Conservatism in Accounting

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Abstract

This paper examines conservatism in accounting. Conservatism is defined as the differential verifiability required for recognition of profits versus losses. In its extreme form the definition incorporates the traditional conservatism adage: “anticipate no profit, but anticipate all losses.” Despite criticism from many quarters, including standard-setters, conservatism appears not only to have survived in accounting for many centuries, but also to have increased in the last 30 years.

The paper lays out the various alternative explanations for conservatism: contracting; shareholder litigation; taxation and accounting regulation (e.g., SEC and FASB). It also summarizes the empirical evidence on the existence of conservatism and the extent to which it is consistent with the alternative explanations for conservatism. The evidence is consistent with both the existence of conservatism and its increase in recent years. Contracting and shareholder litigation explanations appear to be important in these results. The evidence on the effect of taxation and regulation is weaker, but is still consistent with those explanations playing a role. Earnings management could also produce some of the evidence on conservatism, but it is unlikely to be the major explanation.

The explanations and evidence have important implications for accounting regulators (SEC and FASB). First, the contracting explanation implies that conservatism will exist even in the absence of formal contractual use of financial statements. As long as income and net asset measures have meaning and are used in a way that affects management’s welfare, conservatism is likely to be an optimal accounting principle. Absent differential verifiability, financial measures such as income and net assets are likely to be subject to sufficient manipulation to render them meaningless. Second, recent FASB moves to apply rules such as mark-to-market without appropriate concern for verifiability are likely to be disastrous for the FASB and capital markets. Third, attempts to introduce unverifiable estimates of future cash flows into the financial statements are likely to just as disastrous.
1. **Introduction**

Accounting conservatism is traditionally defined by the adage “anticipate no profit, but anticipate all losses” (e.g., Bliss, 1924). Anticipating profits means recognizing profits before there is a verifiable legal claim to the revenues generating those profits. Conservatism does not imply that all revenue cash flows should be received before profits are recognized. Thus the issue is one of verifiability. 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 asymmetry in the 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 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 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 conservatism’s income statement effect for a particular period was popularized by conservatism’s critics. That usage does not fit with conservatism itself. Conservatism reserves the use of the term for the balance sheet and for 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 is accounting practice conservative, but also that it 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 conservatism has significant benefits that are missed by its critics. The puzzle is: what are those benefits? If regulator and standard-setter critics try to eliminate conservatism without understanding the puzzle, the resultant standards are likely to be seriously detrimental to financial reporting.

Researchers have advanced a number of explanations for conservative reporting and all of them suggest conservatism has benefits to parties associated with the firm that 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 outside parties (contracting explanation). Under this explanation, conservative accounting is a means of addressing problems due to parties to the firm having asymmetric information, asymmetric payoffs and limited liability. Even if contracting and managerial accounting were separated from financial reporting, these problems would still exist as long as the reports’ accounting measures informed investors about managerial performance and so affected investors’ asset allocation decisions and managers’ welfare. The contracting explanation implies conservatism is beneficial from the investor information perspective that is usually adopted by accounting standard-setters and academics.\(^2\)

In recent years, shareholder litigation is another potential source of conservatism. Litigation also produces asymmetric payoffs: overstating net assets is more likely to generate litigation costs than understating net assets. Conservatism, by understating net assets, reduces the firm’s expected litigation costs.

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. Delaying the recognition of revenues and accelerating the recognition of expense defers tax payments.

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\(^1\) 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).
Finally, financial reporting standard-setters and regulators have their own incentives to induce 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 more likely to be blamed if firms overstate net assets than if they understate net assets. Conservatism reduces the political costs imposed on standard-setters and regulators.

The recent empirical evidence that suggests accounting conservatism not only exists but has increased in recent years is consistent, in varying degrees, with the four conservatism explanations. However, some of the evidence is also consistent with two explanations that do not imply conservatism. One of those explanations is that management understates assets by taking excessive charges (such as restructuring charges) or excessive write-offs in order to overstate earnings in the future (see Hanna, 2002). The other is that management elects to abandon operations that are not profitable (Hayn, 1995).

The extent to which the evidence is consistent with the various explanations has important financial reporting implications. For example, assume the evidence is consistent with conservatism explanations that imply conservatism has a productive role in financial reports providing information to capital market investors. Then regulators and standard-setters should rethink or redirect their opposition to conservatism.

The objectives of this paper are to:

a) Discuss the explanations for conservatism
b) Summarize the evidence on conservatism’s existence
c) Evaluate the evidence’s ability to discriminate between conservatism explanations
d) Evaluate the evidence’s ability to discriminate between conservatism and non-conservatism explanations
e) Draw implications for regulation and standard-setting

The explanations discussion draws on the existing literature. However, my explanation of the links between conservatism and contracts other than debt contracts is new. It extends the debt contract dividend constraint explanation to other contracts. Also new is

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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
my argument that an information perspective also produces conservatism once relevant information costs are introduced.

2. Explanations for Conservatism

I devote most of this section to the contracting explanation. My reason is that it is the original source of conservatism and I think it has implications for the information perspective used by standard-setters. Also, although the contracting explanation in the literature emphasizes the formal contracts between parties to the firm (such as debt and management compensation contracts), the explanations extend to the firm’s organizational arrangements such as its managerial accounting and control systems. The tax explanation is also linked to the contracting explanation. The very early origins of accounting (and writing) involved control of assets and tax collection for kings and lords (see for example, Chadwick, 2000).

The contracting use of accounting is very old: many centuries for corporate use (see Watts and Zimmerman, 1983); and millennia for management control (see for example, de Ste Croix, 1956 and Chadwick, 2000). That long usage is hypothesized to have influenced the development and nature of accounting and financial reporting, including conservatism (Watts and Zimmerman, 1986; Watts, 1993; and Basu, 1995).

Other explanations for conservatism rely on more recent phenomena. The increase in shareholder litigation that began in the US in the 1960s and has grown significantly since is often pointed to as an explanation for conservatism. The tax system’s influence on financial reporting accounting methods (as exemplified in the LIFO method or the effects of the alternative minimum tax) is another potential explanation. This influence in the US dates at least from 1909. Finally, and somewhat ironically given regulators’ criticism of conservatism, the government regulation of financial reporting, dating from the securities acts of 1933 and 1934, is hypothesized to have contributed to conservatism (at least in the initial regulatory period).

