. The rate of profit on investment, investment having the following possible definitions:*

* While these definitions are given in terms of a corporation balance-sheet, they are equally applicable to a partnership or an individual proprietorship, by substituting for capital stock and surplus the partnership or proprietorship accounts.

a. The rate of profit on economic capital (including borrowed money and a valuation for leased property.)
b. The rate of profit on capital stock.
c. The rate of profit on fixed investment (land, buildings, machinery, etc.)
d. The rate of profit on the actual cash or property investment contributed by stockholders.
e. The rate of profit on capital stock, surplus and borrowed money, including bonds, notes payable and other interest-bearing obligations.
f. The rate of profit on capital stock, surplus and bonded indebtedness.
g. The rate of profit on net worth or total assets less total outside liabilities (net worth is usually represented on a company balance-sheet by capital stock and surplus).

All the above standards have been used at one time or another, and most of them are more or less illuminating and useful from certain angles, even as they may be misinforming from other angles. Due to this variety of standards perhaps, there is no single field in which misunderstanding is at present more rife.

The greatest carelessness obtains among all sections of the business world in announcing rates of profit without stipulating upon what the rates are based. It is very common to be told that a given enterprise makes 10 per cent or 20 per cent or 100 per cent, but it is exceedingly uncommon to be told whether the percentage is based on sales, on economic capital, on net worth, on capital stock or what not. The fact that percentages are given with the base taken for granted would seem to indicate that the public mind is reaching toward the creation of a universal standard. The fact remains, however, that that standard has never been determined, and as a result gross misunderstandings are constantly occurring through the indiscriminate use of undefined percentages.

Let us examine each of the above standards with a view toward its adaptability as a universal measure of the reasonableness of profits.

(1) *Sales*—A rate of profit on sales is not a trustworthy index as between two different industries, in that this rate is subject to

great variation according to the industry in question. The condensed milk business, for instance, operates on a fairly rapid turnover, the manufacturing process is simple and requires neither highly skilled workmen or much expensive machinery, and as a result the rate of profit on sales does not need to exceed 2 or 3 per cent in order to give an ample return (10 to 15 per cent) on net worth. The manufacture of shoes, on the other hand, is a longer process, the turnover is not so rapid, skilled workmen and costly machines are required in some numbers, and as a result the rate of profit on sales must be from 8 to 10 per cent in order to yield a 10 to 15 per cent return on net worth. Obviously a 2 per cent profit on condensed milk sales has no significance when compared with 2 per cent on shoe sales, and the two industries cannot be compared or judged on this standard.

Again, while a rate of profit on sales is in common use in many lines of business as a guide to the executives of that business, it is always theoretically unsound and often dangerous. For instance, in a period of rapidly increasing prices, a profit which might positively increase in terms of rate on investment would tend to show a decrease in terms of rate of profit on sales. As profit in the modern business sense applies to stockholders, and stockholders are represented by investment, obviously the rate on investment curve is more important and more nearly true than the rate on sales.

Furthermore a rate of profit on sales can never reach 100 per cent (unless the goods cost nothing), and accordingly as rates on sales approach 100 per cent they become increasingly flattened and meaningless.*

(2) *Costs*—A rate of profit on costs is sounder than a rate on sales, but the fact that the make-up of costs between industries is founded on widely varying amounts of investment to produce those costs renders this ratio unsuitable for comparative purposes. An industry whose costs are 90 per cent raw material and 10 per cent expense requires as a rule considerably less investment than an industry where costs are 10 per cent raw material and 90 per cent expense, because in the latter case a great deal of processing is obviously necessary, entailing as a rule the employment of costly machinery and equipment. The question of the

* The food administration during the war used this standard for regulating the profits of the small independent packing companies, allowing 2½ per cent. on sales.

rapidity of turnover also operates in a "cost" rate, as it does in a "sales" rate.

(3) *Unit of output*—Rates of profit per pound, per gallon, per cubic foot, etc., are excellent for the information of operators in any given industry as a measure of efficiency, but they are meaningless for comparisons between industries, because a profit of 2 cents per pound on meat has no significance when compared with a profit of 2 cents per pound on coal, and largely meaningless to the general public until reduced to terms of rate of profit on investment or other well-recognized factor.

(4) *Investment*—The last seven items on the list of standards deal with different definitions of what constitutes investment. It is by this time clear that investment is one thing that all business has in common and is the common item upon which significance can be placed. A rate of profit on investment has few of the shortcomings that apply to rates on sales, costs or unit of output, and, if investment can be adequately defined, it is obvious that here is found a standard upon which can be compared intelligibly the earnings of most if not all industrials. Profits arise fundamentally from the application of capital or "investment" to a given enterprise. A rate of profit on that investment goes far toward telling the true story of reasonableness.

