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Alternative Measures of Corporate Profits

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The Sydney (Australia) Morning Herald for Tuesday, February 12, 2002 (Business Section, page 21) contained a short note on the measurement of corporate profits.

> "On the adults-only hot, hot, hot topic of…accounting, [a] study…compares earnings reports from companies listed on the New York Stock Exchange with statistics from the U.S. Bureau of Economic Analysis…our spies tell us that the report concludes that U.S. profits in 2001 have been overstated by $130 billion or 27%."

Others have made similar comparisons. William Nordhaus (2002) observed that Standard & Poor's earnings grew 15% per year over the 1992-2000 interval, nearly twice as fast as the 8% per year for corporate profits in the national accounts. Paul Krugman wrote in his New York Times column (Friday, October 11, 2002, page A31): "In the last three years of the bubble reported profits soared, but the overall measure of profits calculated by the [BEA]…grew hardly at all." And in an August 7, 2002, National Association for Business Economics (NABE) teleconference on alternative measures of

corporate earnings, Richard Berner, past president of NABE, reported the "sentiment in Wall Street that, because they are based on tax records, the national accounts based earnings measures may be conservative and therefore the best gauge of corporate profits" (taken from a recording of the conference—NABE, 2002).

I. Alternative Measures of Accounting Profits

For an economist, getting an aggregate measure of accounting profits has become more complicated. In "as reported" earnings (the traditional S&P profits measure), profits are stated according to generally accepted accounting principles (GAAP). Blitzer et al. (2002) note that "operating earnings" is a popular alternative but that it lacks a consistent definition. Partly in response to concerns about reported profits, and partly because operating earnings lacks an agreed-on definition, Standard & Poor's introduced a "core earnings" measure of operating profits that was offered as a new reporting standard.[2]

From the language used to describe the new S&P series, its analytic objective appear to be the same as for BEA's "profits from current production." Compare the following two quotations:

> "Core earnings refer to the after-tax earnings generated from a corporation's principal business or businesses" (Blitzer, et al, 2002).
> "Corporate profits reflect the income earned by corporations as a result of current production; the measure is defined as receipts arising from current production less associated expenses" (Petrick, 2002).

The details in S&P core earnings and BEA profits measures, however, are quite different.

Writing in the New York Times, Fuerbringer (2002) pointed out that alternative tabulations to the Standard & Poor's 500 series already exist. Thompson Financial's First Call reports rose less than one percent when S&P's series recorded a 30 percent increase in aggregate profits, though the Thompson's series was based on the same companies. The differences reflect

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[1] This paper is based on portions of "How Economists Account for the Economy," delivered as the Keynote Address to the annual meeting of the American Accounting Association, August 16, 2002, San Antonio.
[2] "Many observers agree that an impartial organization should act as a forum for discussions of how earnings should be defined and measured" (Blitzer, et al, 2002)

differences in the way unusual charges are handled. Fuerbringer predicted that the gap between the S&P and Thompson series would widen after Standard & Poor's moved to its core earnings measure. Yoon (2001) reports that in the second quarter of 2002, the two recorded "wildly different figures," 33% and 17% declines, respectively, which she says is the biggest difference in 10 years.

Accountants and stock market analysts have not all agreed with some of the decisions that went into the Standard & Poor's core earnings measure, and some strong language has been exchanged between S&P and Thompsons. I understand that a revised core earnings measure is under consideration. The published measures of aggregate accounting profits are evolving.

Economists, more than accountants, are interested in aggregate measures of profits. There is a presumption among economists that substantial differences separate accounting measures of profits and "economic" profits. From an economist's perspective (and one suspects, from users of company reports), it is not easy to determine what aggregate accounting profits show, and thus it is not easy to know what measure of "accounting profits" should be compared with the profits data released by BEA. But in their discussions of economic profit and accounting profit, economists have probably not paid enough attention to different accounting measures of earnings.

For example, coverage seems to have been neglected in some of the discussion. The *published* Standard & Poor's profits series covers only the corporations in the Standard & Poor's 500 stock index. The S&P Computstat file covers some 17 thousand corporations, but S&P does not routinely publish aggregate profits for the companies in the Computstat file. My understanding is that BEA has compared for internal purposes S&P 500 and S&P 17 thousand profits, and that these do not yield as great a difference as one might think, but I have not seen a time series documentation.