2.1 Contracting explanations for conservatism

2.1.1 Explanations
Contractual use of accounting measures. Many contracts between parties to the firm use accounting numbers to reduce agency costs associated with the firm (see Watts and Zimmerman, 1986). Those contracts include contracts between the firm and holders of the firm’s debt (debt contracts), management compensation contracts, employment contracts, and cost-plus sales contracts. Contracting parties demand timely measures of performance and net asset values (e.g., for compensation and debt contract purposes). Ceteris paribus, managerial performance measures in compensation contracts (e.g., earnings) are more effective if they reflect the effects of the managers’ actions on firm value in the period in which the actions are taken (i.e., are timely). Timeliness avoids dysfunctional outcomes such as the manager foregoing positive net present value projects because earnings do not reflect the benefits of the project until after the manager has retired or left the firm.

Earnings are used in debt contracts to restrict the payment of dividends to shareholders and keep a minimum amount of net assets within the firm to provide backing for outstanding debt and so reduce agency costs of debt (Smith and Warner, 1979). If earnings and net assets increase in the current period it is desirable for net asset accounting measures to reflect that increase in a timely fashion so the goal of the restriction is met and management is not forced to forego optimal dividend payments and have shareholders over-invest in the firm. Likewise, if there is a decrease in earnings and net assets, the effectiveness of the restriction is improved if the earnings and net asset measures are timely. Hence, there is a debt contracting demand for timely earnings and net asset measures.

Role of verification. Much information that could make accounting measures, such as 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, there is no legal claim to those future net cash inflow estimates and the estimates are not verifiable because they often 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. Ideally, in order to be timely, performance measures would include the future net cash inflows from
current management actions, including the future cash inflows due to new product development. However, since the earnings measure has to be verifiable for the contract to be enforceable, contracts exclude non-verifiable future net cash inflows effects from earnings measures.

When a firm’s expected future operating net cash flows are negative and are not already contracted there is no legal liability for those cash flows. Despite the lower verification requirement for losses the future negative cash flows will not typically be recognized. Apart from no legal liability, an important reason is that actions will be taken to eliminate those negative future cash flows. For example, if the cash flows are due to future benefits to employees that are not yet a legal liability, the management can change the plan to eliminate those benefits. Another scenario is that the management (or a corporate raider) will liquidate the business or the part of the business generating the outflows and realize the net assets.

*Role of asymmetric verification.* Given verification is necessary for contracting, the question is: why is a higher degree of verification required for gains than for losses? Part of the explanation is that the relevant parties to the firm have asymmetric payoffs from the 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. When the managers of the firm cannot produce enough net assets at maturity (or earlier) to cover the promised payments to the debt-holders, limited liability causes debt-holders to receive below the contracted sum, in particular the net assets of the firm. Consequently, debt-holders are concerned with the lower ends of the earnings and net asset distributions. Further, managers will not be able to produce net assets to pay off debt (e.g., by selling more shares) if the value of the equity is less than or approximately equal to the net asset value (the firm is bankrupt).

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 that as a basis for the loan. Further, they use
those lower bound measures during the life of the loan to **monitor** the borrower’s ability to pay. In debt contracts lenders use lower bound measures of net assets (and other accounting measures) to trigger technical default and allow for calling of the loan (see Beneish and Press, 1993) and to **restrict** managerial actions such as dividends that reduce the value of net assets or otherwise reduce the value of the loan, for example acquisitions that increase the firm’s risk (see Smith and Warner, 1979). Essentially the measures calculate the value of net assets assuming orderly liquidation.

In Watts (1993), I argue the orderly liquidation concept underlies conservative accounting. When estimating the value of net assets for 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. This argument is not original to me, conservatism is often attributed to bankers’ and other lenders’ use of the balance sheet (e.g., see 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, typically intangible assets are not included in net assets consistent with the elimination of non-verifiable assets and conservative accounting. In liquidation many intangibles assets are likely to have a value of zero (see Holthausen and Watts, 2001, p. 36).

Dividend covenants are important in debt agreements and important examples of conservatism’s function. They restrict dividends based on retained earnings calculated on conservative accounting principles. To protect debt-holders those restrictions force management to maintain within the firm assets with a given lower bound value. This use of conservative accounting in corporations is extremely old and in the UK dates back to the 1620s when faceless trading of company shares effectively generated limited liability for shareholders (see Watts, 1977, p. 57). Without that restriction corporations could not borrow because of the potential for management to distribute the assets and, given limited liability, leave the creditors with nothing and no way of recovering their loans.³

The demands for restrictions on distributions of net assets also affect accounting earnings measures via management compensation contracts. The manager frequently has more information than the other parties to the firm. For example, the manager likely has
better information about the effects of new product development on the future cash flows than have the shareholders, auditor or board of directors. Absent the verification requirement the manager can bias estimates of those future cash flow effects upwards, not only producing large payments under earnings-based compensation plans, but also perhaps leading to negative net present value investments by the firm.

Recovery of the excess compensation payments and reparation for the excess investments is difficult if the manager leaves the firm before the cash flows are realized. Given the inability to verify the estimates, fraud would be difficult to prove. Absent legal damages, the excess payments and reparations would probably be impossible to recover. Even with a legal finding of fraud and a damages award the excess payments typically cannot be fully recovered not just because, with negative net present value projects, the full cost is greater than the sum the manager received. Individuals 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 very high costs such as selling the individual and his descendants into slavery).

The earnings-based compensation problem is essentially the same as the dividend problem (above). The dividend problem is that unless dividend constraints are imposed using conservative earnings, shareholders may pay dividends that leave debt-holders with less net assets than the face value of their debt and an inability to recover the excess payment because of 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 limited liability. Conservatively measured earnings provide some timely incentives and deferred

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3 Winakor (1934) is an early paper that recognizes limited liability’s importance to accounting methods.
4 Basu (1997) argues that rational labor markets reduce management compensation for managerial bias, causing managers to commit to a conservative accounting system that offsets the managers’ informational advantage. Basu does not explain how conservatism offsets that advantage or why the compensation parameters cannot be adjusted to offset the bias. In my explanation, conservatism produces a lower bound on net assets and so specifies the allowable timely payments. The bound varies with the verifiability of the assets and cash flows, a variable that management controls. Hence specification of a simple ‘a priori’ bias is not effective.
compensation rewards managers for future cash flows (e.g., in some bonus plans managers earn compensation on earnings after retirement, see Smith and Watts, 1982).\(^5\)

The arguments for conservative accounting measures in debt and managerial compensation contracts apply to most uses of accounting within the firm. For example, they apply to measures of managerial performance for subunits of the firm such as profit centers. In those cases the employee responsible for the center has asymmetric information, asymmetric payoffs and limited liability. The arguments also apply to cost centers and budgets that are used to control expenditures. In the cost center and budget examples, to the extent the employee does not have control of net assets, he will not be charged with losses in asset values.