The problem is by no means solved, however, until investment be defined. Seven definitions are given in the above list, and they will be considered in turn:

a. *Economic capital* includes all capital—whether owned, borrowed or leased—used by the company in question. If this definition of investment be taken, obviously the economist's definition of earnings, compounded of the three elements of rent, interest and pure economic profit, must be taken in conjunction therewith, in order to establish a standard rate. The great difficulties with such a standard are its unusualness, the absence of data from which to calculate it on most accounting records and the question as to whether reasonableness is more closely related to economic capital or to investors' capital. This definition cannot be dismissed, however, and will be considered again later.

b. *Capital stock* is a common measure of profit but a highly unsound one. On this basis, a company which capitalizes its surplus by issuing stock dividends will show a much lower rate than

one which does not, although the earnings of the two companies on the basis of economic capital or net worth may be identical. Morris & Co. in 1917 earned about the same rate on net worth as did the Cudahy Packing Co. (23 per cent) but this profit applied to capital stock shows some 260 per cent in the case of Morris and only 35 per cent in the case of Cudahy, because Morris has not capitalized surplus in recent years. The futility of comparisons on this basis needs no further argument.

c. *Fixed investment* (*lands, buildings and machinery*) is not an adequate standard because of the tremendous variation between industries in the amount of fixed investment required. A broker or commission man may have no fixed investment beyond a desk or two and yet have a great deal of money tied up in working assets.

d. *Actual cash or property contributions* on the part of the stockholders provide an interesting standard for measuring profits in the early years of a given enterprise, but after profits have been accumulated in the surplus account—particularly by reason of a genuine foregoing of reasonable dividends on the part of the stockholders—the original cash contribution ceases to measure the stockholders' investment, and thus comparisons between liberal and illiberal dividend paying companies, as well as between old companies and new companies, become largely meaningless on this basis. We shall consider actual contributions later, however.

e. *Capital stock, surplus, bonds, notes payable and other interest-bearing obligations.* The theory of this definition leans toward the economic standpoint, in that investment is here postulated to include all moneys used in the enterprise, the source of those moneys—whether advanced by owners or stockholders or by banks, bondholders or other money lenders—having no bearing on the situation. The weakness in this definition, still from the economic viewpoint, is the fact that no provision is made for the inclusion of fixed properties (land, buildings, machinery, etc.) by a given enterprise, but leased or rented, rather than owned. In cases where royalties are paid, the problem of capitalizing them becomes so complicated that this definition may serve as a more practicable one than economic capital—although in theory it is deficient.*

* The food administration during the war applied this standard to the regulation of the packers' profits, allowing 9 per cent. profit on the meat business.

f. *Net worth plus bonded indebtedness* is another common measure, but its shortcoming is apparent when it is remembered how common it is for corporations to borrow from banks on long term notes instead of bonding their assets. This measure does not furnish a sound basis for comparability.

g. *Net worth* is from the legal or investors' viewpoint the true investment in a given enterprise. After eliminating goodwill, unwarranted appraisals and other more or less intangible assets, it represents the actual money advanced or left in the business by owners or stockholders. Borrowed money or leased property is regarded as a commodity used in the enterprise, like raw materials or labor, for which due payment is made in the form of interest or rent charges, but it has no claim to share in the profits of the business after such charges have been met. Profit is accordingly defined as the amount of income remaining after the deduction of interest and rent, and agrees with the investor's definition of net profit.

Argument is thus between economic capital and net worth as the better basis for defining investment and the best standard upon which to calculate rates of profit, with net worth plus borrowed money as a substitute for economic capital when valuations for leased property are difficult to determine.

There is no question, from the economic contemplation of the whole industry, that a rate of profit—before charging rent and interest—on economic capital is the most acceptable standard for measuring earning power. But, as has already been pointed out, such a standard involves a considerable revision of modern accounting methods as well as an extensive change in both the business man's mind and the public mind as to what constitutes investment and profit.

From the point of view of modern business, profit is universally recognized as remaining after rent and interest charges have been met and investment is finally conceded to be synonymous with net worth. Net worth is the stockholder's or owner's investment. This investment has presumably been made for the purpose of earning a profit over and above actual rent and interest charges. When such a profit remains it is divisible among shareholders or owners in proportion to their holdings in or claims upon the net worth (after income taxes have been paid to the government),

and accordingly the relationship of net profit to net worth is a close one, and a rate or ratio established between them is a significant and well-nigh universally understood figure.