BEA's national accounts profits data are ultimately (the revised figures) benchmarked to IRS data that cover some 1.8 million corporations. Comparing profits of the S&P 500 (or even S&P 17 thousand) with BEA's national accounts profits (all corporations in the economy) probably exaggerates differences between national accounts and financial accounting profits, leaving aside the question of which accounting measure one uses for the comparison. Perhaps earnings of the largest corporations do not move with those of the smaller ones, and perhaps privately held corporations (included in the IRS data that BEA uses for its revised economy-wide profits estimates, but not included in S&P tabulations) have had different profits experiences from those of public corporations.

Additionally, other accounting concepts of earnings, such residual income, are constructed for individual firms. I take it that no aggregate series is available. But economists also use microdata, including the Compustat file. These data include financial information, so economists must confront the variety of accounting information on earnings. The new S&P core earnings figure will be on the Compustat file, for example.

As the foregoing suggests, substantially different measures of accounting profits exist. Why? How does one resolve questions about the appropriate earnings measures for analysis of corporate reports? Thompson Financial charged S&P with trying to become the "earnings pope," to which S&P responded "We have no problem being the pope" (Yoon, 2001). Some analytic way of proceeding would surely be better than contending over who should wield authority. In any case, fragmentary evidence suggests that none of the competing accounting figures would match the BEA profits series, although I do not have a time series comparison to document it.

II. Measures of economic profits. It is not unreasonable for an accountant to ask: Where are those economic profits that you economists wish to compare with accounting profits? Economists talk a good deal about economic profits and how they may differ from accounting

profits by they haven't computed economic profits very often. Usually, they leave that task to BEA and to the accountants.

National accounts profits are not necessarily a very good approximation to economic profits. Petrick (2002) contains a table that contrasts "selected differences" among practices generally used in financial accounting, in tax accounting, and by BEA in constructing measures of corporate profits for the national accounts. This table is reproduced in the present paper as Appendix A.

The table is intended to show that national accounts profits are consistent with neither GAAP financial accounting standards nor tax accounting rules. From a cursory examination of the table, one gets the feeling that national accounts profits are constructed a bit like a restaurant menu of the type that says: Choose one from column A and one from column B. It is hard to discern from this table a principle or concept for measuring profits.

Rationales exist of course for the national accounts decisions recorded in the table. For example, the national accounts do not accept depletion of mineral wealth (see Petrick's table) because mineral wealth is not part of the capital stock on national accounts definitions (Commission of the European Communities, et. al., 1993, hereafter: SNA, 1993). To avoid missing this form of investment altogether, BEA counts mineral exploration expenses as the capital, not the minerals that exploration discovers. In consequence, depletion of the mineral stock (the rough, though not exact, parallel to depreciation for non-mineral assets) is not appropriate for national accounts recording of profits, though it appears in tax profits. Instead, BEA depreciates exploration expenses.

Moreover, the national accounts concept of profit "from current production" (Petrick, 2002) is driven partly by a definition, elsewhere in the accounts, that interest and the provision of finance are not "productive" activities. For this reason, payments for the provision of finance (interest) cannot be expenses for the provision of a service in national accounts, nor can they

represent income from this activity. This has implications for the treatment of the output of financial firms, but also for the definition of profits.[3]

Additionally, most economists would make an allowance for the opportunity cost of owned capital in computing "economic" profit (see the next section). National accounts profits do not do so. In this, they agree with accounting profits, though that point is not emphasized in BEA documentation.

For the record, profits, as such, do not actually appear in the international guidelines for national accounts (SNA, 1993). The analogous term is called the "operating surplus." Operating surplus is defined as output of the firm less its purchased inputs, less compensation of employees and taxes (SNA, 1993, paragraph 7.8, p. 162). The SNA text explains that operating surplus "measures the surplus or deficit accruing from production before taking account of any interest, rent, or similar charges payable on financial or tangible non-produced assets borrowed or rented by the enterprise, or any interest, rent or similar receipts receivable on financial or tangible non-produced assets owned by the enterprise" (SNA, 1993, paragraph 7.8). Operating surplus is thus all property income generated by the (nonfinancial) firm, and is comparable to the definition of profit that Desai (1987) associates with the Marxian tradition in economics. Because the SNA operating surplus idea combines equity and nonequity capital, it also might be more or less justified by the Modigliani-Miller (1958) theory of finance in which a firm's value should be invariant to whether it is financed with equity or debt. For some of the subsequent discussion, definitions of property income, and not just of profits, are relevant.