In debt, compensation and other contract explanations, conservatism emerges endogenously as an efficient contracting mechanism. It occurs because it is optimal for contracts’ performance measures to be conservative (i.e., to have more stringent verification standards for gains than for losses). The asymmetry in standards leads to greater delay in the recognition of gains than in the recognition of losses with the result that net assets and cumulative earnings are less likely to be overstated at any point in time. This reduces the likelihood of distributions that violate contracts and reduce the value of the firm. 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. 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. The increase in firm value generated by reduced dysfunctional actions is shared among all parties to the firm.\(^6\)

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\(^5\) Kwon, Newman and Suh (2001) model conservative financial reporting as part of efficient contracting with a manager when the penalties on agents are limited (i.e., 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.” This is consistent with a higher verification requirement for high outcomes (gains) than for low outcomes (losses). However, the model used in the model does not incorporate the arguments made above.

\(^6\) There are other formal conservatism models in a contracting setting. For example, Reichelstein (1997) and Dutta and Reichelstein (2000) model incentive systems to achieve goal congruence between a principal and an agent with respect to investment decisions in no moral hazard and moral hazard settings respectively.
Conservative accounting numbers as information for equity investors. The orderly liquidation (conservative) value of net assets is also relevant to investors in equities. An important element of equity valuation is the abandonment option. When the operating value of the firm falls below the liquidation value of net assets there is the potential for increasing the value of the firm by exercising the 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 abandonment option is not in the money, the orderly liquidation value of net assets is relevant. In that situation there is frequently still a probability the option will be in the money in the future. In that case the option value affects the current valuation of equity. This implies equity investors have a demand for a conservative balance sheet (see Holthausen and Watts, 2001).

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

2.1.2 The contracting explanation and criticisms of conservatism.

Critics of conservatism argue that it leads to future income statements that are not “conservative” (e.g., AICPA, 1939). The argument is that downward-biased estimates of net assets (due to the asymmetry in recognition of gains and losses) lead to upwardly biased estimates of earnings in future years when those assets are expensed. Hence, conservatism 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, i.e., to prevent actions by managers and others that reduce the size of the pie available to all

when the principal does not know the agent’s discount factor. And, Antle and Lambert (1988) model a system that generates conservative information for an accountant who is hired by a principal. However, these models do not capture the essence of traditional conservatism.
claimants on the firm. Conservatism produces asset and earnings measures that maximize the real value of the firm. Future year earnings are higher because gains are deferred until there is evidence they exist and have been earned. This makes them conservative. The fact that future earnings for a given year are higher than some Nirvana benchmark for earnings such as the change in the value of the shares estimated by an accountant 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 were introduced into audited financial statements and were at all useful, they would be subject to the same forces that produce conservatism, even if (as a consequence) formal contracts ceased to use the measures in audited financial statements. If investors took the measures seriously, so would managers who would then manipulate those measures. For example, consider measures of the earnings benchmarks implicit in many value-relevance studies: permanent earnings (a fraction of the value of equity); or changes in the value of equity. If investors used estimated measures of those benchmarks in any way to evaluate and reward managers, managers would attempt to manipulate the measures to their own advantage and to the disadvantage of other parties. The measures proposed in the academic literature involve unverifiable estimates of future cash flows or market values that would be open to considerable manipulation (see Holthausen and Watts, 2001). It is likely that when introduced into practice and subjected to manipulation, the measures proposed in the academic literature would be 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 do not incorporate some value changes, presumably it is at least partially because those value changes are not verifiable.

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7 Business school faculty are familiar with the lengths to which their deans go to influence inputs to business school ratings. Carhart, Kaniel, Musto and Reed (2002) supply a more formal example of the phenomenon. They present strong evidence that mutual fund managers inflate quarter-end portfolio prices using last minute-purchases of stocks already held. Those purchases occur in the last five minutes of trading each quarter and cause the stock prices to close higher and at the ask price. The effect is to inflate prices by 0.5 percent to well over 2.0 percent depending on the fund category. The inflation is greatest for the funds that are the closest to being ranked in their category’s top 10 funds based on performance.
and the attempt to incorporate them would make 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 of $3.9 billion of WorldCom’s costs of leasing other company’s networks having been “improperly” capitalized rather than expensed (see 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 (see Krim, 2002).

Enron also illustrates the importance of verification. That company reportedly marked contracts and derivatives to market and incorporated the consequent value changes in earnings that were used in bonus plan compensation (see 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 (the price a market-maker is prepared to pay for the contract) or an “ask” price (the price at which a market-maker is prepared to sell the contract). As a market-maker (in some cases the only market-maker), Enron could determine these prices (see Weil, 2001). According to Weil, “Enron often posted ‘ask’ prices that were as much as eight times the posted ‘bid’ prices.” While such ‘ask’ prices are unlikely to generate a sale at the end of a period, they enable significant over-valuation of contracts.

2.2 A litigation explanation for conservatism

Beaver (1993) and Watts (1993) both note that litigation under the Securities Acts encourages conservatism. The reason is that litigation is much more likely to be generated by overstatement rather than understatement of earnings and net assets. 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 are given incentives to understate earnings and net assets.
Unlike the contracting explanation for conservatism, the litigation explanation applies only recently in the US. Kothari, Lys, Smith and Watts (1988) point out that litigation under the Security Acts dates from the 1966 changes in the rules for bringing class action suits. This point allows some empirical discrimination between the contracting and litigation explanations (see later).

2.3 An income tax explanation for conservatism

Income taxes have long been tied to reported earnings and as a result have 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.\(^8\) In effect, that law was an income tax law and was a precursor to the 1913 income tax law.\(^9\)

Guenther, et al. (1997, pp. 230-234) suggest accounting methods used for reporting still influence taxable income (though depreciation methods for reporting now do not). Court decisions on reporting methods serving as precedents for tax methods, IRS behavior and formal ties between reporting and tax (such as LIFO and the alternative minimum tax) provide the links. Shackelford and Shevlin (2001) also suggest taxes provide incentives for reported accounting income to conform to taxable income. As long as a firm is profitable and has taxable income and interest rates are positive, this connection 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.

