THE TROUBLE WITH EARNINGS

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The main objective of financial accounting has slowly but surely become providing information for security analysis. Informing the analyst was not always a primary or even a secondary objective of financial accounting, nor were accounting outputs always the primary or even a secondary objective of financial accounting, nor were accounting outputs always the primary input for security analysis; but today it is probably realistic to view the activities of the accountant and the security analyst as two parts of a larger process primarily devoted to estimating the value of corporate common stocks.

The earnings concept is the link between these ostensibly complementary activities. Yet there is no genuine communication between analysts and accountants when it comes to the meaning of earnings. The analyst treats earnings as if it were an economic value to the firm - he can scarcely do otherwise.

The accountant's concept of earnings dates from a time when specialization of labor within the investment industry had scarcely begun, and when, indeed, ownership and management had not begun to separate. The accountant is, of course, the oldest of the professionals in the investment industry, and he continues to regard accounting earnings as his most important product. The accountant defines it as what he gets when he matches costs against revenues, making any necessary allocations of cost to time periods; or as the change in the equity account over the accounting period, before capital transactions. There are not economic definitions of earnings, but merely descriptions of the motions the accountant goes through to arrive at the earnings number.

There is no way to carry on constructive discussion of an undefined concept. One approach the security analyst might take in attempting to establish meaningful communications with the accountant would be to ask him to give an economic definition of earnings. As we shall soon see, however, the accountant has very practical reasons for deferring his definition as long as possible. Accordingly, our tactic will be to narrow the accountant's room for maneuver by supplying a definition of earnings - one that has economic meaning - and then asking whether the security analyst would show much interest in the concept given our definition.

Professor Lawrence Revsine[1] has suggested defining earnings as an estimate of the change in present value of the firm over the accounting period - a definition that seems to accord closely with Professor Hick's celebrated definition of earnings as the measure of how much value can be withdrawn from the firm over the accounting period without leaving it poorer than it was at the beginning. Unfortunately, it is easy to show that the earnings concept so defined is not well suited to linking the measuring and reporting function of the accountant to the judging and valuation function of the security analyst.

In simplest terms our argument runs as follows. If accounting earnings are construed as an attempt to measure changes in the present value of the firm (or, in the context of per share accounting, changes in the value of the share) then in order to arrive at the change in value the accountant must first arrive at the value.

The accountant could save the analyst a great deal of trouble by simply reporting to him the end-of-period value from which change in value over the period was derived.

> If earnings is the difference between the worth of the of the firm at the beginning and the end of the accounting period, then analysis of a firm's worth logically precedes measurement of earnings, rather than the other way around.

The present joint process by which the accountant arrives at earnings by estimating or measuring the change in value over the accounting period, and the analyst in turn uses these earnings to estimate value at the end of each period, is in some danger of being logically circular. There is, of course, redundancy in having two different people estimate investment worth at two different stages of the overall process. But the wasted effort is far less important than the fact that, in attempting to estimate the value of the firm, the analyst is using earnings data which in turn depend importantly on accountant's estimates of the value of some of the firm's major assets. If estimation of economic value requires earnings data, the earnings data requires estimates of economic value, how do we get the joint process off the ground? The pragmatic answer of the accountant is: By making arbitrary, mechanical estimates of value in the development of earnings. Unless he thinks that "garbage in - garbage out!" applies only to computers, however, the thinking security analyst is not going to be happy with this answer.

It is sometimes argued that, because market value fluctuates - sometimes wildly - the appropriate book figure can be a more reliable indicator of an asset's "true" or "intrinsic" value, where the latter is believed to be somehow more stable than market value. It is surprising that this notion is still taken seriously by so many in view of the rapidly spreading recognition that, if values don't fluctuate as a random walk, they can't be true economic values.2 In every kind of market, asset value depends on expectations of future earning power (i.e. economic rents) which are subject to continual and unpredictable change.

The analyst is expected to produce good estimates of economic value from earning data which are based in turn on bad estimates of economic value. Whether book values are good or bad estimates is, however, beside the point. The point is that an arbitrary, mechanical estimate of value is still an estimate of value. There are many different kinds of market (e.g., markets for specific productive assets on one hand - industrial real estate, used machine tools, etc. - and markets for claims on firms owning productive assets on the other), but there is only one kind of economic value. Although, through extensive use and familiarity book values have taken on for many investors a kind of mystical significance completely unrelated to economic reality, for any practical purpose they must either be construed as proxies for economic values or as having no meaning at all. But if book values are interpreted as proxies for economic values, then it is clear that the problem of circularity has not been avoided, but merely obscured.

Security analysis is not strictly circular when the accountant confines himself to estimating the value of such current assets as inventories and receivables in order to estimate the rate of flow of economic earnings (what economists call quasi-rents) attributable to the firm. The security analyst can choose to delegate the task of estimating a change in value (hence the value) of current assets to the accountant, accepting whatever approximating conventions the accountant may invoke in order to simplify his task, if the goal is estimating the market value of other, more important assets.