III. What is the question (or questions) for which we are seeking an answer?

Confronted with the wide range of existing measures, a measurement economist instinctively looks for an underlying concept that can make sense out the available profits and earnings measures and their diversity.

[3] Triplett (2001c) explains implications of the national accounts treatment of finance for its output measure of

Economic measurements ideally proceed from an underlying economic concept. Ideally that is, a concept drawn from economic theory guides the design of an economic measurement and provides the basis for evaluating its validity. The "concept" for an economic measurement is not just an arbitrary definition, it provides the analytic framework for thinking about and designing the measurement. The concept indicates the question, and the economic measurement can be thought of as the answer. Equivalently, the economic concept reflects the analytic purpose that underlies the design of a proper economic measurement, on the principle that a sound economic measurement must be tailored to its use.

The theory of the cost-of-living index (COLI) illustrates the use of an economic concept to discuss measurement issues—in the case of the COLI, the consumer price index (CPI). The economic concept of the COLI is well known, it is widely (though not universally) accepted as the basis for evaluating the CPI, and it has been developed as a measurement tool over many years.[4] Are there in economics or accounting concepts for profit or earnings that can guide thinking and analysis, as the cost of living index (COLI) concept does for the consumer price index (CPI)?

An economic concept of profit is the maximum amount that can be paid out of a firm's receipts without diminishing the value of the firm. Nordhaus (2002) provides an equivalent alternative statement: "A reasonable definition of economic profits would be distributions to the shareholders plus the change in the real net worth from one period to the next."[5] These definitions owe their inspirations to Hicks' (1940) definition of income: the maximum amount a household can consume in a period while leaving its wealth intact. Hicksian income is also

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insurance.

[4] Standard modern references for the theory of the COLI are Pollak (1989) and Diewert and Nakamura (1993). Triplett (2001a) presents examples showing how the theory is used for resolving practical measurement issues. Pollak (1998), Deaton (1998), and Schultze and Mackie (2002) discuss shortcomings and lacunae in the standard theory.

[5] Desai (1987) notes that historically economists have sometimes used the term "profit" in ways that mingle the definitions given above with interest and rent, that is "as synonymous with all non-labor income." This tradition lingers on in some applications.

called Haig-Simons income. The work of all three authors is as well cited in accounting as it is in economics.

If the accounting profits that are actually produced are based on a different theoretical concept, then different concepts—which imply different purposes or uses of the data—might be an explanation for the differences in accounting and economic profits measurements. Are accountants and economists (or at least the economists in BEA) trying to measure the same concept? Or do they somehow have different concepts in mind?

Alternatively, do we have instead different implementations, or attempts by different people—economists and accountants—to measure the same underlying concept? Fueling this interpretation, most economists would probably not endorse the BEA profits measure as an unqualified correspondence with economic profits. Existing accounting measures—whether or not they correspond in principle to the economist's concept of profits—are also likely to reflect differences in implementation, not differences in concept or purpose. One does not hear Standard &Poor's and Thompson Financial arguing about which of their intended purposes corresponds to the most widely used one; instead, Thompson claimed that S&P was trying to be the pope of profits numbers, which implies that they are at least communing in the same house and are arguing about alternative implementations of the same principle.

My hypothesis is that the underlying concept that accountants want to estimate is the same as the economic definition of profits. For example, the hypothesis seems consistent with most of the items in Parker, Harcourt and Whittington (1986), but I await reactions to the hypothesis. If the hypothesis is correct, it implies that differences among alternative estimates of profits arise from differences in implementations, and we should be able to examine the differences using the concept.

IV. Some difficulties with the economic concept.

Empirical implementation of the economic concept of profits does face formidable difficulties, possibly because (unlike the case of the COLI concept, which has an enormous literature) the economic literature developing the economic concept of profits is sparse. The accounting literature on profits is not sparse, of course, and implementation problems with the economic concept are well documented there.

