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Part I: Explanations and Implications**

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Part I: Explanations and Implications

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Part I: Explanations and Implications

SYNOPSIS

This paper is the first in a two part series on conservatism in accounting. Part I examines alternative explanations for conservatism in accounting and their implications for accounting regulators. Part II summarizes the empirical evidence on conservatism, its consistency with alternative explanations and opportunities for future research. The evidence is consistent with conservatism's existence and, in varying degrees, the various explanations.

Conservatism is defined as the differential verifiability required for recognition of profits versus losses. Its extreme form is the traditional conservatism adage: "anticipate no profit, but anticipate all losses." Despite criticism, conservatism has survived in accounting for many centuries and appears to have increased in the last 30 years.

The alternative explanations for conservatism are contracting, shareholder litigation, taxation, and accounting regulation. The evidence in Part II suggests the contracting and shareholder litigation explanations are most important. Evidence on the effects of taxation and regulation is weaker but consistent with those explanations playing a role. Earnings management could produce some of the evidence on conservatism, but cannot be the prime explanation.

The explanations and evidence have important implications for accounting regulators. FASB attempts to ban conservatism in order to achieve "neutrality of information" without understanding the reasons conservatism existed and prospered for so long are likely to fail and produce unintended consequences. Successful elimination of conservatism will change managerial behavior and impose significant costs on investors and the economy in general.

Similarly, researchers and regulators who propose the inclusion of capitalized unverifiable future cash flows in financial reports should consider the costs generated by their proposal's effect on managerial behavior.

INTRODUCTION

This paper is Part I in a two part series on conservatism in accounting. The objectives of this paper are to:

1. Discuss the explanations for conservatism; and
2. Draw implications for regulation and standard-setting

The objectives of Part II in the series are to:

1. Summarize the evidence on conservatism's existence
2. Evaluate the evidence's ability to discriminate among conservatism explanations
3. Evaluate the evidence's ability to discriminate between conservatism and non-conservatism explanations

The explanations discussion draws on existing literature. However, this paper develops a general contracting explanation for conservatism that encompasses the existing debt contract dividend constraint explanation (Watts, 1993) and predicts that other contracts employed within the firm, such as managerial compensation contracts, will also generate conservatism. The paper also offers a new argument that, even without contracting considerations, an information perspective produces conservatism once the information costs of changed managerial behavior are introduced.

Conservatism Defined

Accounting conservatism is traditionally defined by the adage “anticipate no profit, but anticipate all losses” (Bliss, 1924). Anticipating profits means recognizing profits before there is legal claim to the revenues generating them and the revenues are verifiable. Conservatism does not imply that all revenue cash flows should be received before profits are recognized—credit sales are recognized—but rather that those cash flows should be verifiable. In the empirical

literature the adage is interpreted as representing “the accountant’s tendency to require a higher degree of verification to recognize good news as gains than to recognize bad news as losses” (Basu, 1997, p. 7). Conservatism is the asymmetrical verification requirements for gains and losses. This interpretation allows for degrees of conservatism: the greater the difference in degree of verification required for gains versus losses, the greater the conservatism. It is this “differential verification” interpretation of conservatism that is adopted in this paper.

An important consequence of conservatism’s asymmetric treatment of gains and losses is the persistent understatement of net asset values. Capital market regulators, standard-setters and academics criticize conservatism because this understatement in the current period can lead to overstatement of earnings in future periods by causing an understatement of future expenses. For example, *Accounting Research Bulletin* (ARB) 2 (AICPA, 1939) states:

“conservatism in the balance sheet is of dubious value if attained at the expense of conservatism in the income statement, which is far more significant.”

Using “conservatism” to describe an income statement effect for a particular period was popularized by conservatism’s critics. That usage does not fit with the conservatism definition employed here. Conservatism refers to the cumulative financial effects represented in the balance sheet and to income or earnings cumulated since the firm began operation.

Conservatism’s influence on accounting practice has been both long and significant. Basu (1997, p. 8) argues that conservatism has influenced accounting practice for at least five hundred years. Sterling (1970, p. 256) rates conservatism as the most influential principle of valuation in accounting. Recent empirical research on conservatism suggests not only that

accounting practice is conservative, but also that practice has become more conservative in the last 30 years. These results are surprising given the vocal opposition of many capital market regulators, standard-setters and academics to conservatism.¹ The long survival of conservatism and its apparent resilience to criticism strongly suggests that conservatism's critics overlook its significant benefits. If regulator and standard-setter critics try to eliminate conservatism without understanding its benefits, the resultant standards are likely to be seriously detrimental to financial reporting.

Overview of Explanations for Conservatism

Researchers advance a number of explanations for conservative reporting; all of them suggest that conservatism benefits users of the firm's accounting reports. One explanation is that conservatism arises because it is part of the efficient technology employed in the organization of the firm and its contracts with various parties. Under this *contracting explanation*, conservative accounting is a means of addressing moral hazard caused by parties to the firm having asymmetric information, asymmetric payoffs, limited horizons and limited liability. For example, conservatism can contain management's opportunistic behavior in reporting accounting measures used in contract.