2.4 A regulatory explanation for conservatism

Regulation also provides incentives for firms’ reported financial statements to be conservative. Watts (1977, p. 67) suggests losses from overvalued assets and overstated income are more observable and usable in the political process than foregone gains due to

\(^8\) Note that even though depreciation was not taken as an expense in earlier times, it was deducted from net assets as predicted by conservatism. Reserves were established out of retained earnings. Contracting did not lead to clean surplus (see Holthausen and Watts, 2001).

\(^9\) The excise law was later declared unconstitutional. That led to the sixteenth amendment to the Constitution and the 1913 income tax law.
undervalued assets or understated income. This provides incentives for regulators and standard-setters to be conservative. This incentive apparently caused the SEC during its first 30 years to ban upward valuations of assets (see Zeff, 1972, pp. 156-160; and Walker, 1992). The rationale for the Securities Acts also suggested accounting should be conservative. The story blamed accounting for the ex post overvaluation of New York Stock Exchange stocks in 1929 (see Benston, 1969).

While there are regulatory incentives for accounting to be conservative, in recent times accounting standard-setters seem to have gone against those incentives on occasion. Both their words and some of their recent actions suggest a concern that accounting not be biased. The FASB’s publications (e.g., FASB, 1980) seem to adopt that position. And, some recent standards appear inconsistent with the bias of conservatism. One of those is SFAS 142, which eliminated the amortization of goodwill and requires periodic assessment of whether goodwill has become “impaired.” Assessing impairment requires valuation of future cash flows. Those valuation estimates are unlikely to be verifiable and contractible. As a result, they are likely to be manipulated.

SFAS 142 may be an error in judgment by the FASB. The inclusion of the impairment provision and the exclusion of goodwill amortization occurred immediately after a presentation to the FASB by investment bankers. The timing suggests the inclusion and exclusion decisions were a reaction to that lobbying. While survival requires regulators (both SEC and FASB) to consider political interests, those political interests include others in addition to the investment bankers. For example, I wonder if the FASB gave sufficient weight to the political backlash against “ex post” overvaluations of the kind experienced by the early SEC commissioners who, in response, banned upward valuations (see Zeff, 1972, pp. 156-160).

While the FASB may have strayed from conservatism on occasion, in the SEC’s enforcement of GAAP there is at least one example of enforcement of a level of conservatism that is likely greater than expected under contracting. That example is the enforcement of revenue recognition requirements as described in Staff Accounting Bulletin (SAB) 101 (see Turner, 2001; and Vogt, 2001). According to Vogt the position taken in SAB 101 overlooks the operation of the Uniform Commercial Code in a way that suggests recognition would be less timely than that 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.

3. **Measuring Conservatism**

Researchers generate three types of measures of conservatism:

1. Earnings/stock returns relation measures;
2. Net asset measures; and
3. Earnings/accrual measures.

This section explains each of these measures and summarizes the extent to which the measures’ estimates indicate accounting is conservative. The measures assess attributes of accounting numbers that explanations suggest conservatism generates. Essentially they are measures of the extent to which earnings are asymmetrically deferred or the extent to which net assets are understated.

3.1 **Earnings/stock returns relation measures**

Conservatism is the requirement of a higher degree of verification for gains than for losses. Gains are increases in the value of net assets and losses are decreases in the value of net assets. Differences in the degree of required verification can be determined by first observing actual net asset gains and losses when they occur and then determining whether there is a difference in the speed with which those gains and losses are captured by accounting. Reasonably, Basu (1997) assumes that positive stock returns in a period generally reflect net asset gains and negative stock returns reflect net asset losses. If losses are subject to a lesser degree of verification than gains, Basu argues earnings will reflect net asset losses more quickly than net assets gains. The consequence is that stock returns and earnings will tend to reflect net asset losses in the same period, but stock returns will reflect net asset gains in earlier periods than earnings. In particular, Basu predicts that negative stock returns are more likely than positive stock returns to be fully reflected in earnings of the period in which those returns occur.

Basu illustrates his prediction with the earnings effects of a change in the estimated useful life of a fixed asset. When the estimated life drops, the asset’s value drops and the asset is written down to leave the estimated depreciation of future years
unchanged. All of the loss appears in earnings of the year of the loss. Earnings of that year are lower and the expected earnings of future years are unchanged. However, when the estimated life increases (the value of the asset increases), the gain is not taken. Instead, the remaining book value of the asset is spread over the increased number of remaining years of the asset’s life, reducing depreciation for those future years. The effect is to increase the earnings of the year of the gain and the earnings of future years by a fraction of the increase in asset value. Only a small fraction of the gain occurs in the earnings of the year of the gain.

To provide estimates of his conservatism measure Basu (1997) regresses annual earnings on stock returns of the same year. The $R^2$ of this regression is predicted to be higher for a sample of firms with negative stock returns than for the sample of firms with positive returns. Likewise the coefficient of stock returns is predicted to be higher for the negative stock return sample. This latter prediction is illustrated by the full loss appearing in earnings in the year of loss in the estimated life example while only a fraction of the gain appears in earnings. If stock returns measured the gain or loss only then the coefficient would be one for the negative return sample and $1/n$ for the positive return sample (where $n$ is the remaining life of the asset).

Consistent with the conservatism predictions, using US data, Basu (1997) finds that both the $R^2$ and estimated coefficient of stock returns in a regression of a current period’s earnings on stock returns are higher for samples of negative returns. Using variations on this methodology, the result has been replicated in other studies including, among others, Ball, Kothari and Robin (2000), Givoly and Hayn (2000), Holthausen and Watts (2001) and Pope and Walker (1999).

### 3.2 Net asset measures

**Valuation model measures.** Conservatism’s differential verification of gains and losses causes there to be more unrecognized gains than losses and so understates net assets. A number of valuation studies estimate the level of net asset understatement (conservatism) using equity valuation models. The valuation models are either Feltham-Ohlson valuation models or models of the ratio of book value of equity to market value of equity (book-to-market ratios).
The Feltham-Ohlson models (Feltham and Ohlson, 1995 and 1996) include parameters that reflect the degree of understatement of operating assets (due to the accounting rate of depreciation exceeding the economic rate). Estimates of those conservatism parameters are generated from estimation of the valuation model itself and also from time series estimation of the relation between variables that are inputs to the valuation model. The valuation model estimation parameter is obtained from cross-sectional regressions of value on abnormal earnings, assets and investment. An example from Ahmed, Morton and Schaefer (2000) is the regression of firms’ estimated goodwill on abnormal earnings, lagged operating assets and contemporaneous investment in operating assets. The coefficient of lagged operating assets should be positive in the presence of conservatism. The other parameter is obtained from the time series regression of abnormal earnings on lagged abnormal earnings and lagged book value of operating assets (see Myers, 1999). Again, the coefficient of lagged operating assets should be positive if conservatism exists. To obtain the intuition for these predictions, note that the more understated the operating assets (due to excess depreciation), the greater the coefficient that will have to be applied to the lagged operating assets to obtain either estimated goodwill or abnormal earnings.

