

Study of Accounting from an Analytical Approach

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Abstract: *With a major focus on accounting valuation, this study provides a selective, analytical overview of the financial accounting literature. This review covers implied costs of equity capital, empirical accounting proxies, and frictions in accounting theory. According to this author, too much complacency and a lack of critical thought typically characterise accounting research in these fields. Complacency stifles innovative research in the field of financial accounting and undermines the long-term viability of the accounting academic community. Examples of issues covered in this paper include (but are not limited to) the problem of structural modelling and model falsifiability; determining whether a firm is overpriced or underpriced based on valuation models that do not take into account such phenomena; arbitrarily "merging" two disparate models, one for valuation and one for the discount rate; failing to recognise the empirical limitations induced by risk-neutral valuation models in estimating costs of capital; and using valuation models that do not account for such phenomena.*

Keywords: Cost of capital, accounting research, and financial accounting

I. INTRODUCTION

In this essay, the financial accounting literature is reviewed critically and selectively, with a focus on empirical archive research but not just. Being selective is crucial because financial accounting study covers such a wide range of topics. In my opinion, the field is overly complacent with regard to its scientific methodology, its numerous shaky proxy constructs, and the rather casual attitude that financial accounting empiricists (and occasionally even theorists) have towards financial accounting theory. This makes criticality necessary. I will say up front that my own work is not immune to the objections highlighted in this paper in order to avoid being accused of undue pride.

Three financial accounting study areas are highlighted: accounting valuation, which includes implied costs of equity capital, empirical accounting proxies, and frictions in accounting theory.

The firm is conservative, therefore more of its known value is allocated to operating assets than to operating earnings. The vague general term "other value relevant information," which will also be given a percentage of the firm's known value, exacerbates the valuation problem. However, given that the model does not include them, how can we know, ex ante, whether additional factors are value-relevant, and what if the value-relevant variables differ among enterprises and industries?

One could argue that Ohlsonian models cannot offer any useful valuation insights because they attribute the known value of the firm to accounting variables. It accurately suggests that Ohlsonian models cannot be used to identify which enterprises are overvalued or undervalued or to estimate fundamental values based on accounting statistics that differ from market prices, even though I disagree with this point of view. 6 If the accounting figures yield a value that is different from market value, it merely means that the known worth of the firm has not been "correctly" allocated to the accounting figures. Conceptually faulty are numerous attempts to apply Ohlsonian models to estimate the firm's intrinsic value or, alternatively, its under- or overvaluation in relation to its market value. The bulk of Ohlsonian models make the assumption of risk neutrality, which is glossed over in the latter debate. It is challenging to evaluate the empirical estimation of such models and their relative popularity given that the reality is certainly not risk-neutral. The basic Residual Income Model (RIM) valuation model is expanded by Feltham and Ohlson (1999) to include risk, making the firm's worth equal to its book value, weighted abnormal earnings (as in risk-neutral models), and a sum of covariance risk-adjustment factors. There haven't been many publications on empirical accounting that have attempted to address the problem of risk in the context of model estimate. Nekrasov and Shroff (2009) are an exception; they estimate the extended RIM model developed by Feltham and Ohlson (1999). They do, however, not take into account the empirical fact that risk varies over time, even though they do account for risk. Lyle et al. (forthcoming) incorporate

an extended system of dynamics, including risk dynamics, in the Feltham and Ohlson (1999) RIM model, which is akin to Ohlson's (1995a,b) augmentation of the conventional RIM model. Their dynamic risk structure and empirical findings support the voluminous empirical evidence in the accounting and finance literatures that costs of capital (anticipated returns) are time-varying in addition to producing a closed-form linear solution amenable to empirical assessment.

Cost of Capital and accounting analysis

Research on accounting cost of capital has the potential to be important from a practical and motivational perspective. Costs of capital, for instance, can be used to value assets and provide a comparison point for assessing the CEO's performance. The presumption that disclosure lowers firms' capital costs drives a significant portion of accounting transparency policy research.

Costs of capital are usually implied in accounting research, that is, they are typically calculated as the internal rate of return linking the current known price to the projected future cash flows, where the projected future cash flows are assessed using a model (typically an Ohlsonian model). The great majority of empirical studies make the assumption that the resulting internal rate of return figure is an accurate representation of the firm's cost of capital. However, the inferred cost of capital will equal the risk-free rate if the cash flows in the numerator are correctly risk-adjusted. But why would anyone undertake such a task? As stated by Samuelson (1965) and Ohlson (1981) decades ago (1990), if the cash flows are not risk-adjusted, the resulting estimate will only approximate the cost of capital under extremely pessimistic assumptions.