Even if one separates contracting and managerial accounting from financial reporting, moral hazard problems will exist in financial reporting as long as the reports' accounting measures inform investors about managerial performance and affect investors' asset allocation decisions and managers' welfare. These effects on managers' welfare will motivate managers to introduce bias and noise into the same accounting measures that regulators hope will inform

¹ For examples of the opposition of regulators, standard-setters and academics to conservatism see Levitt (1998), FASB(1980, paragraphs 91-97) and Devine (1963, p. 127).

investors, just as they motivate managers to introduce bias and noise into contractual accounting measures. Absent constraints on this opportunistic managerial behavior, accounting measures in financial reports that ‘a priori’ appear neutral will be significantly biased and noisy in practice. Conservatism constrains managerial opportunistic behavior and offsets managerial biases with its asymmetrical verifiability requirement.

In practice conservatism more than offsets managerial bias, and on average defers earnings and understates cumulative earnings and net assets. In contracts these effects increase firm value because they constrain managements’ opportunistic payments to themselves and other parties, such as shareholders. The increased firm value is shared among all parties to the firm increasing everyone’s welfare. In that sense, conservatism is an efficient contracting mechanism.

Conservatism is likely to be an efficient financial reporting mechanism in the absence of contracting. Other conservatism explanations discussed below suggest that, in addition to conservatism offsetting managerial bias in financial reporting, non-contracting parties in society also value conservatism’s constraint on opportunistic payments to managers and other contracting parties. Given that, conservatism and the net asset bias it generates are probably necessary components of efficient financial reporting that are “good” and not “bad” as implied by various statements by accounting regulators and academics.²

Shareholder litigation is another source of conservatism in recent years. Litigation also produces asymmetric payoffs in that overstating the firm’s net assets is more likely to generate litigation costs for the firm than understating net assets. By understating net assets, conservatism reduces the firm’s expected litigation costs. The asymmetry in litigation costs is consistent with

the legal system evolving to constrain opportunistic payments to managers and other parties to the firm. To that extent, the litigation explanation suggests that individuals other than the parties to the firm also value such constraint.

The links between taxation and reporting can also generate conservatism in financial reporting. Asymmetric recognition of gains and losses enables managers of profitable firms to reduce the present value of taxes and increase the value of the firm. Delaying the recognition of revenues and accelerating the recognition of expense defers tax payments.

Finally, financial reporting standard-setters and regulators have their own incentives to favor conservative accounting and reporting. Just as there is an asymmetry in litigation costs, there is an asymmetry in regulators' costs. Standard-setters and regulators are likely to face more criticism if firms overstate net assets than if they understate net assets. Conservatism reduces the political costs imposed on standard-setters and regulators. This asymmetry in political costs, like the asymmetry in litigation costs, is consistent with non-contracting parties (such as voters) valuing conservatism's constraint on opportunistic payments to managers and other parties.

The commonalities among the four explanations suggest they might be manifestations of a single explanation. As we have seen, conservatism encouraged by contracting, litigation and political costs is consistent with a general aversion to opportunistic payments to managers and other parties. The role of verifiability is also common to the explanations. Verifiability of profits is essential to legal contracting; contracts written on unverifiable accounting numbers are not enforceable. Similarly, proof of fraud in financial reporting litigation and enforceable tax codes requires verifiable accounting numbers.

² The information perspective's proponents fail to recognize conservatism's benefits because of their limited analysis of the effects of asymmetric payoffs and limited liability on the costs and benefits of information to

The recent empirical evidence suggesting that accounting conservatism exists and is on the rise in recent years is consistent, in varying degrees, with the four conservatism explanations. However, some of the evidence examined in Part II is also consistent with two explanations that do not imply conservatism. One of those explanations involves earnings management — management understates assets by taking excessive charges and excessive write-offs, perhaps in a “big bath,” in order to overstate earnings in the future (Hanna, 2002). The other is that management elects to abandon operations that are not profitable (Hayn, 1995). While both of these other explanations can explain firm attributes generated by conservatism such as the transitory nature of losses, they cannot individually or jointly explain the systematic understatement of net assets that is the hallmark of conservatism.

The consistency of the evidence in Part II with the various conservatism explanations implies conservatism has a productive role in financial reports providing information to capital market investors. That implication suggests regulators and standard-setters should rethink or redirect their opposition to conservatism.

CONTRACTING EXPLANATIONS FOR CONSERVATISM

Of the four conservatism explanations, I examine the contracting explanation most exhaustively because it is an early source of conservatism and its arguments are more fully developed. The more developed arguments allow more complete articulation of the explanation’s links to the standard-setters’ information perspective. Also, although contracting explanations emphasize formal contracts, such as debt and management compensation contracts, they extend to the firm’s organizational arrangements including managerial accounting and

investors.

control systems. Even the tax explanation is linked to the contracting explanation in that the early uses of accounting (and writing) were control of assets and tax collection for the nobility.