Stober (1996), Dechow, Hutton and Sloan (1999), Myers (1999) and Ahmed, Morton and Schaefer (2000) find that the conservatism parameter estimated from the abnormal earnings regressions tends to be negative, not positive as predicted. The authors attribute this inconsistency to the misspecification of the relation between the variables. The specification of the relation is arbitrary and is not guided by any theory of conservatism or accruals other than the assumption that the depreciation rate is too high. As a result the specification ignores other known relations in the time-series of earnings. In particular, it ignores the negative serial correlation that conservatism generates in earnings and earnings changes because of conservatism (see below) or because of accrual estimation errors (see Ball and Watts, 1972). The estimated conservatism parameter in the valuation regression is less subject to these effects and is generally positive as predicted.

regress book-to-market ratios on individual year and firm dummy variables and on individual firm stock returns for the current and previous five years. The estimated coefficient of an individual firm’s dummy captures the persistent portion of the difference between the firm’s book and market values of equity. The lower the coefficient, the more conservative the firm (the more book value is biased downward). By construction, the mean coefficient is zero so the coefficient is a measure of relative conservatism and not aggregate conservatism. The measure is used to proxy for the extent to which conservatism varies across firms.

3.3 Earnings/accrual measures

Earnings measures. Basu (1997) and Watts (1993, p. 11) predict negative earnings changes are more likely to reverse in the next period than positive earnings changes. The reason is that (by selection) negative changes are likely to include more asset write-offs and write-ups of liabilities. Since these reductions in earnings and net assets anticipate future cash flow effects, next period’s earnings will not on average have such write-offs and will increase. On the other hand, the implications of positive earnings changes are not fully incorporated into current earnings producing positive dependence in positive earnings changes.

This prediction can be extended to earnings levels. Again by selection, negative earnings are more likely to include asset write-offs and liability write-ups. Given these charges are of a one time nature, next period’s earnings are less likely to be negative. Positive earnings will be less likely to have these reversals. Givoly and Hayn (2000) point out that this asymmetric effect on earnings will produce negative skewness in the earnings distribution.

Evidence that negative earnings changes are more likely to reverse than positive earnings changes already existed in the literature before Basu (1997), in particular in Brooks and Buckmaster (1976) and Elgers and Lo (1994). Basu also finds this result. He regresses earnings changes deflated by beginning-of-period price on lagged deflated earnings changes. The estimated slope coefficient for positive earnings changes is insignificantly different from zero, consistent with positive earnings changes being permanent and not reversing. The estimated slope coefficient for negative earnings
changes is significantly negative (-.69), but is not significantly different from minus one, the value expected if negative earnings changes are completely transitory. This result is consistent with write-offs due to conservatism causing earnings changes. If those write-offs capture all expected future losses on the assets, they would be completely transitory.

Accrual measures. Givoly and Hayn (2000) note that conservatism reduces cumulative reported earnings over time. They suggest the sign and magnitude of accumulated accruals over time are measures of conservatism. In a steady state (no growth) with no conservatism, earnings would converge to cash flows and periodic accruals would converge to zero. “A consistent predominance of negative accruals across firms over a long period is, ceteris paribus, an indication of conservatism, while the rate of accumulation of negative accruals is an indication of the shift in the degree of conservatism over time” (Givoly and Hayn, 2000, p. 292).

Consistent with conservatism, Givoly and Hayn (2000) find that the distribution of return on assets (whether derived from time-series of individual firms or the cross-section of firm-years) is negatively skewed for most of the period they examine (1956-1999). Givoly and Hayn also find that over the period 1965-1998 accruals (excluding depreciation) cumulate to an amount that represents 16% of cumulative earnings over the same period. This accumulation occurs from 1982-1998, consistent with the timing of a large increase in conservatism observed using the earnings/stock return relation (see time-series evidence below).

3.4 Summary of the evidence.

Overall, the evidence is consistent with the existence of conservatism in US financial reporting. The one set of inconsistent results, the estimated negative conservatism parameters from the abnormal earnings regressions is likely the weakest test. The predicted positive sign for the parameter does not incorporate negative earnings dependence generated by conservatism and errors in accrual estimation.

4. Evidence on Conservatism Explanations

This section presents evidence on the extent to which conservatism estimated by the measures in section 3 varies across time, firms and countries in accord with the four conservatism explanations discussed in Section 2. The section also discusses a way of
testing the contracting explanation that does not rely on the conservatism measures outlined above. That method investigates differences between GAAP and contracts. The section concludes with a discussion of the extent to which the evidence discriminates among the four explanations for conservatism.

4.1 *Time-series evidence*

Contracting likely explains the origins of both accounting and conservatism so it is difficult to predict time-series variation in conservatism using contracting. However, conservatism should vary over time with litigation. Watts (1993, p. 14) predicts that conservatism in the US varies with unexpected changes in legal liability. In particular, as noted earlier, prior to 1966 litigation was extremely rare so that litigation alone would not predict conservatism in US published financial statements. Thus, absent factors other than litigation, conservatism would not be observed prior to 1966 in the US. Given the existence of other factors, conservatism would increase after 1966. Further, Watts (1993) suggests the periods Kothari, Lys, Smith and Watts (1988) identify as different litigation regimes following 1966 can be used to test whether conservatism varies with changes in liability. Basu (1995, 1997) predicts his conservatism measures increase in the periods following liability increases and remain constant in periods following court decisions that restrict liability growth.

Income taxes predict the existence of conservatism in the US at least from 1909. Variations in the extent to which tax accounting is linked to financial reporting over time can be used to predict the effect of tax on conservatism. Based on the literature on the interaction between financial reporting considerations (see Shackelford and Shevlin, 2001, for a summary), one can predict that when the links between the two become closer or taxes increase, reported financial accounting becomes more conservative.

The Securities Acts are a potential source of regulatory effect on conservatism. Those acts date from the 1930s. The SEC’s initial reaction was to be conservative for reasons explained above (see Zeff, 1972). Hence, absent other factors, I predict conservatism is first observed after the 1930s. Given other factors, I expect conservatism to increase after the 1930s. By the 1970s the SEC tended to be less conservative (Watts, 1977) and by 2000 we observe the FASB (presumably with the SEC’s tacit approval)
introducing unverifiable measures of assets (see earlier). Hence, over the last 30 years if we can reliably measure the extent of conservatism in SEC rulings and FASB standards, we can predict variations in conservatism in accounting reports.