Robert H. Montgomery takes up the position that net worth constitutes the true definition of investment, on page 572 of his book *Income Tax Procedure,* 1918, as follows:

> Capital in a commercial sense is what remains after debts are provided for. A man with no capital of his own may borrow $1,000 and lose it in his trade or business. He still owes it. As before, he has no capital, and now he does not even have economic capital.
>
> Borrowed money is the capital of the lender, not of the borrower. Much has been said in favor of considering borrowed money as invested capital, but the author thinks that the arguments used are fallacious and impracticable. If banks were to consider all deposits as invested capital, a curious situation would arise. Its depositors might not like the idea.
>
> The inclusion of interest as an expense of the business is a sufficient recognition of the use of borrowed money by the borrower.
>
> In the case of corporations where the limitation on interest deduction may operate to prevent credit for the full amount paid, there is, of course, an injustice, but the remedy is to remove the restrictions on the interest allowance, not to consider borrowed money as capital.

Congress in the income-tax law laid down in effect a theory of judging reasonableness of profits, when it provided that a certain pre-war rate of earnings on investment should be taken as a standard for gauging excess war earnings. Investment was defined in the summary as follows:

> Art. 831. *Meaning of invested capital.*—Invested capital within the meaning of the statute is the capital actually paid in to the corporation by the stockholders, including the surplus and undivided profits, and is not based upon the present net worth of the assets, as shown by an appraisal or in any other manner. The basis or starting point in the computation of invested capital is found in the amount of cash and other property paid in, the valuation at which such other property may be included being determined in accordance with the statute and the regulations. The computation does not stop, however, with such original entries or amounts, but also takes into account the surplus and undivided profits of prior years left in the business. The invested capital of a corporation includes, generally speaking, (a) the cash paid in for stock, (b) the tangible property paid in for stock, (c) the surplus and undivided profits, and (d) the intangible property paid in for stock (to a limited amount), less, however, the same proportion of such aggregate sum as the amount of inadmissible assets bears to the total assets. Invested capital does not include borrowed capital.

In other words investment closely approximates net worth, and no attempt is made in the law to use economic capital as a basis, for the clause quoted above specifically says "invested capital does not include borrowed capital."

All things considered it would appear that rate of profit on net worth furnishes the most practical standard for him who is attempting to pass judgment upon the reasonableness of profits.

Precaution Necessary in Using Net Worth as a Standard

In an unincorporated enterprise it is conceivable that all the capital for running the business might be borrowed. In this case there is no net worth at the beginning of operations. Any profit made, therefore, cannot be related to net worth, and no rate or measure of reasonableness on this basis can be established. In such cases economic capital is obviously a better standard, but it would probably be admitted that cases of this kind are rare. Again, if a certain rate on net worth were laid down as reasonable, the shrewd business man would immediately attempt to make his net worth as large as possible. This he can do, if no regulations restrain him, by revaluing his fixed property on the basis of current reproduction values instead of cost values; by injecting goodwill into his assets and issuing stock therefor; by selling stock instead of borrowing money from the banks; by issuing preferred stock instead of bonds, and so forth.

Great care must be exercised by the regulating authority in defining net worth. Perhaps the safest rule that can be laid down is that net worth is the difference between total assets (after assets have been cleared of goodwill and all fictitious valuations including re-appraisals) and total liabilities, including bonds.

Again assuming that net worth as thus limited and defined be taken as a standard, a further difficulty remains in regard to the question of the actual cash or property contributions made by stockholders and the bearing of such contributions on the problem of a reasonable rate of earnings. A profit regulation, for instance, of 10 per cent on the net worth of company A and company B—where A's net worth was made up of cash capital plus a surplus derived from a genuine parsimony in declaring dividends; and B's net worth was made up of an original shoe-string plus excessive profits put back into surplus after paying high dividends—such a situation, calling for an equal tax, or price reduction, on the part of both A and B, does not seem to be altogether equitable. The bearing of original contributions, particularly in cases of monopoly, must not be overlooked in bringing judgment to bear upon the reasonableness of the profits of a given company.

An Illustrative Case

The XY Company manufactures men's shoes of one style

only. Its balance-sheet (condensed) on December 31, 1919, was as follows:

Assets		*Liabilities*	
Current assets	$100,000	Accounts payable	$ 30,000
Fixed assets	200,000	Notes payable	30,000
Goodwill	50,000	Bonds payable	70,000
		Total liabilities	$130,000
		Net worth	
		Capital stock, common	100,000
		" " pfd. (7%)	50,000
		Surplus	70,000
		Total net worth	$220,000
Total assets	$350,000	Total liabilities & net worth	$350,000

Value of leased machinery used by company—$50,000

The profit and loss account of the XY company for the year ended December 31, 1919, was as follows:

Sales (200,000 pairs of shoes @ $5)		$1,000,000
Cost of sales (exclusive of rent, interest and federal taxes)		950,000
Gross profit		$50,000
Less rent paid on machinery	$4,000	
Interest paid	6,000	10,000
Net profit		$40,000
Federal income tax		10,000
Transferred to surplus		$30,000

From the above statements it is possible to select all the various figures and standards hitherto considered and calculate rates of profit on each.