The contracting use of accounting is very old, spanning many centuries of corporate use (Watts and Zimmerman, 1983); and millennia for management control (de Ste Croix, 1956 and Chadwick, 1992). Researchers suggest that long usage influenced the development and nature of contemporary accounting and financial reporting and led to the conservative bias examined here (Watts and Zimmerman, 1986; Watts, 1993; and Basu, 1995).

In contrast, other conservatism explanations rely on more recent phenomena. The increase in shareholder litigation that began in the US in the 1960s, and grew significantly afterwards, is a relatively recent explanation for conservatism. The tax system's influence on financial reporting accounting methods, producing conservative methods such as LIFO, is another relatively recent explanation dating in the US from 1909. Finally, and perhaps ironically given FASB's recent preference for neutrality over conservatism, some hypothesize that government regulation of financial reporting, dating from the securities acts of 1933 and 1934, actually contributes to conservatism.

Contracting explains three attributes of accounting measures: timeliness, verifiability and asymmetric verifiability. Next I examine those attributes and potential conflicts among them.

Timeliness

Contracts between parties to the firm use accounting numbers to reduce agency costs (Watts and Zimmerman, 1986). Agency costs arise when managers and other parties to the firm maximize their own welfare instead of firm value. They include costs incurred to align parties' incentives with firm value maximization and the negative firm value effect caused by the

remaining lack of alignment. Reducing agency costs increases the firm value to be shared among the various parties to the firm.

Agency cost-reducing contracts include debt contracts between the firm and holders of the firm's debt, management compensation contracts, employment contracts, and cost-plus sales contracts. Contracting parties demand *timely* measures of performance and net asset values for compensation and debt contract purposes. Ceteris paribus, managerial performance measures in compensation contracts, such as earnings, are more effective when they are timely and reflect the effects of the managers' actions on firm value in the period in which the actions are taken. Timeliness avoids dysfunctional outcomes associated with managers' limited tenure with the firm, often referred to as the manager's limited horizon. For example, a manager may forego positive net present value projects with near-term negative earnings because future earnings will reflect the benefits of the project after the manager has retired or left the firm.

Earnings-based formulas are used in debt contracts to restrict dividend payments and maintain a minimum amount of net assets within the firm. These restrictions provide a guaranteed backing or bond for outstanding debt and reduce the ability of the manager and shareholders to maximize their own payoff by paying a liquidating dividend at the expense of debt-holders and total firm value (Smith and Warner, 1979). If not paying a dividend is costly because the shareholders have better alternative investments than the firm, restricting dividends beyond the level necessary to protect the debt-holders' claims reduces firm value. Accounting earnings are likely to generate such reductions if they are not timely and do not recognize a net asset increase in the year it occurs. Likewise, if there is a decrease in earnings and net assets, timely measures improve the efficiency of the restriction. Like earnings-based management

compensation contracts, accounting-based debt contracts generate a demand for timely earnings and net asset measures.

Verifiability

Much information that could make accounting measures like earnings and net assets timely and informative cannot be easily verified. For example, the expected increase in net cash flows due to new product development is useful information for evaluating a manager's performance. However, estimates of those future net cash inflows are not verifiable because they depend on assumptions about the future that experts cannot agree upon. Because they cannot be verified, the estimates are not used in contracts. Verification is necessary for the contract to be enforced in a court of law. In order to be timely, ideal performance measures include the future net cash inflows from current management actions, including the future cash inflows due to new product development. However, since any earnings or cash flow measure has to be verifiable for the contract to be enforceable, contracts exclude non-verifiable future net cash inflows from earnings measures.

When a firm's expected future operating net cash flows are negative and are not committed by contract, there is no legal liability for those cash flows. Despite the lower verification requirement for losses, these future cash outflows are not typically recognized. Apart from no legal liability, an important reason for non-recognition is that actions are likely to be taken to eliminate those negative future cash flows. For example, if the cash flows arise from future benefits promised to employees that are not yet a legal liability, management can change the plan to eliminate those benefits. In another scenario, management or a corporate raider will

liquidate the business or the part of the business generating the outflows and realize the net assets.

Asymmetric Verifiability

Given that verification is necessary for contracting, one might question why a higher degree of verification is required for gains than for losses? Part of the explanation is that the relevant parties to the firm have asymmetric payoffs from the contracts.

Conservatism and Debt Contracts

Investors in the firm's debt have an asymmetric payoff with respect to net assets. When, at maturity of the loan, the firm's net assets are above the face value of the debt, debt-holders do not receive any additional compensation, regardless of how high net assets may be. But when the managers of the firm cannot produce enough net assets to cover the promised payments to the debt-holders at maturity, limited liability causes debt-holders to receive less than the contracted sum, perhaps the entire net assets of the firm. Consequently, debt-holders are concerned with the lower ends of the earnings and net asset distributions. They want assurances that the minimum amount of net assets will be greater than their contracted sum.