Using the earnings/stock returns relation, Basu (1997) investigates conservatism in the US in four periods: 1963-66; 1967-75; 1976-83 and 1983-90. Kothari, Lys, Smith and Watts (1988) designate the periods as low, high, low, and high litigation growth periods respectively. Basu finds a significant increase in conservatism in the two high litigation growth periods and no increase in the low litigation growth periods, a result consistent with litigation generating conservatism. There is a significant level of conservatism in the last three periods but in the initial low litigation period (1963-66) the level of conservatism is insignificant. That 1963-66 period result is inconsistent with contracting-induced conservatism.

Holthausen and Watts (2001) argue that since contracting incentives for conservatism existed prior to the increase in the litigation in the late 1960’s, US financial reporting should have been significantly conservative in the pre-1967 period also. Using the earnings/stock returns relation for a sample of large firms for the period 1927-1993, they find significant conservatism not only in the last three litigation periods investigated by Basu but also in the pre-litigation periods, 1927-41 and 1954-66. Conservatism is not significant in the period between 1942 and 1953 perhaps due to price controls during World War II and the Korean War.\footnote{Accounting data was used under the World War II Office of Price Administration “hold-the-line” rules to measure “out-of-pocket” expenses that could be used for a price increase. However, an asset write-off would not seem to qualify as an “out-of-pocket” expense. Further, shortages of fixed assets made a write-off difficult to justify (see Rockoff, 1995).}

Holthausen and Watts (2001) find that the estimated coefficient for negative stock returns averages around .20 in the non-price control periods between 1927 and 1975. In the period 1976-82 the estimated coefficient increases to approximately .30 and by the 1983-93 period it is approximately .40. On the other hand, the estimated coefficient for positive stock returns averages around .10 in the non-price control periods up until 1982 and then in the period 1983-93 drops to zero. Both Basu (1997) and Ball, Kothari and Robin (1999) find a large increase in the negative returns coefficient and a drop in the positive returns coefficient in the periods 1983-1990 and 1985-95, respectively. It
appears that by the end of the millennium US accounting earnings are not timely at all in reflecting good news but are very timely in reflecting bad news. The significant increase in conservatism occurs under the FASB management of standards and so could also be at least partially due to standard-setting.

4.2 Cross-sectional evidence

Variation across firms. Beaver and Ryan (2000) predict that their net assets measure of conservatism (the bias component or BC) varies with three contemporaneous proxies for accounting conservatism: the ratio of accumulated depreciation to gross property, plant and equipment for firms that use accelerated depreciation; the ratio of the sum of research and development expense and advertising expense to sales; and the ratio of the LIFO reserve to total assets. Since BC is more negative the greater the conservatism, the prediction is that BC varies negatively with those ratios.

Ahmed, Billings, Harris and Morton (2001) assume conservatism evolves as an efficient contracting mechanism to mitigate dividend policy conflicts between shareholders and bondholders. They predict the more severe such conflicts, the more conservative the firm’s accounting choice and the greater the firm’s conservatism, the lower the cost of debt. In testing both those predictions Ahmed, Billings, Harris and Morton use Beaver and Ryan’s bias component BC and a version of Givoly and Hayn’s accumulated accruals measure. The first explicit prediction is the larger the proxies for dividend conflicts (ratio of dividends to assets, standard deviation of return on assets and leverage), the more negative is BC and the more negative the cumulated accruals. The second explicit prediction is the greater conservatism as reflected in the two conservatism measures, the lower the cost of debt as reflected in S&P debt ratings.

Beaver and Ryan (2000) estimate the relation between their BC measure of conservatism and their accelerated depreciation, research and development and advertising expense and LIFO proxies for conservatism. They control for the effects of growth, leverage and investment opportunity set on the bias in book-to-market ratios. Beaver and Ryan find significantly negative effects for accelerated depreciation and research and development and advertising expense, consistent with BC reflecting conservatism. The LIFO proxy however has a significantly positive effect. They find the
LIFO result can be explained by LIFO reserves in their 1981-1993 sample period occurring in firms operating in mature, unprofitable markets. In essence, the LIFO variable is a proxy for investment prospects.

Using both the BC measure and a cumulative accruals measure, Ahmed, Billings, Harris and Morton (2001) find that, across firms, conservatism is greater the larger the conflicts over dividend payout. They also find the greater the conservatism according to the two measures, the lower the cost of debt.

Variation across countries. A number of studies, starting with Ball, Kothari and Robin (2000), predict that Basu measures of conservatism vary across countries with the nature of the institutional arrangements in the countries. Ball, Kothari and Robin predict that common law countries’ use of published financial accounting statement numbers in contracts causes those countries’ earnings numbers to be more conservative than those of code law countries. Information asymmetries among parties to code law country firms are resolved privately within the firm without the use of external contracts. Similarly distributions are determined privately within the firm.

Ball, Kothari and Robin also seek to jointly test the litigation and regulatory hypotheses. After a subjective discussion they conclude that the UK provides the least incentive to be conservative under both of these explanations and so predict conservatism is less there than in the other common law countries.

The common law countries in the Ball, Kothari and Robin sample are Australia, Canada, UK and USA. The code law countries are France, Germany and Japan. Ball, Robin and Wu (2002) hypothesize that four Asian countries (Hong Kong, Malaysia, Singapore and Thailand) that have some common-law heritage, including accounting standards, have less conservatism than common law countries. The reasoning behind the hypothesis is that those four countries have two code law attributes important to the relation between financial reporting and contracting: there are political influences on financial reporting; and information asymmetry is resolved through private channels of communication rather than through public disclosure. Family and other insider networks are more important than contracts based on audited financial statements.

11 Other studies using the Basu measure to investigate cross-country variation in conservatism include Pope and Walker (1999) and Giner and Rees (2001)
Using data from 1985-1995, Ball, Kothari and Robin (2000) find that the earnings of common law countries are much more conservative than those of code law countries. Ball, Kothari and Robin regress earnings on both positive and negative stock returns allowing for different coefficients for returns of different signs. Basu coefficient estimates for positive and negative stock returns constructed from that regression for common law countries are .02 and .33 respectively and for code law countries are .04 and .05 respectively. Note the very large differences between the coefficients for the common law countries versus the code law countries. It is also important to note that the regression yields \( R^2 \) of .14 for common law countries and .05 for code law countries. Accounting earnings are much more associated with contemporaneous stock returns (more “timely”) in common law countries. The evidence is consistent with the timeliness arising primarily from the timely recognition of losses in the countries that rely on accounting-based contracts.