Net worth is found to be $170,000

The net worth of the company shown on the balance-sheet is $220,000, but this includes a valuation of $50,000 for goodwill which must be eliminated, the item in this case being assumed to be merely a book value for which nothing was paid.

Economic capital is found to be $320,000

This is obtained by adding net worth ($170,000) to borrowed

money ($100,000) to the valuation of rented machinery used ($50,000).

Net worth plus borrowed money is found to be.................. $270,000

The various rates of profit actually earned according to certain of the standards already enumerated are as follows:

Rate of net profit ($40,000) on sales ($1,000,000)..........	=	4 per cent
Rate of net profit ($40,000) on costs ($950,000)............	=	4.2 " "
Rate of net profit ($40,000) per unit of output (200,000 prs.)	=	20c. per pair
Rate of gross profit ($50,000) on economic capital ($320,000)	=	15.6 per cent
Rate of profit* ($46,000) on net worth plus borrowed money ($270,000)	=	17.0 " "
Rate of net profit ($40,000) on net worth ($170,000).......	=	23.5 " "
Rate of net profit ($40,000) on capital stock ($150,000)....	=	26.7 " "
Rate of profit† ($36,500) on common stock ($100,000).....	=	36.5 " "

Which of these rates is the most significant, and which gives the surest index of reasonableness? Four per cent on sales and 4.2 per cent on costs and 20 cents per pair, standing by themselves, mean nothing. They do not tell us whether the company is making a modest profit or recklessly profiteering. Similarly a rate of 26.7 per cent on capital stock or 36.5 per cent on common stock has no final significance in itself. We must know what percentage of the stock has been paid in, what percentage represents stock dividends or the capitalizing of intangible amounts. Also a rate on preferred and common combined means little.

This leaves two significant figures. The rate of gross profit on economic capital is 15.6 per cent. The rate of net profit on net worth is 23.5 per cent. The former makes it evident that the company is earning almost three times the normal interest rate on the total investment that it uses. In a necessity of life such as shoes, this appears to be high. There is no question therefore as to the possibility of passing some kind of judgment from this standpoint.

From the standpoint of net worth, a rate of 23.5 per cent before paying income taxes rewards the stockholders with better than four times the normal interest rate on their investment.

Which of these two standards, both significant, shall be chosen as preferable? Does 15 per cent on economic capital mean more

* Gross profit after paying rent.
† After paying preferred dividend.

than 23 per cent on net worth? Undoubtedly, the latter figure is the better known and the more significant in the business world.

What is a Reasonable Rate of Profit

Having determined, provisionally at least, a standard by which profit may be measured, the next problem is to fix a specific rate of earnings which may be judged as reasonable. It is not within the limits of the present discussion to lay down any specific rates, and it is probable that such rates should only be laid down by the statesman or the critic after the most searching examination of all the factors involved. The most that can be said at this point is that no allowed rate should ever be less than the current interest rate, and it is obvious that the interest rate should form the foundation for erecting reasonable percentages in multiples above this base line.

Rates falling within the category of reasonableness will vary somewhat between industries according to the risk involved. Thus complete monopolies with little inherent risk in them might well be content with the lowest rate (but little if any above the current interest rate); semi-monopolies might justly claim a higher level as reasonable, while companies in more or less competitive fields might claim still higher rates.

The layman or the statesman who attempts to pass upon the reasonableness of profits or to bring upon a given individual the fearful stigma of a profiteer should exercise the greatest care in weighing relative economic advantages. In general, it may be laid down that a reasonable rate varies directly with the risk involved. It might well be that the soundest method of determining rates in a field where competition still persists to some extent lies in averaging such rates over a series of years, reasonableness being dependent upon the average of the period rather than upon the return in any given year.

Conclusion

Summarizing the argument, it appears that the question of what shall constitute a reasonable profit is permanently before us. It must be faced, whether we like it or not and whether we agree with the economics of it or not. To date no universal standard has been laid down for gauging reasonableness. The most diverse methods are employed and the most careless statements

and conclusions are made. Reviewing the field, it is evident that, of all methods which have been advanced for passing judgment on profits, the rate of economic profit on economic capital and the rate of net profit on net worth are the two tenable bases which have a more or less universal application. Of the two, the rate of net profit on net worth is, undoubtedly, the better understood. If net worth be taken as the standard, a fixed rate of profit thereon cannot be laid down as reasonable for all industries, but such rate must vary according to the extent of risk inherent in the particular business under review. The range of such variation should, however, probably lie between the normal rate of interest as a minimum and several times this rate as a maximum.