In assessing a *potential loan*, lenders are interested in the likelihood the firm will have enough net assets to cover their loans. Future values of the firm and of net assets are generally not verifiable. Lenders, however, obtain verifiable lower bound measures of the current value of net assets and use those as inputs in the loan decision. Further, they use those lower bound measures during the life of the loan to *monitor* the borrower's ability to pay. Debt contracts use lower bound measures of net assets to trigger technical default that allows the loan to be called (Beneish and Press, 1993) and to *restrict* managerial actions that reduce the value of net assets or

otherwise reduce the value of the loan. These include dividends and acquisitions that increase the firm's risk (Smith and Warner, 1979). Essentially the measures calculate the value of net assets assuming orderly liquidation.

In Watts (1993), I argue that the orderly liquidation concept underlies conservative accounting. When estimating the value of net assets for interim distributions in accordance with claimants' contracted priorities, the liquidator anticipates all possible losses and no unverifiable gains. In other words, the liquidator employs conservative accounting. My own views notwithstanding, conservatism is often attributed to bankers' and other lenders' use of the balance sheet as in *FASB Concepts Statement 2* (FASB, 1980, paragraph 94).

The net asset and earnings (increase in net assets) accounting measures used in debt contracts are generally consistent with the orderly liquidation concept. For example, intangible assets typically are not included in net assets, "conservatively," because their values are not verifiable. In liquidation many intangible assets are likely to have a value of zero (Holthausen and Watts, 2001, p. 36).

The importance of dividend covenants in debt agreements illustrates conservatism's function. These covenants limit dividend payments to "unrestricted" retained earnings calculated on conservative accounting principles. Thus those restrictions force management to protect debt-holders by maintaining, within the firm, assets with a given lower bound value. This use of conservative accounting in corporations is extremely old and dates back to the 1620s in the UK when faceless trading of company shares effectively generated limited liability for shareholders (Watts, 1977, p. 57). Without those kinds of restrictions, corporations could not borrow because of management's ability to distribute the assets and, given limited liability, leave the creditors with nothing and no way of recovering their loans.

Conservatism and Executive Compensation Contracts

These demands for restrictions on distributions of net assets also affect accounting earnings measures used in management compensation and employment contracts. The manager frequently has more information than the other parties to the firm. For example, the manager likely has better information about the future cash flows from new product development than the shareholders, auditor or board of directors. Absent a verification requirement the manager can bias estimates of those future cash flows upwards, producing large payments under earnings-based compensation plans and possibly leading to negative net present value investments by the firm.

The manager's limited tenure and limited liability play an important role in conservatism's differential verifiability. Recovery of excess compensation payments and reparation for excess investments is difficult when the manager leaves the firm before the cash flows are realized. Given the inability to verify the estimates, fraud is difficult to prove or to distinguish from bad outcomes that are due to chance. And without a court judgment, the excess payments and reparations are probably impossible to recover. Even with a legal finding of fraud and a damages award the excess payments typically cannot be fully recovered. Note that with negative net present value projects, the full cost is greater than the sum the manager received. Moreover, individuals also have limited legal liability — the full cost of the actions could well be larger than the individual's wealth and it is not socially acceptable to impose extremely high penalties such as torture or death.³

³ Basu (1997) argues managers commit to conservative accounting to avoid compensation reductions due to managerial bias. He does not explain how conservatism offsets management's information advantage and why compensation parameters are not adjusted to offset the bias. In my explanation, conservatism produces a lower bound on net assets allowing timely payments. Because the bound varies with cash flow verifiability that is management controlled, specification of a simple 'a priori' bias is not effective.

The earnings-based compensation problem is essentially the same as the dividend problem. Under the dividend problem, unless dividend constraints are imposed using conservative earnings, shareholders may receive dividends that leave debt-holders with net assets that are less than the face value of their debt, and an inability to recover the excess payment because of shareholders' limited liability. In the incentive compensation case, without verifiable earnings measures the manager receives over-payments that leave shareholders with a lower share value, even after adjusting for the value-added by the manager, and the shareholders are unable to recover the over-payment because of the manager's limited liability. Conservatively measured earnings provide some timely incentives and deferred compensation rewards managers for currently unverifiable future cash flows, as in some bonus plans managers earn compensation on earnings after retirement (Smith and Watts, 1982).⁴

Conservatism and Firm Governance

Asymmetric verifiability can also arise from employment contract or firm governance reasons. Managers have incentives to hide losses to avoid being fired before their tenure is over. Admitting losses and/or that they took negative net present value projects can lead shareholders to push for the manager's dismissal. Asymmetric verifiability speeds up the recognition of losses and provides the board of directors and shareholders with a signal to investigate the reasons for those losses. Such investigations can lead to discharging the manager and eliminating projects that currently have a negative net present value.⁵ On the other hand,

⁴ Kwon, Newman and Suh (2001) model conservative financial reporting as part of efficient contracting with a manager subject to limited liability. Their definition of conservatism (p. 35) "implies that the accounting system is more likely to report 'low' when the outcome is low than to report 'high' when the outcome is high," consistent with a higher verification requirement for high outcomes (gains) than for low outcomes (losses).