The concept of economic profit lacks precision empirically, to be generous about it. This is "pure profit," after capital invested in the firm has been paid a return sufficient to compensate for risk and other attributes of the industry in which it is employed. Thus, capital employed in the firm is valued at opportunity cost. In the long run, and in a competitive industry, pure profit is zero. However, it is never clear whether high profits are signs of a risky industry or of monopoly power. Pharmaceuticals and software are fine examples, which is one reason why it is so common to find respected economists arrayed on both sides of antitrust proceedings. This implies that estimates of the opportunity cost of capital invested in the firm are a substantial undertaking.

Neither BEA nor accounting profits make allowance for the opportunity cost of owned capital. Borrowed capital has a cost, in these accounting systems, owned capital does not. In the national accounts tradition, neglect of the opportunity cost of owned capital has historically arise because of a mistaken belief that depreciation represents the full cost of owned capital assets.

The concept is also imprecise because of the difficulties in measuring the value of the firm. If profit is the maximum amount that can be withdrawn without affecting the value of the firm, how do we value the firm, and how do we know when the value of the firm changes?[6] I discuss some examples in the following section.

[6] Beaver and Demski (1979, reprinted in Parker, Harcourt, and Whittington, 1986) show that earnings information is unambiguous only when there are complete markets, but then it is not useful because participants know all the relevant information; earning information is useful when markets are incomplete, but then the information, or the use of it, is ambiguous.

It is also the case that profit, whether measured by BEA or by accountants, will in practice be measured as a residual, the difference between revenues and expenses. But which receipts? Which expenses? And under what conditions? Different measures of profits come out of different classifications of expenditures and receipts. In the end, differences between existing measures of profits come down to this (as is explicit in Petrick's table, reproduced as Appendix A). How does the theoretical concept relate to these pragmatic decisions? It is not quite clear—which is the same thing as saying that the implications of the theoretical economic concept are not well developed.

V. Some empirical issues.

Intangibles. An example that cuts across the boundaries of economics and accounting serves to illustrate difficulties in the valuation of the firm. Economists often use a measure called "Tobin's q" (named for Nobel Prize-winning economist James Tobin). Tobin's q equals the ratio of the firm's stock market value to its "book" value of assets. At one time, q was approximately unity, but for the last decade, the value of q has increasingly risen above unity. Larkins (2002) presents some valuable comparisons.

There are obviously many reasons why q can deviate from unity, including deviations in the market value of a firm's plant and equipment from the mostly historical valuations that are kept on the firm's records, and as well "irrational exuberance" and so forth in the stock market. But increasingly, economists have asked whether the rise of q reflects intangible corporate assets that are not included in the firm's capital assets as estimated in traditional accounting. Attention to this problem in the accounting literature is the work of Lev (2001, 2002).

Lev proposes that the intangible assets of the firm be valued and included in the firm's assets, in parallel with its tangible assets. Economists are interested in this proposal not so much because they are interested in valuing the firm, as such, but because they need estimates of investment, and of the capital stock. If investment is increasingly taking on intangible forms (as

frequently asserted, though not at all well documented), then economics may have a distorted view of the amount of capital formation in the economy. This, in turn, will distort our analysis of economic growth and of its sources.

For example, Barry Bosworth and I (Triplett and Bosworth, 2002) show that there was an acceleration in labor productivity growth within the services industries in the 1990s, and that labor productivity growth in services is attributable, among other influences, to increases in capital per worker, mainly in information technology (IT) capital.[7] But the data on capital that we use come from government agencies, and include tangible capital only. If intangible capital has become more important in recent years than it was in the past, then our analysis is flawed, our estimates of the contribution of capital to growth too low, and our measures of multi-factor productivity may be too large.

National accountants have also considered adding intangibles to capital stocks. The international guidelines for national accounts (SNA, 1993) recommend that intangible assets of specified kinds be capitalized for the purposes of computing national accounts.[8] Thus, there is substantial commonality in the concerns of economists and accountants in this area.

The international agenda for including intangible assets in the definition of a nation's capital stock runs into the same problems that emerge in proposals to value a company's intangible assets: What is the list of assets? Where are values of them to be obtained? How are they to be depreciated? In my own view (see Triplett, 2001b), constructing a taxonomy of the intangible assets is the first step, because without a list of the assets to be capitalized one does not know how to find their values and does not know what the impacts of capitalization will be.

Some of these valuation problems, however, also affect tangible assets. Rick Antle, in the American Accounting Association panel discussion of profits measures (San Antonio,

[7] Labor productivity is output per hour, the change in output divided by the change in labor hours. Multi-factor productivity (MFP) is output divided by an index of all inputs, not just of the labor input as is the case in labor productivity. The MFP concept and its measurement are described in Schreyer (2001).

