

A Comparison of Accounting and Economic Concepts of Business Income

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The determination of annual business income is, for accountants, a major area of research, study and discussion. Economists, too, are intrigued with this determination. However, the concept of income held by the two groups, broadly, is radically different, as will be evident from the ensuing exposition.

Accountants and economists have been unable to come to terms in developing a uniform concept of income. Indeed, there exists within each profession many different concepts of income. Both professions have agreed that income determination is one of their most important concerns. Irving Fisher, a celebrated American economist, pointed out the prominent role of the income concept to the economists when he stated that:

"I believe that the concept of income is, without exception, the most vital concept in economic science . . ."¹

The accountant too, has placed paramount importance on the income statement—it is the most important accounting report in today's business world.

So it is, that both accountants and economists have ascribed a most important role to the income concept. But, further examination shows that the two disciplines have different ob-

jectives in their conceptual approach to it.

The economist is concerned primarily with the income of persons, of groups of persons and of society as a whole. The accountant, on the other hand, is concerned principally with income as it arises in transactions of business enterprises.

The economist's approach to income is therefore much broader than that of the accountant; but the domain of the accountant is also covered by the economist. Since the economist is concerned with income of society as a whole, then of necessity he must be concerned with income of business enterprises which is an integral part of total income. Therefore, income concepts as they apply to business enterprises are common grounds to both economists and accountants. Despite the common interest, each discipline views business income from a different vantage point, and consequently sees it in a different light—which is the point of this article.

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WHAT IS BUSINESS INCOME?

In accounting, business income is generally conceived as the residual

from matching revenue realized against costs consumed.

The economist uses different concepts of income. The Hicksian concept is probably the most generally accepted by economists. Hicks stated that:

"It would seem that we ought to define a man's income as the maximum value which he can consume during a week and still expect to be as well off at the end of the week as he was at the beginning."²

This approach to being as "well off" at the end of a period as the beginning has been used by the economist to determine business income. Consequently, the economic income of a business for a given period, may be described as:

". . . the amount of wealth that can be distributed to the owner during the period without diminishing the entity's future prospects below those that prevailed at the start of the period."³

If a business has residual value of its revenue over its related costs, then it has earned income and consequently increased its net worth. Similarly, if the business is better off at the end of a period than it was at the beginning, then it has also increased its net worth. Consequently, we see that both the economist and the accountant agree that income is an increase in net worth, but each has a different concept of net worth; and therein lies the major difference between the concepts of business income by the accountant and the economist.

The accountant determines net worth on an historical cost basis by the formula of "assets — liabilities = net worth"; whereas the economist's determination is "current value of tangible assets + discounted value of future net receipts — liabilities." The following oversimplified example will serve to illustrate the accounting as well as the economic method of computing net

worth and consequently the determination of income.

ILLUSTRATION OF NET WORTH DETERMINATION

On January 1, 1967 a corporation was organized with a capital of \$100,000 with which it purchased a new building. The building is on land leased for a period of forty years, at the end of which time, it is assumed, the building will have no value. The corporation then leased the building for a period of forty years at an annual rental of \$20,000. The expected operating cost, including depreciation would be \$15,000 per annum, leaving a net profit of \$5,000, disregarding income tax. The determination of the corporation's net worth as of January 1, 1967 and December 31, 1967 computed by the accountant and economist would be as follows: Assume the appropriate rate of interest to be 5%.

	Jan. 1, 1967	Dec. 31, 1967
Net Worth—Per CPA		
Assets	\$100,000	\$105,000
Liabilities	—0—	—0—
Net Worth	\$100,000	\$105,000
Net Worth— Per Economist		
Tangible Assets	\$100,000	\$105,000*
Goodwill†	85,795	85,085
	185,795	190,085
Liabilities	—0—	—0—
Net Worth	\$185,795	\$190,085

†Represents the discounted value of future net receipts, present value of \$5,000 per annum at 5%, for 40 and 39 years respectively.
*No change in market value of building.

ILLUSTRATION OF INCOME DETERMINATION

In order to arrive at net income for the year 1967, the accountant would merely determine the excess of revenue realized over cost consumed or \$20,000 — \$15,000 = \$5,000. The same result would be arrived at by obtaining the difference between the

net worth at the beginning and end of the period, giving the appropriate recognition to capital additions or withdrawals and dividend distribution, if any. The economist uses only the change-in-net worth method in arriving at net income. His net income would thus be \$4290 (\$190,085 — \$185,795).

Variation in Conditions at End of Year. An extension of the economist's concept of income determination is illustrated by the introduction of two factors, both ignored by the accountant but meaningful to the economist. These factors are (1) a rise in the general price index at the end of 1967 to 110% of the base period (January 1, 1967), and (2) an increase in the market value of the building, which then had a depreciated bases of \$97,500, to \$120,000.