⁵ I am grateful to Stewart Myers for this point. Note that this does not imply recognition of unverifiable future negative cash flows for which the firm is not liable.

managers have incentives to provide information on projects that have positive net present value projects.

The contracting arguments for conservative accounting apply to most uses of accounting within the firm, including measures of managerial performance for subunits of the firm such as profit centers. In those cases the responsible employees have asymmetric information, asymmetric payoffs and limited liability. The arguments also apply to cost centers and budgets used to control expenditures; to the extent the employees do not control net assets, they are not charged with losses in asset values.

Why isn't the extreme form of conservatism that does not anticipate any profits until received optimal for contracting purposes? As noted, the reason is the cost of not being timely. Delaying recognition of earnings that are verifiable is costly for both dividend and compensation purposes. Employing the verification requirement allows more timely compensation than extreme conservatism and reduces over-investment in the firm caused by restrictive dividend covenants. The asymmetrical verification requirements follow from asymmetrical costs of overpayment versus underpayment due to the limited liability of shareholders and managers.

Summary of the Contracting Explanations

In debt, compensation and other contract explanations, conservatism emerges almost naturally as an efficient contracting mechanism because it is optimal for contracts' performance measures to have more stringent verification standards for gains than for losses. As before, the asymmetry in standards leads to greater delay in the recognition of gains than in the recognition of losses. The result is that net assets and cumulative earnings are less likely to be overstated at

any point in time, reducing the likelihood of distributions that violate contracts and reduce the value of the firm. Let's summarize the examples:

- In debt covenants, conservatism reduces the likelihood management will forego positive net present value projects, overstate earnings and assets, and make what is effectively a liquidating dividend payment to shareholders at the expense of debt-holders.
- In compensation contracts, conservatism reduces the likelihood that managers will exert effort to overstate net assets and cumulative earnings in order to distribute the net assets of the firm to themselves instead of exerting effort to take positive net present value projects.
- In corporate governance, conservatism provides timely signals for investigating the existence of negative net present value projects and taking appropriate actions if they exist. Conservatism protects the shareholders' option to exercise their property rights.

The increase in firm value generated by conservatism's reduction of dysfunctional actions is shared among all parties to the firm.

CONTRACTING EXPLANATIONS AND THE INFORMATION PERSPECTIVE

Conservative Accounting Numbers as Information

The conservative orderly liquidation value of net assets is also relevant to investors in equities because of the "abandonment option." Suppose the operating value of the firm falls below the liquidation value of net assets. At that point there is the potential to increase the value of the firm by exercising the "abandonment" option to liquidate the assets and go out of business. Corporate raiders have been accused of taking over firms to do just that.

Even if the operating value exceeds the liquidation value and the abandonment option is not in the money, the orderly liquidation value of net assets is relevant. Even in that situation there is a probability that the option will be in the money in the future, and the resulting option value affects the current valuation of equity. In this framework, equity investors are better off with, and have a demand for, a conservative balance sheet (Holthausen and Watts, 2001).

Conservative accounting performance measures such as earnings also fulfill an important role in providing information for investors. Eventually, currently unverifiable future cash flows are realized and flow through the income and cash flow statements. These earnings numbers provide investors with a control for other sources of information. Unverifiable estimates of future performance supplied by analysts are likely to be of higher quality when subsequent conservative earnings can be used to evaluate them. If accounting earnings are unverifiable, the quality of other information decreases.

The Flaw in the Information Perspective Criticism

Critics of conservatism argue that it leads to future income statements that are not “conservative,” as stated in the earlier quote from ARB 2 (AICPA, 1939). The argument is that downward-biased estimates of net assets caused by asymmetric recognition of gains and losses lead to upwardly biased estimates of earnings in future years when those assets are realized. Hence, it is said that conservatism now produces “non-conservative” earnings in future years. This charge misses the point of conservatism in the contracting explanation.

Conservatism produces estimates of net assets and retained earnings that are biased downward for a reason — to prevent actions by managers and others that reduce the size of the pie available to all claimants on the firm. Conservatism produces asset and earnings measures

that help in maximizing the real value of the firm. Future years' earnings are higher because gains are deferred until there is verifiable evidence that they exist and will be *realized*. This makes those earnings conservative. The fact that a particular future year's earnings are higher than a Nirvana benchmark such as a manager's or accountant's estimate of that future year's share value change does not make the future earnings non-conservative.