No matter how well the valuation model incorporates risk, empirical accounting valuation studies frequently utilise Ohlsonian type models to value the firm's cash flows and a CAPM type model to empirically establish the relevant cost of capital. This apparent contradiction appears to be brought on by the paradox that, if the firm's cash flows are valued using an Ohlsonian model, one cannot then use the same model to reverse-engineer an estimate of the firm's cost of capital. Alternatively, one cannot use the same model to value the company after reverse-engineering it to calculate the implied cost of capital. However, a cost of capital estimate is necessary, for example to calculate abnormal earnings, in order to correctly employ Ohlsonian models for valuation reasons. For two reasons, the habit of "merging" two models so that one is utilised for valuation and the other for capital cost estimation is troublesome. The implied cost of capital literature states, first, that a company's value and cost of capital are set jointly. In any case, this literature makes the assumption that the price accounts for the discount rate as well as anticipated cash flows (profits). This simultaneity is casually ignored when assessing company value using one model and cost of capital with another. It is incorrect to presume that the two models are almost equal when estimating price from an Ohlsonian-type model and the cost of capital from a CAPM-type model. Each model stands independently of the others.

Financial accounting theory

The goal of financial accounting theory is to produce testable hypotheses and direct field-specific empirical research. Unfortunately, theory has a propensity to ignore the frictions that give it significance. Although frictions can be challenging to model, they are occasionally the main problem. Theorists have already brought up this topic; for instance, Hemmer (2008) discussed unmodeled frictions in the study of Plantin et al. (2008), but I think it is important and deserving of focus. It should only take two occurrences.

Gigler et al. (2009) developed a comprehensive model to capture the impact of accounting conservatism on debt covenants. They make the assumption that the firm's debt level is both positive and exogenous in the context of their model. In other words, Gigler et al. (2009) do not model the leverage decision. Neither this is unique nor is it necessarily an issue. Even important decisions cannot always be included in a model, and this is especially true when the model is unusually complex. The only problem is that their model makes the assumption that debt has no positive value. In fact, when there are no offsets, debt is expensive. As a result, the firm in this model should be wholly made up of equity, but an all-equity firm cannot be used to examine debt covenants. In other words, assuming exogenous debt levels when the model itself finds an equity-only optimal capital structure is nonsensical. In a paradigm where only irrational enterprises issue debt, how can debt covenants be rationally explained?

Such a complaint might be addressed, for example, by expanding the model to include tax-deductible interest, which would produce the ideal level of debt for the model. Taxes would not change the qualitative model outcomes, but given the complexity of the current model, adding them would certainly make it unsolvable. I feel that this response is insufficient. There is no guarantee that if tax frictions were included in the authors' model, their conclusions about the impact of conservatism on debt covenants would still hold. For instance, it's plausible that the paper's conclusion that accounting conservatism is essentially negative is motivated by the assumption that debt is exogenous, in which case no firm would carry debt optimally to begin with. If we are to believe the model's predictions, a proof using taxes (or other frictions) is necessary, in my opinion.

In other cases, some frictions are modelled while others are not, and it is particularly important to consider the frictions that are not modelled. Before the company issues new shares to finance new investment opportunities, Beyer and Guttman (2012) look at an intriguing concept of voluntary endogenous disclosure. The issue is that new shareholders take use of some of the advantages of existing assets. This gives management a reason to inflate the value of present assets in order to get new investors to pay more per share, hence limiting share dilution. The model is quite complex, and its effects on voluntary disclosure are unique. Nevertheless, the fundamental underlying premise of the model is that new owners benefit from existing assets in a manner that is shared by current shareholders. However, corporations commonly employ project finance rather than raising direct equity to separate the profits from the new investment from the returns from existing assets to the extent that current assets skew managerial incentives. To put it another way, project funding solves their problem. This alternative and the obstacles that would make the project funding strategy excessively expensive are not taken into account by Beyer and Guttman.

II. CONCLUSION

With a major focus on three research topics—accounting valuation, including implied costs of capital, empirical accounting proxies, and unmodeled frictions in accounting theory—this study offers a selective critical overview of the financial accounting literature. According to this author, accounting research in these fields frequently exhibits an excessive level of complacency, especially in the absence of critical reasoning. Empiricists frequently misuse the existing models because they are unable to see their shortcomings. Examples covered in this paper include structural modelling, model falsifiability, deciding whether a firm is overpriced or underpriced based on valuation models that don't take these phenomena into account, arbitrarily "merging" two dissimilar models—valuation and discount rate—and failing to recognise the empirical limitations induced by risk neutral valuation models when estimating costs of capital. A lack of critical thinking can also be seen in the repeated use of proxies that purport to have no theoretical underpinning, the estimation of regressions that invariably produce biased coefficients when the econometrics literature offers solutions, and the creation of complex models without the frictions necessary to understand the problem being studied.

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