Under the above conditions the accounting income would remain at \$5,000, as computed earlier, but the economic income would be \$7,464, computed as follows:

<u>Net Worth—Dec. 31, 1967</u>	
Building, at market	\$120,000
Other assets	7,500
Discounted value of future receipts	\$85,085
Less, losses due to price level changes	<u>19,326*</u>
	65,759
Net Worth	<u>193,259</u>
<u>Net Worth—Jan. 1, 1967</u>	
Per prior computation	<u>185,795</u>
Net Income for the Year	7,464
*Computed at 110% of base at Jan. 1, 1967.	

This computation reflects some of the basic differences between the accountants' and the economists' concepts of income determination. The accountant does not consider the price level changes or the holding gains resulting from the appreciation of fixed assets.

The differences between these two concepts of increase in net worth, eco-

nomical income and accounting income may be reconciled by starting with accounting income and arriving at economic income as follows:

Accounting Income

- ± Unrealized changes in the value of tangible assets which took place during the period, over and above value changes recognized as depreciation of fixed assets and inventory mark-downs.
- amounts realized this period in respect of value changes in tangible assets which took place in previous periods and were not recognized in these periods.
- + changes in the value of intangible assets during the period (which may be considered as changes in the value of goodwill)
- = economic income.

THE UNDERLYING ASSUMPTION OF THE INCOME CONCEPTS

Many of the basic postulates or assumptions used by the accountant in income determination are objected to or completely rebuffed by the economist. Some of these concepts are:

- the going concern
- objectivity
- realization of revenues
- stable monetary unit.

In the succeeding paragraphs, an attempt will be made to bring out the economist's view of the above concepts.

The Going Concern Concept. Accountants have accepted the presumption that:

" . . . in the absence of evidence to the contrary, the productive life of the enterprise may be deemed to be indefinitely long."⁴

As a result of this postulate, all costs of the enterprise are referred until such time as they have been consumed by a revenue producing process or have expired because of the passing of time.

When fixed assets are purchased, they are recorded at cost which gen-

erally represents market price at the time of acquisition. Later change in market value is not recorded, except in the case of a reorganization, appreciation as the asset is a deferred cost chargeable against future revenues in a rational and systematic manner. This line of reasoning is justified by the accountant on the assumption that the life of the entity is indefinitely long and the cost of the asset will eventually be completely written off.

Another case in point is the valuation of accounts receivable. From an accounting standpoint, accounts receivable at any given time are valued at the full expected amount to be collected in future periods, on the presumption that on a going concern bases, there is no need to decrease the asset to its present value. However, the economist, in order to arrive at his current net worth would consider accounts receivable only at the discounted present value.

The economist rejects the thesis of the going concern as a basis for income determination for the reason that he "values" the company annually. Since he must first determine net worth to compute net income, then each year's balance sheet is equivalent to a terminal determination, except for no provision for liquidation.

Objectivity. The accountant, because of his intention to utilize accuracy in accounting procedures, has come to regard objectivity as a major guidepost. Thus, the accountant endeavors to measure the effects of business transaction on verifiable evidence, whereas the economist generally makes his measurements on the basis of expectations.

Professor Moonitz, in outlining "The Basic Postulates of Accounting," wrote:

"Changes in assets and liabilities and related effects (if any) on revenues, expenses, and retained earnings and the like, should

not be given formal recognition in the accounts earlier than the point of time at which they can be measured in objective terms."⁵

The accountant's concept of income, therefore, is well supported by his reliance on objectivity. The process of matching cost against current revenue could not be properly carried out without the full employment of the objective approach. Paton and Littleton stated that:

"The fundamental problem of accounting . . . is the division of the stream of cost incurred between the present and the future in the process of measuring periodic income."⁶

However, the economist does not adhere to the principle of objectivity in developing his concept of income. There is heavy reliance on subjectivity and individual judgment by the economist in his determination of income. This is so because the economist, before he can arrive at current net income, must first determine the ability of the enterprise to earn future income. He must estimate what the total future income might be (by computing its discounted value), and then arrive at the current net worth of the enterprise. Therefore, since the economist is called upon to predict the future events of the enterprise, in order to arrive at current net worth and net income, then his net income is based upon less objectively verifiable evidence than that of the accountant. Of course, the accountant also estimates future events of the enterprise, such as the useful life of depreciable assets, but in this respect he merely reviews management's determinations. But by and large, the accountant is concerned with what has been, or, what is, rather than what might be.

Realization of Revenues. Accountants take the conservative view in determining the point at which income

should be recognized. It has become the general practice to record income at the point of realization, indeed at the point of sale. W. A. Patton said:

"The process of exchanging product for cash or definite claim to cash, constitutes 'realization' and justifies the description of revenue measured by sale as 'realized' revenues."⁷

The point of sale is chosen as the time of realization because it offers an objective measurement of the value of the product being exchanged. Further, the disposal of the product is the final fulfillment of the contribution such product can ultimately make to the enterprise. Finally, this position is a conservative one, which is a popular and creditable stance.