August, 2002) remarked that it was not their intangibility that caused the problem, but the fact that intangibles seldom had market values attached to them. Many tangible assets also lack current market valuations, which is why we do not know very much about the true empirical patterns of depreciation. Economists cite the major work of Hulten and Wykoff (1981), but generally wind up using arbitrary depreciation patterns (Hermann and Katz, 1997), just as do accountants.

My impression is that opposition to capitalizing intangibles in company accounts has something to do with the uncertainty about their valuations. I suppose the logic might be: If valuations are uncertain, there is more room for manipulation and thus more room for fraud, which we do not need more of. Lev (2002), on the other hand, contends the opposite--that more disclosure (even if not recognized in the balance sheets) would be beneficial, and would result in less manipulation, not more. On uncertainty, see section VIII of this paper.

Transitory effects. The economic concept of profits would clearly fluctuate with irregular events because irregular events would influence the maximum amount that could be withdrawn from the firm while leaving its value intact. For many purposes, however, it is useful to distinguish transitory changes in the value of the firm from some non-transitory notion—not long run or "permanent" necessarily, but a measure of profits purged of irregular events so that it more nearly records the finances of the firm based on its major activities. Capital gains or losses on investing the reserves set aside for pension liabilities do not have much to do with a firm's relative position in (say) the nuts and bolts business, though they do say something about value to the shareholders. This desire to purge profits and the value of the firm from irregular and transitory impacts has something (though hardly everything) to do with the new Standard & Poor's "core earnings" measure of operating profits and indeed with the BEA-national accounts notion of "profits from current production."

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[8] Some international politics intervened in the decision to exclude research and development, R & D, from the list of

The desire to remove transitory components does not mean that the underlying conceptual basis is changed. However, it does complicate matters considerably, and can cloud the basis for examining the concept, and sometimes introduce its own errors. Since the modern corporation is increasingly a collection of financial assets and liabilities, it is not clear what may be discarded with the bathwater here. However, economists will be vitally interested in the outcome of accountants' deliberations.

VI. Some objections. I do not know whether the economic concept of profits can be developed into a set of concrete measurement prescriptions for profits, partly because the empirical implications of the economic concept of profit are not that clear, and partly because I am an economist and not an accountant.[9] For economic measurement issues, I have found that before one asks, "What is the answer?" it is always necessary to ask: "What is the question?"[10] The "what is the question?" way of proceeding may be somewhat novel in this application, so let me consider some objections.

One objection is that accounting is an information system. One cannot, on this view, examine the way accountants measure net earnings without considering the way net earnings fits into the rest of the information system. The same objection, actually, comes up in national accounts. One cannot change the treatment of profits, or of finance, without causing ancillary changes elsewhere in the national accounts system.

The implications of this objection are valid, but the objection itself is not. Each piece of an information system provides information. If decisions in one part of the system that seem appropriate for that part impact on a second part of the system in a way that diminishes the information content of the second part, then the system is flawed. If some part is not valid

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assets to be capitalized.

[9] I do not want to be among those whom Edwards and Bell (1961, page 24) scolded many years ago: "Economists…have been criticizing the accountants' concepts of profit for years. But in attempting to derive an alternative which the accountant might find useful, economists have almost invariably lost track of the objective of accounting measurement."

conceptually—if it does not give an answer to the question for which it is appropriately designed—and if the reason is found elsewhere in the information system, then the system must be redesigned. One cannot use "the system" as an argument against examining the usefulness of each part of the system.

A second objection is that there are many uses for earnings and profits data. Accountants may have to consider what CEO's find useful, or what stockholders or stock analysts find useful, which may not at all correspond to what economists find useful. At the conclusion of the NABE teleconference noted earlier (which involved both accountants and economists), someone summarized the discussion by saying that there were a number of measures of profits which were useful for different purposes. Perhaps so. If so, this implies that there are a number of valid questions, and accordingly a number of valid answers. One ought, then, to be able to say what are the purposes for which different measures were designed, and to state the analytic uses (the concepts) for which each one is appropriate. That is the same thing as asking: "What is the question for which some measure of profit is the answer?" If we can't say what the purposes are—what is the question or what are the questions—then perhaps differences in the answers are just arbitrary, or even misconceptions.