More importantly, the critics do not take into account contracting's implications for measures of the earnings benchmarks they use to criticize conservatism. If those benchmark measures are introduced into audited financial statements and are at all useful, they become subject to the same forces that produce conservatism. This will happen even if formal contracts stopped using measures from audited financial statements. If investors take the benchmark measures seriously, managers will attempt to manipulate them. For example, two earnings benchmarks implicit in many value-relevance studies are (1) permanent earnings (a fraction of the value of equity) and (2) changes in the value of equity. If investors use estimates of those benchmark earnings in *any way* to evaluate and reward managers, those managers will try to manipulate the measures to their own advantage and to the disadvantage of other parties.

An illustration of this phenomenon is the evidence in Carhart et al. (2002) that mutual fund managers inflate quarter-end portfolio prices with last minute-purchases of stocks already held. This causes the stock prices to close higher and at the ask price. The practice inflates prices by 0.5 percent to over 2.0 percent and is greatest for the funds that are closest to being ranked in the overall top 10 funds based on performance. Such ranking increases the fund's cash inflows and management fees.

Implications for Proposed Information Perspective Measures

Earnings and asset measures proposed in the academic literature involve unverifiable estimates of future cash flows or market values that are open to considerable manipulation (Holthausen and Watts, 2001). It is likely that when introduced into practice and subjected to manipulation, the measures proposed in the academic literature become less efficient and poorer signals for the efficient allocation of resources than conservative accounting earnings. After all, contracting parties have incentives to measure earnings in a way that incorporates value changes in a timely fashion. If earnings omit some value changes because those value changes are not verifiable, incorporating them makes earnings a poorer signal and a less efficient contracting device.

Some of the current corporate accounting scandals illustrate the problems of including non-verifiable future cash flows or market values in earnings measures. For example, the event that led to WorldCom's bankruptcy was the announcement that \$3.9 billion of WorldCom's costs of leasing other companies' networks was "improperly" capitalized rather than expensed (Krim, 2002). The rationalization for the capitalization of unused capacity cost under the leasing contracts was that the unused capacity was incurred in anticipation of (unverifiable) increased future business (Krim, 2002).

In another example illustrating the importance of verification, Enron management reportedly marked contracts and derivatives to market and recognized the value changes in earnings used in bonus plan compensation (McGraw-Hill Inc., 2002). The FASB's Emerging Issues Task Force left the decision on how to determine the market value of energy-related contracts and derivatives to the discretion of corporate managers. For a given contract, Enron managers could choose to select either a "bid" price that a market-maker is prepared to pay for

the contract or an “ask” price at which a market-maker is prepared to sell the contract. As a market-maker, in some cases the only market-maker, Enron management could determine these prices (Weil, 2001). According to Weil, “Enron often posted ‘ask’ prices that were as much as eight times the posted ‘bid’ prices.” Because such ‘ask’ prices are unlikely to generate verifiable sales, they enable significant over-valuation of contracts.

Consistent application of asymmetric verifiability—conservatism—will tend to offset management’s positive earnings bias as illustrated in the mutual fund, WorldCom and Enron examples above. However, contracting suggests the information perspective should go further and employ conservatism to generate a downward bias in net assets. The net bias results from the costs of overpayments to managers and shareholders. Because the information perspective arose from regulation imposed by the Securities Acts, one expects it to reflect the objectives of regulation. The political process that generated the Securities Acts and the behavior of regulators such as the SEC suggest that regulation has the same concern about overpayments as contracting, a matter examined below in the regulatory explanation section.

OTHER EXPLANATIONS FOR CONSERVATISM

A Litigation Explanation for Conservatism

Beaver (1993) and Watts (1993) note that litigation under the Securities Acts encourages conservatism because litigation is much more likely when earnings and net assets are overstated, not understated. Kellogg (1984) finds that in securities litigation, buyers’ lawsuits against auditors and firms outnumber sellers’ lawsuits by a ratio of 13 to one. Since the expected litigation costs of overstatement are higher than those of understatement, management and auditors have incentives to report conservative values for earnings and net assets.

Unlike the contracting explanation for conservatism, the litigation explanation applies only recently in the US. Kothari et al (1988) point out that litigation under the Securities Acts was relatively rare before the 1966 changes in the rules for bringing class action suits. This point allows some empirical discrimination between the contracting and litigation explanations as discussed in Part II.

An Income Tax Explanation for Conservatism

Because taxable income and methods for calculating taxable income have long been linked to reported earnings they have long influenced the calculation of earnings. Watts (1977, p. 69) and Watts and Zimmerman (1979) suggest that the widespread adoption of depreciation as an expense in the US was due to the Treasury's requirement that depreciation be recorded as an expense in reported financial statements in order to qualify as a tax deduction under the 1909 Corporation Excise Tax Law, a precursor to the 1913 income tax law.