Ball, Kothari and Robin find that reporting in the UK is significantly less conservative than reporting in Australia, Canada and the US while being marginally more significant than reporting in the code law countries. Given Ball, Kothari and Robin’s arguments that the UK has less litigation and regulation than the other common law countries (but presumably the same contracting incentives), this evidence is consistent with one or both of the litigation and regulation explanations.

Using the same common and code law countries as Ball, Kothari and Robin (2000), Ball, Robin and Wu (2002) find the four Asian countries are more similar to code law countries than to common law countries in terms of conservatism. The period investigated is 1984-1996. Given Ball, Robin and Wu’s claim that the important difference between the Asian countries and common law countries is their lack of reliance on public disclosure and contracts, these results support the contracting explanation for conservatism.

4.3 Contractual variations

Watts (1977, p. 62) and Leftwich (1983, p. 35) predict that debt contracts adjust GAAP definitions of earnings and net assets to make net assets conservative when standards require the anticipation of gains that are not verifiable or to which the firm has
no immediate legally verifiable claim. By its nature this prediction is generated only by
the contracting explanation. An example of the exclusion of a non-verifiable asset is debt
contracts’ exclusion of intangibles such as goodwill. An example of exclusion of
earnings to which the firm does not have immediate claim is earnings from the equity
method of accounting for unconsolidated subsidiaries. Absent cross-guarantees between
the subsidiary and the parent, the parent’s creditors and debt-holders may not be able to
obtain access to those gains in bankruptcy.

The examination of an American Bar Association guide to writing debt covenants
by Leftwich (1983) is the only empirical evidence on these propositions. His subjective
assessment is consistent with conservatism. Clearly more formal studies are required and
are possible.

4.4 Discrimination among conservatism explanations

Evidence from the estimation of the conservatism measures is consistent with the
existence of conservatism. The time-series, cross-sectional and contract variation
evidence provides a chance to discriminate between the alternative explanations for
conservatism: contracting, litigation, taxes and regulation. Such discrimination is
important to assessing where and when the various explanations influence practice.

Overall, the time-series variation in the earnings/stock return relation is consistent
with all four explanations for conservatism. The existence of conservatism prior to
litigation and regulation is consistent with contracting and tax explanations, but not the
litigation and regulation explanations. The continuation of conservatism until the present
day is also consistent with the contracting and tax explanations. The increase in
conservatism since 1967 and its variation with changes in the litigation environment, as
tested by Basu (1997), is consistent with the litigation explanation. Finally, the overall
increase in conservatism under the FASB’s regulation of financial reporting is possibly
consistent with the regulation explanation. Finer tests of variations in regulatory
conservatism similar to those conducted for litigation periods are important to
determining if standard-setting is generating conservatism.

The cross-sectional tests using US firms provide some weak evidence consistent
with the contracting explanation. The independent variables in the Beaver and Ryan
paper are essentially proxies for conservatism and so only serve to validate the BC measure of conservatism. Ahmed, Billings, Harris and Morton provide tests of the contracting explanation if we take their story as given. The contracting explanation suggests conservatism would be more important, the greater the dividend conflicts and that ceteris paribus more conservatism would reduce interest costs. However, there is considerable endogeneity in the relations between the variables involved in the tests. Firms that borrow have less growth options and are more likely to pay dividends (see Smith and Watts, 1992). Lower growth options can generate both more borrowing and less conservatism. Careful specification of the relations between the variables is important to control for that endogeneity.

The cross-country evidence, particularly the Ball, Kothari and Robin evidence, which directly compares code-law countries and common-law countries, supports the contracting explanation. The implications of these results for tax are not apparent. Accounting numbers influence tax in the code law countries giving incentives for firms in those countries to be conservative, but perhaps the tax codes leave managers with insufficient flexibility to be conservative. Ball, Kothari and Robin argue the lower conservatism in the UK jointly supports the litigation and regulation hypotheses. However, the theory and empirical evidence supporting the prediction is weak and as a result so is the Ball, Kothari and Robin support for those explanations.

Leftwich’s general survey of the debt contract guide provides very weak support for the contracting hypothesis. However, formal examination of variations from GAAP in debt and compensation contracts is likely to yield the most powerful tests of contracting. Relating those variations to changes in GAAP seems like a very promising area.

Across all the tests, the evidence appears more consistent with the contracting and litigation explanations. The tax and regulation hypotheses are also consistent with the evidence but no studies directly address those hypotheses.

5. Alternatives to the Conservatism Explanations

There are potential non-conservatism explanations for the evidence summarized above. One is that the results are due to managers exercising abandonment options (see
Hayn, 1995). Another is that the evidence is due to managers manipulating earnings to maximize their own welfare at the expense of other parties to the firm (Hanna, 2002).

5.1 Abandonment option

Hayn (1995) predicts and finds an asymmetric relation between stock returns and earnings similar to that predicted by Basu (1997) but expresses the relation in terms of the coefficient of earnings in a regression of returns on earnings. The coefficient is expected to be larger for profits than for losses (which is equivalent to the coefficient in the earnings/return regression being lower for profits). The reason is that losses are more transitory than profits, an outcome predicted by conservatism. However, Hayn’s explanation is slightly different. In particular, losses are transitory because the firm’s managers will not continue to lose money. Instead they will exercise the abandonment (or liquidation) option on the operations that are generating losses. On the other hand, management will not cease profitable operations.

Despite the similar predictions, Basu (1997) claims the evidence is more consistent with his explanation than with Hayn’s explanation. He argues that Hayn’s story predicts a higher $R^2$ for the earnings/return regression for good news or profit firms while his story predicts the bad news or loss firms will have the higher $R^2$ (in Hayn’s story there is no capitalization of the loss). Basu finds that Hayn’s $R^2$ results are more sensitive to specification than his. In addition, Basu argues conservatism predicts the observed positive intercept for the earnings/return regression (the recognition of past unrealized profits) while the abandonment option does not.

The abandonment option story is plausible and it and the conservatism explanations are not mutually exclusive. It is likely that both are operating. However, if we buy Basu’s arguments, the conservatism story is the stronger.