A third objection arises in the "Generally Accepted" portion of GAAP. Theory can get translated into practical measurements only if accepted by the users. This principle applies to economic measurements as well. Changing national accounts or other statistics often requires public discussions. Educating users takes time. But the ultimate need for education need not inhibit the search for improvements.

I have raised far more questions here than provided answers. I think that economists want to do and what accountants want to do is similar. If so, the details are different. We need to be more precise about the concept that motivates our joint interests, in order to resolve the

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[10] Triplett (1983).

details in an integrated and conceptually valid way. The concept question provides a research agenda, for which contributions by economists and accountants would be valuable.

VII. Why the need for certainty?

The examples discussed in the preceding sections illustrate that economic measurements are generally abstractions. In contrast, the number of bushels of wheat of a specified type that are produced in a given year represents a quantity that is "out there" in some sense. Most economic measurements do not resemble bushels of wheat, nor do accounting measurements. They are abstractions, they are analytical constructs whose value comes from their capability to organize information and present it according to some analytic purpose.

It should be obvious that analytic constructs cannot be precisely measured in the same way that one can count bushels of wheat, or count the population.[11] In addition to the inescapable sampling variance (for economic measurements, at least), there is an inherent uncertainty or dispersion in economic measurements because of what one might call (for lack of a better term) "conceptual uncertainty." Different implementations of the same underlying concept will produce different measurements, even if the concept itself is precisely defined, and the uncertainty will be larger the less precisely defined is the concept that is to be measured. The measurement of analytic constructs is accordingly inherently uncertain.

Why, then, is there so much resistance in economics and in accounting to attaching measures of uncertainty to our measurements? Perhaps I should say: Why is there so much resistance among the users of accounting and economic information?

One obvious answer is that people do not like uncertainty. But that will not do when uncertainty is an inherent part of living with and using analytic numbers.

I recently heard a fascinating presentation by an economist for a big stock market brokerage firm. "The market," he said, does not like economic data that are volatile. I gather

that "the market" would prefer a series that is smooth, or that has been estimated with a methodology that smoothes the underlying volatility, over one that displays either the volatility that exists in the economy or the volatility that arises from the sampling and collection process.[12] This seems bizarre: If any users of economic data should understand the implications of volatility, they are players in the stock market.

Intangibles, discussed in a previous section, are a case where measurement seems to be avoided in part because of a fear that the measurement with intangibles will be less certain than measurement without them. It is an example, in other words, of "the market's" desire to avoid uncertainty in economic and accounting measurements, even at the cost of increased bias in the valuation of total assets.

Another example of this is the consumer price index. In most countries, the CPI is not revised after it is published. This is considered a virtue by CPI users. For example, the report issued after a November, 2001 conference on CPIs at the European Central Bank (ECB) indicated that central bankers wanted an inflation target that was not revised (Centre for Economic Policy Research and the European Central Bank, 2001). Why should this be? If new information were to become available, why don't users want it? Why do they want the appearance of certainty in their measurements when the concepts clearly imply that measurements are not certain?

How should we handle uncertainty in economic or accounting measurements? The statisticians say: Report the variance. But of course the variance concept only applies to a statistical sample. And even when a variance can in principle exist, sometimes there seems to be no interest. For example, GDP is compiled from a large number of statistical series, mostly

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[11] In practice, counting the population is not nearly so easy as it sounds, but that is another matter (Edmonston and Shultze, 1994).

[12] This discussion concerned the two monthly measures of employment published by the BLS (http://www.bls.gov/ces/home.htm).

based on samples, so in principle, GDP could have a variance, and indeed this has sometimes been proposed (Panel to Review Productivity Statistics, chapter 4, 1979).

However, the uncertainty implied in aggregate measures of the economy is considerably greater than any statistical variance. It is fairly clear that most users do not want uncertainty or measures of uncertainty in their economic statistics.

Similarly, the scientific side of measuring corporate profits, and the value of the firm, suggests we might be better off with more inclusive measures to which indicators of uncertainty were attached. Why do users seemingly prefer what is probably a misleadingly precise measure of a portion of what is really of interest over a more extensive, though uncertain, estimate that more nearly approximates the appropriate concept?