Guenther, et al. (1997, pp. 230-234) suggest that accounting methods used for reporting to shareholders still influence taxable income, although specific depreciation methods now do not. Court decisions on reporting methods serving as precedents for tax methods, IRS behavior, and formal ties between financial reporting and tax accounting, such as LIFO and the alternative minimum tax, provide the links. Shackelford and Shevlin (2001) also suggest that taxes provide incentives for firms to conform reported accounting income to tax incentives. As long as a firm is profitable, has taxable income, and interest rates are positive, the connection between taxable and reported income provides an incentive to defer income to reduce the present value of taxes. Like contracting, on average this incentive leads to understatement of net assets.

The link between reported income and taxable income is apparent in the number of companies now seeking refunds of taxes overpaid because of recent frauds in reported

accounting earnings. MCI, formerly WorldCom Inc., reportedly filed for a refund of taxes on three to four years of now discredited profits resulting from the capitalization of expenses mentioned earlier (Blumenstein, Berman and Perez, 2003). These cases, however, go in the opposite direction to taxes generating conservatism in reporting methods. In the fraud cases, reporting considerations took precedence over tax considerations rather than vice-versa.

A Regulatory Explanation for Conservatism

Regulation also provides incentives for firms' reported financial statements to be conservative. Watts (1977, p. 67) argues that losses from overvalued assets and overstated income are more observable and usable in the political process than foregone gains due to undervalued assets or understated income. This phenomenon provides incentives for regulators and standard-setters to be conservative and apparently caused the SEC's ban on upward valuations of assets during its first 30 years (Zeff, 1972, pp. 156-160; and Walker, 1992). The rationale for the Securities Acts also suggested accounting should be conservative and blamed accounting for the ex post overvaluation of New York Stock Exchange stocks in 1929 (Benston, 1969).

While there are regulatory incentives for accounting to be conservative, occasionally in recent times accounting standard-setters seem to ignore those incentives. Both their words and some of their recent actions favor "neutrality" and oppose any bias. FASB *Concepts Statement 2* on qualitative characteristics (FASB, 1980) seems to adopt that position. And, some recent standards appear inconsistent with the bias of conservatism. One of those is SFAS 142, which replaces the amortization of goodwill with periodic assessment of whether goodwill is "impaired." Assessing impairment requires valuation of future cash flows. Because those future

cash flows are unlikely to be verifiable and contractible, they, and valuation based on them, are likely to be manipulated. Conservatism does not allow the use of such measures.

SFAS 142 may be an error in judgment by the FASB. Replacement of goodwill amortization with the impairment provisions occurred immediately after investment bankers made a presentation to the FASB. The timing suggests the inclusion and exclusion decisions were a reaction to that lobbying. While survival requires regulators like the SEC and the FASB to consider political interests, investment bankers aren't the only ones with political interests. For example, I wonder whether the FASB gave sufficient weight to the political backlash against "ex post" overvaluations of the kind experienced by the early SEC commissioners after the 1929 stock market crash and who, in response, banned upward revaluations of assets (Zeff, 1972, pp. 156-160).

Although the FASB has strayed from conservatism on occasion, the SEC's enforcement of GAAP offers at least one example of enforcing a level of conservatism greater than expected under contracting. That example is the revenue recognition requirements described in Staff Accounting Bulletin (SAB) 101 (Turner, 2001; and Vogt, 2001). According to Vogt, the position taken in SAB 101 overlooks the Uniform Commercial Code by requiring in some cases that recognition be less timely than implied by contracting law. Perhaps the SEC has a longer institutional memory than the FASB and is more aware of the political backlash for overvaluation.

IMPLICATIONS FOR REGULATORS AND STANDARD-SETTERS

Overall, existing evidence described in Part II of this article suggests that accounting is conservative for at least contracting and litigation reasons. Earnings manipulation and the

abandonment option scenario are consistent with some evidence, but individually, or in the aggregate, cannot be the primary reasons for the existence of conservatism.

The contracting explanation implies that conservatism enhances the efficiency of earnings as a measure of performance and net assets as a measure of the firm's abandonment value. Conservatism addresses problems in measuring earnings and assets that exist even without contracts, as long as the measures are useful to investors and affect management's welfare. Because conservatism's benefits are relevant even in a pure financial reporting scenario, the FASB should change direction in its standard setting.

The FASB apparently eschews conservatism. It claims to be trying to move towards financial statements that provide neutral (unbiased) information. Yet, the FASB sometimes appears to underestimate the verification that is necessary to prevent management introducing biases into information. As the Enron case demonstrates, the FASB appears to favor mark-to-market accounting without ensuring verifiability of the market estimates. While the FASB's apparent preference for rules is understandable, given that auditors and managers demand specific rules that provide a defense in litigation, the cavalier approach to verifiability is troubling. The FASB can ill afford more scandals of the Enron variety in which "generally accepted" unverifiable values played a role.