5.2 Manipulation of earnings

Hanna (2002) argues that Basu’s results are consistent with management manipulation of earnings. Hanna points out that three of the five financial reporting problems identified by Arthur Levitt (1998) generate understatement of assets: big bath charges; creative acquisition accounting; and miscellaneous cookie jar reserves. The notion is that management writes down assets in order to increase earnings in later years.
The motivation is to increase compensation and to mislead the stock market. At the time it is taken the write-down does not affect compensation. Either earnings before the write-down are lower than the lower bound for compensation so no bonus is lost because of the write-down (big bath) or the write-down is a nonrecurring charge that is excluded by the earnings compensation contract and from the earnings number analysts use in valuation. The following years’ higher earnings, generated by the write-down, increase earnings-based compensation and, perhaps, stock price.

The management manipulation story seems to fit the conservatism literature results. Net assets are understated, losses occur at the time of negative stock returns (the returns provide the excuse) and losses are more transitory than profits. A closer examination is required to produce potential means for discriminating between the manipulation and conservatism explanations.

Discrimination between the manipulation and conservatism explanations using market-based measures of conservatism requires an assumption about the efficiency of the stock market. To start let’s assume the stock market on average sees through the manipulation. In that case, in order to produce the observed earnings/stock return asymmetry, the manipulative write-off has to meet two conditions. First the manipulative write-offs must be associated with negative returns that arise for other reasons since on average an efficient market sees the write-offs as not representing real losses so that there is no average stock price drop associated with to the manipulation. The story’s reason for the association is that negative returns are the excuse for the write-off. Second, the manipulative write-offs must be additional to non-manipulative write-offs expected given the observed negative returns. Otherwise the write-off is not manipulative and effectively is conservatism. Given those conditions, absent the existence of conservatism, manipulative write-offs will not be associated with stock price drops and cannot produce the asymmetry result. If the amount of manipulative write-off possible is a function of the amount of negative returns, manipulative write-offs might increase the Basu type regression coefficient on negative returns to above one but would not increase the regression’s $R^2$.

Now assume the stock market does not see through the manipulation. Then the effect depends on whether the manipulative write-off is designated as a nonrecurring
charge and if so, whether analysts and the market ignore such charges in valuing the firm. If the write-off is not designated as a nonrecurring charge, presumably the analysts and market would not treat it differently to any other earnings component and again there would be no asymmetry in the earnings/stock return relation. If the manipulative write-off is designated as a nonrecurring charge and analysts and the market ignores it for valuation purposes, the coefficient on negative returns as far as the write-offs and non-recurring charges are concerned is zero not one (in essence there would be no association between manipulative write-offs and returns). There would be an asymmetry, but in the wrong direction. If analysts and the market do not ignore non-recurring charges in valuing the firm, one has to have a theory as to how those charges are valued. Absent that theory I have to conclude that the asymmetric earnings/returns relation is more consistent with conservatism. Under the specified manipulation stories, that asymmetric relation is only produced when manipulation occurs jointly with conservatism and then it is not the manipulation that produces the asymmetry.

Another way to discriminate is to note that conservatism does not rely on accounting losses or negative returns being observed for write-offs to occur. Even in profitable years, unverifiable investments in assets are written off. And, while Basu uses negative returns purely as a proxy for bad news, some assets can be reduced in value even in years in which returns are positive. Conservatism should occur every year. For those reasons Givoly and Hayn (2000) predict conservatism generates a continuous accumulation of negative accruals. On the other hand, the manipulation story suggests positive accruals except when big baths or write-offs are taken. Here the evidence in Givoly and Hayn (2000) supports conservatism as the general description.

The consistent evidence that net assets are on average understated, also suggests the manipulation story is a restricted story. For example, if accounting were not conservative, given managers’ incentives, why wouldn’t managers overstate cumulative earnings and net assets on average? Perhaps the earnings manipulations described by Levitt are possible only because accounting is conservative.

Given the importance of these issues to accounting practice, accounting researchers have incentives to try to discriminate between the conservatism and earnings manipulation explanations. As I point out above, they are not mutually exclusive. One
powerful way is to use institutional details relevant to each explanation. For example, in testing the earnings manipulation story, are non-recurring charges used more frequently by firms that exclude those charges from earnings for compensation purposes? Also, Hanna (2000) suggests conservatism be tested by observing whether firms take write-offs when the write-offs are costly, in particular when they cause debt covenants to be violated.

Changes in debt contracts provide fertile grounds for research on conservatism. In the 1990s there appears to have been innovation in debt contracts. One of those innovations is the frequent use of “frozen” GAAP (GAAP existing at the time of the contract) to calculate the contracts’ accounting numbers (see Beatty, Ramesh and Weber, 2002). I expect that contracting changes of this kind are related both to the frequency of changes in GAAP and to changes in the conservatism of GAAP. I expect the contracts to try to reduce the effect of non-conservative GAAP changes.

There are a few contracting changes that appear to contradict the contracting arguments. While most debt contracts still exclude intangible assets from assets, some agreements do not (e.g., see Weil, 2002 for a description of AOL’s problems because of the inclusion of intangible assets in net assets). My guess is those inclusions are mistakes and I predict they will die out as that becomes evident from the experiences of AOL and other companies.

6. Conclusions and Implications

Overall, existing evidence suggests accounting is conservative for at least contracting and litigation explanations. The evidence does not rule out earnings manipulation, but instead suggests conservatism’s effects are more pervasive. The evidence is limited and more research is required before some implications can be drawn.

The contracting explanation implies conservatism enhances the efficiency of earnings as a measure of performance and net assets as a measure of the firms’ abandonment value. Conservatism addresses problems in financial reporting earnings and asset measures that still exist in the absence of their use in contracts, if the measures are useful to investors and so affect management’s welfare. Hence, conservatism’s
benefits are relevant even in a pure financial reporting scenario. This suggests the FASB should change direction in its standard setting.

The FASB apparently eschews conservatism. It is moving towards mark-to-market accounting without ensuring verifiability of the market estimates. While the FASB’s preference for rules is understandable given auditors and management demand specific rules that can be used as a defense in litigation, the lack of consideration of verifiability is dangerous to its health. The FASB can ill afford more Enron scandals.

Recent standards have introduced unverifiable estimates into goodwill impairment tests. The assessment of value of a part of a firm is extremely subjective and is not verifiable. The likely result is that goodwill impairment will be used for earnings management and produce overstated net assets and non-conservative earnings. In the 1920s profitable U.S. firms wrote goodwill off promptly to equity consistent with conservatism and the fact that when the lower bound on net assets is important, goodwill is likely to be zero. Given WorldCom’s capitalization of “future cash flows” that treatment could well be more conducive to the FASB’s survival.
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