If the earnings of the firm are due almost entirely to the services of its employees and officers, or to special monopoly powers derived from patents or secret manufacturing processes, the use of accounting earnings by the security analyst may not be circular, simply because in such cases accountants' determinations of asset values have relatively little influence on reported earnings.

But consider, for example, the firm in which the main source of economic rents in assets - bricks and mortar and machinery - that are depreciated over time. The accountant estimates the decline in the value of these assets over the accounting period, in order to report a figure to the analyst, that the analyst extrapolates and then capitalizes to estimate the value of the firm - including the value of the assets being depreciated. Reporting the change in value over the accounting period implies an estimate of the value itself at the beginning and end of the period. The analyst cannot employ a figure based on an accountant's estimate of the change in value of assets, when these assets constitute a major source of investment value in the firm, without introducing into his reasoning a fatal circularity.

At this point, some readers will raise the standard objections to using earnings gross of depreciation for security analysis, arguing that, whereas "cash flow" fluctuates over time in ways unrelated to the firm's economic prospects, the earnings concept tends to smooth out the "spurious" fluctuations. Fluctuations in the reported stream of rents will translate into fluctuations in the investor's estimate of the firm's value only if the investor insists on capitalizing cash flow by applying a constant "P/E" ratio to the current value of the stream without regard for the future pattern. Needless to say, if the analyst insists on being provided with a single number so simply related to market value, then he is delegating away to whoever provides that number most of the real task of security analysis.

The Price of Relevance

The Security Analyst is an interloper from the accountant's point of view. The security analyst is doing something that implicitly or explicitly the accountant was doing before the security analyst came along - namely, judging the worth of a company at certain points in time. The accounting profession has had to recognize the existence of the security analyst because the analyst, by bringing to bear economic and business judgment has been able to do a more convincing job on the determination of economic worth than the accountant. But the accountant has not accommodated the security analyst by trimming back his own function to exclude that part of the task of determining corporate worth now performed by the analyst. Instead, he continues to encourage use by investors of accounting earnings.

Present accounting practice tends to conceal the dependence of the earnings concept on estimates of worth by substituting accounting ritual for judgment in the determination of asset values. But it is becoming more and more difficult for accountants to convince practical decision makers that earnings figures based on such arbitrary procedures have any relevance; current accounting practices (e.g. current value accounting, introduction of market values into computations of portfolio earnings) are tending to narrow the gap between book and market values. And in removing that gap, accountants are actually moving toward Hick's definition of earnings whether they like to admit it or not.

It is natural and human for accountants to want to maintain the traditional scope of financial accounting, but in their attempts to bring accounting up to date and satisfy critics' demands for greater relevance, they are bringing steadily closer the day when it will be obvious to everyone in and outside their profession that the earnings concept is not suited to the needs of investors.

In Conclusion

1. If the roles of the accountant and the security analyst are viewed together as part of a larger process of arriving at estimates of security values, little real progress can be made until we have an economic definition of earnings that is accepted by both accountant and security analyst, and until it can be established that earnings, given this definition, has any role to play in the deliberations of the analyst.

2. On the other hand, virtually all the most heated controversies in financial accounting (for example, the creation of artificial reserves in order to enhance reported future income, the pooling versus purchase controversy, full-cost accounting in the petroleum industry, bank earnings, etc) revolve around the accounting evaluation of assets (or, equivalently, the creation of reserves against the value of fixed assets) and the impact on accounting earnings. These issues over which the Accounting Principles Board has labored long and hard will be seen to be empty issues once it is recognized that no number affected by an accountant's determinations of the value of assets contributing significantly to the investment worth of the firm can be useful to the security analyst - regardless of how the accountant's determinations are made. The hot controversies will disappear when the concept of accounting earnings loses its central role in security valuation.

3. It is often suggested that skill in adjusting accounting data is important for the security analyst, and that skillful adjustment requires judgment. But the way to make the convential earnings figure useful for security analysis is merely to remove the effect of any accounting determinations of worth. Hence in any given case there is only one correct adjustment. Very little skill - and certainly no judgment! - is required to make it.

4. Current methods of security valuation depend on treating earnings as if they were economic rents. Far from being rents, however, accounting earnings are more like estimates of change in the value of the firm over the accounting period - if indeed they have any economic meaning at all. If this is the meaning of accounting earnings, however, then their use in estimating the value of the firm is circular; the analyst will have to face the fact that he actually lacks any defensible basis for valuation methods based on earnings and start looking for methods with a plausible basis.

5. If accountants want to continue to enjoy a role in the investment management process they should prepare to focus their energies on supplying whatever data a workable theory of security valuation requires, rather than defending the present ritual.

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1. Department of Accounting, University of Illinois.
2. Paul Samuelson, "Proof that Properly Anticipated Prices Fluctuate Randomly," Industrial Management Review, spring 1965.