Watch Out for the Joint Cost/Benefit Problem

Recent standards introduce new unverifiable estimates into financial reporting. SFAS 141 requires managers to record unverifiable values of intangible assets that were previously not recorded separately in mergers and acquisitions. SFAS 142 requires managers to make unverifiable estimates of impairment of some of those assets' values. SFAS 142 also requires

managers to make unverifiable estimates of the value of firms as a whole or of the value of parts of firms when testing whether goodwill is impaired. Assessment of the value of a firm and its implied goodwill is extremely subjective. Listed firms have an objective measure, the observed market value, but that is not to be used. Assessing the value and implied goodwill of reporting units is even more difficult. Not only are values and estimates of implied goodwill unverifiable, if there are any significant synergies at all among the units there is no meaningful way to allocate future cash flows, value and goodwill among units. Synergies imply joint costs and benefits and, as managerial accounting texts recognize, allocation of joint costs and benefits for valuation purposes is arbitrary and meaningless.⁶

The joint cost/benefit problem also applies to the valuation and impairment estimates for other identified intangible assets. Unless these assets can be sold separately from the firm, estimating their value involves allocating joint benefits and costs. Accounting researchers may be partially to blame for the FASB overlooking this problem.

In investigating the empirical relation between the market value of firms and expenditures on advertising, research and development and franchise development that supposedly develop intangible assets, researchers, such as Lev and Sougiannis (1996), fail to recognize the fact that they are facing the joint benefit problem. Those researchers associate one particular set of expenditures on investment projects with the present value of those projects. But, in order to produce those present values, the expenditures have to be incurred jointly with other expenditures. Once again any allocation of the joint benefits or firm value to individual expenditures like advertising or research and development is arbitrary, meaningless and unverifiable.

⁶ Since synergies are necessary to make business combinations value-increasing, the joint benefit/cost allocation problem is likely present in most business combinations.

Separable Net Assets versus Firm Value

Accounting is traditionally wary of estimating *firm* value. Instead it tends to measure the values of separable *assets* that are independent of the firm and can be liquidated. The market value of such an asset is determined by the price someone else is prepared to pay for it — its value in the next most productive use. Verifiable values of such assets are available when their markets are liquid and, before SEC regulation, some such assets with liquid markets were marked to market (Holthausen and Watts, 2001). Prior to the Securities Acts, non-separable intangible assets tended to be written off. In the 1920s many profitable U.S. firms promptly wrote goodwill off to equity, consistent with conservatism and the fact that when the lower bound on net assets is important, goodwill is likely to be zero. That write-off is also consistent with debt contracts' treatment of goodwill. In accounting, earnings tends to be calculated as the change in the aggregate *verifiable* market value of separable net assets that is not due to transactions with owners, such as share issuance or dividends. Such earnings are realized and verifiable. Note that if an asset does not have a liquid market to provide a verifiable market value, it tends to be valued at verifiable historical cost or less if evidence suggests the value is lower.

In moving into unverifiable valuation of the firm and non-separable intangible assets the FASB is taking steps down a path that many before them have feared to tread, and with good reason! The likely result will be net asset values and earnings that are subject to more manipulation and, accordingly, are poorer measures of worth and performance. The financial press and professional journals tend to recognize these implications, as the following quote indicates:

“The effects on financial results and ratios will be very significant in years of impairment, and it is hard to see how fair values for goodwill will be objectively determined. The new impairment charges are prime candidates for movable expenses from one period to another to achieve desired earnings targets. Much like depreciation was in the 1920s, impairment may become the key to making earnings estimates — not to mention the added cost of annual impairment testing.” (Rockness, Rockness and Ivancevich, 2001).

CONCLUSION: CONSERVATISM IS ESSENTIAL

If the FASB wants to improve financial reporting it must recognize the importance of verification and the problems that conservatism’s asymmetric verification requirement evolved to address. Managers’ limited tenures and limited liability give them incentives to introduce bias and noise into value estimates. The lack of verifiability of many valuation estimates gives managers the ability to do so. Asymmetric verifiability limits that bias and noise. Conservatism also constrains overpayments to managers and other parties, consistent with standard-setting objectives as inferred from SEC and Congressional behavior.

Throwing away conservatism’s benefits in an attempt to achieve gains from accounting valuing firms based on managers’ estimates does not make sense. Those estimates will incorporate all the problems conservatism seeks to address. Further, while firm managers do have inside information, it is unlikely that in valuation, per se, they have any net advantage over a market that has many informed participants with a wide range of information.⁷ The market’s value estimates are observable for listed firms. The FASB can improve financial reporting more if it concentrates on accounting’s core competence: providing verifiable conservative

⁷ Managers may have some information investors do not, but in aggregate investors have a lot of information the management does not. In addition, the manager’s valuation model is often crude and noisy.

information that market participants can use both as inputs in their own valuation and as calibration for their own and others' unverifiable information.

One possible counter-balance to the FASB's apparent disregard for verifiability and conservatism is the SEC. In SAB 101 the SEC appears to defer recognition of some gains beyond the point that they are verifiable, needlessly reducing the timeliness of accounting earnings. However, at the same time the SEC is accepting filings under SFAS 141 and 142. We may have to wait for further frauds for the SEC to recognize the inconsistency of its actions.

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