I do not know the answers. Very likely, part of the answer lies in our own professions. Users come to the professionals, after all, to reduce their own uncertainty. They are less likely to come if the professionals give reasons for uncertainty that the users probably would never have thought of.[13]

Part of the reason for conceptual uncertainty in economic and accounting measurements is that we have not formulated precisely the questions for which our measurements are the answer. Suppose we told our users that our estimates might have, say, a range of 10 to 20 percent error because we have not yet formulated our questions precisely enough. I think that neither government statistical agencies, nor accountants, nor economists (except those economists who criticize the others!) would be comfortable with that. Part of the reason lies in the users, to be sure, and perhaps education about economic and accounting measurements would help change the climate of user concerns. But part of the reason also no doubt lies in ourselves.

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[13] Professionals adding to user uncertainty is behind the famous story about President Harry Truman's wish for a one-handed economist. He said he was tired of hearing: "One the one this and on the other hand that." From the accounting perspective, Rick Antle spoke of abandoning the "language of certainty" at the San Antonio meetings of the American Accounting Association.

VIII. Conclusions

One purpose of this paper is to ask questions about economic and accounting concepts of profits and their implementations, under the presumption that a dialog that crosses the boundaries of the accounting and economics professions would be useful. Economists and accountants are linked in a number of ways. Many of the jokes about our two professions are interchangeable.[14] We both measure aspects of the economy. The underlying conceptual framework that defines what we both do extends across the boundary between economics and accounting. Economists use data and information that are generated by accounting concepts, and economic concepts—and I suppose economic data and analysis—influence what accountants do. My impression is that the distance between us has grown over time, and that the communication perhaps flows less freely than it once did, but I may be wrong about that. The measurement of profits is clearly a topic of great interest to both economists and accountants, so the potential for fruitful dialog is great.

[14] A collection of economist jokes is: http://netec.wustl.edu/JokEc.html. The equivalent "Two fun guys and an accountant" site is: http://www.execpc.com/~thorsten/JOKE.HTML. The "flock of sheep" joke appears on the first page of each site.

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Appendix A

Selected Differences in Financial, Tax, and National Income and Product Accounting

	Financial accounting	Tax accounting	National income and product accounting: Profits from current production[1/]
1. Depreciation	Generally, expenses recognized as calculated with straight-line depreciation formula.	Generally, expenses recognized as calculated with accelerated formulas and with shorter service lives than financial accounting.	Expenses recognized as calculated with geometric depreciation formula, service lives generally similar to financial accounting, and valued at current replacement cost.
2. Inventory withdrawals	Withdrawals valued using various methods, including acquisition cost and current replacement cost.	Same as financial accounting.	Withdrawals valued at current replacement cost.
3. Future expenditures	Expenditures recognized as current expense when decision is made.	Expenditures recognized as current expense when actually made.	Same as tax accounting.
4. Certain mineral exploration expenditures	Expenditures capitalized and depreciated over life of asset.	Expenditures recognized as current expense.	Same as financial accounting
5. Nonstatutory stock options	Expense not recognized.	Deducted from profits when exercised.	Same as tax accounting.
6. Bonus payments for drilling rights	Expenditures recognized and charged as depletion if and when production begins; expenditure is recognized as current expense if and when drilling is abandoned.	Expenditures recognized and charged as depletion if and when production begins; expenditure is recognized as current expense if and when drilling is abandoned.	Expenditures not recognized.
7. Interest on State and local government obligations	Receipts recognized.	Same as financial accounts.	Same as financial accounting.
8. Certain "receipts" from related foreign corporations	Receipts not recognized.	Receipts recognized as "constructive taxable income."	Same as financial accounting.
9. Depletion	Expenses, based on cost of asset, recognized.	Expenses, based on percentage of gross income, recognized.	Expenses not recognized.
10. Bad debts	Expenses recognized when additions to bad debts reserves are made.	Expenses recognized when written off.	Expenses not recognized.
11. Investment tax credit	Tax credit spread over life of asset.	Tax credit taken when investment is made.	Same as tax accounting.
12. Level of consolidation of parent and subsidiary reporting	Parent corporation and subsidiaries report on a consolidated basis.	Parent corporation and subsidiaries report separately or on a consolidated basis, but year-to year consistency is required.	Same as tax accounting.

1. Profits before tax differs from profits from current production only with respect to depreciation and inventory withdrawals; profits before tax generally follows tax accounting.

Source: Petrick (2002).