If the contribution to be made to the well-being of an enterprise by the assets it owns is anticipated before the actual realization of such contribution, then the entire income for the life of the enterprise could be determined at the time the enterprise is capitalized. But this would be inconsistent with other accounting concepts because

- accounting presumes the business to be a going concern, and,
- such measurement could not be made objectively.

On the other hand, the economist conceives that the enterprise at any given time should recognize the income it expects its assets will ultimately contribute in the future. This is done by making an estimate of the value of such future income, and capitalizing it as goodwill (as was done with the expected rental income from the leased building in our prior discussion). If the estimate made by the economist is correct, then all the income of an enterprise would be recognized at the time of its inception except for interest to be earned, if any, since it represents the difference between the future and present values.

In addition, the economist will currently reflect income representing holding gains and monetary fluctuations. In the holding gains, he includes increases in the current market values of assets. For example, appreciation in real estate is recognized as income as determined. The accountant, however, in accordance with generally accepted accounting principles which rest on the realization concept, will not recognize this appreciation until it has actually been realized.

*Stable Monetary Unit.*⁸ The accountant still adheres to the concept of the stable monetary unit. One of the postulates of accounting state:

"Fluctuation in value of the monetary unit which is the accounting symbol may properly be ignored."⁹

(The economist is diametrically opposed to this presumption and takes an adamant position that all changes in price levels must be reflected in income during the period of such changes. By so doing, the economist adjusts for variable monetary values from one period to another in order to reflect a constant base and thus maintain the "real" monetary value.

The accountant's approach to price-level changes in income determination is to completely ignore the effects of such changes. Here again, the reasoning is based on the interlocking of other basic concepts in accounting. Firstly, income should be reported only when realized and a mere change in the purchasing power of the monetary unit is not a realization of income or loss. Secondly, the life of the enterprise is deemed to be indefinitely long, and, therefore, barring a liquidation of the enterprise, the effects of the money fluctuation might never be realized.

CONCLUSION

The economist and the accountant

have different objectives in the determination of income, as well as different concepts of income. The accountant measures income independently, and the balance sheet, in effect, is the residue of prepaid and deferred items. The economist, on the other hand, uses successive balance sheets as real value determinants and the annual increases or decreases represent real economic income. The accountant, on the whole, is interested in what is or what has been, whereas the economist is interested in what might be. Income of an enterprise from the accountants' point of view must be realized and objectively quantified. But the economist's point of view is that income can accrue only after proper provision has been made to keep capital intact. This is done by capitalizing all expected future net receipts as goodwill. Therefore, economic income is the sum of the future net receipts plus interest earned on capital plus other unexpected gains such as appreciation of fixed assets and monetary fluctuations. The economist deals with certainties and

uncertainties. If his estimate of the uncertainties turns out to be accurate, then in the long run he would have arrived at the same point of cumulative income as the accountant.

The underlying assumptions on which the economic concepts of income are based bear heavily on subjective judgments while the accounting assumptions are objective in nature. Nevertheless, there is a great deal of inter-relationship of the framework of the two disciplines. As Professor K. E. Boulding wrote in his article, "Economics and Accounting, the Uncongenial Twins."¹⁰

"... many of the basic concepts of economics are, in fact, derived from accounting practice and many accounting practices have been devised in an attempt to answer what are essentially economic questions."

Notwithstanding whatever degree of inter-relationship there is between the development of the theories of accounting and economics, there remain some differences in the conceptual view of business income between the two disciplines.

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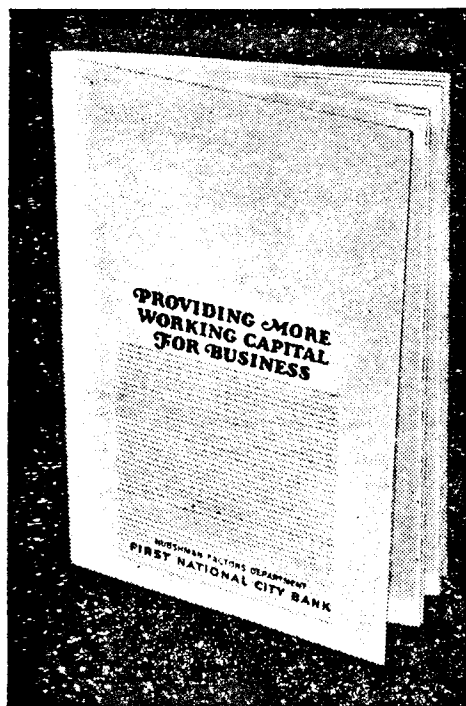
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