

**A Discussion of Creditors' and Shareholders' Reporting Demands in Public versus
Private Firms: Evidence from Europe^{*}**

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In this paper I discuss Peek, Cuijpers, and Buijink 2010 (hereafter PCB) with the objective of using PCB as a point of departure from which to discuss the current state of research on accounting conservatism and efficient debt contract design. PCB investigates the importance of the timeliness of accounting recognition of economic gains and losses to creditors and shareholders as distinct claimholder classes with different payoff profiles and incentives. Estimating timeliness for public and private firms across 13 Western European countries, the paper examines whether symmetric and asymmetric timeliness differs across public and private firms as a function of investor and creditor protection in a country. Investor and creditor protection proxies are posited to identify shareholders' and creditors' demands, respectively, for accounting information. PCB's premise for examining differences in timeliness across public and private firms is based on the idea that claimholders of public firms have a greater demand for publicly reported accounting information than do claimholders of private firms. Given this premise, their empirical strategy controls for regulatory differences in accounting across countries, allowing a direct focus on discretionary accounting choices made by public firms in response to demands of creditors and shareholders.

The paper's main result is that the difference in asymmetric timeliness between public and private firms is increasing in a country's degree of creditor protection, while the difference is not associated with investor protections. The conclusion PCB draws from this result is that creditors in countries with strong creditor protections demand more timely accounting recognition of economic losses than of economic gains, while shareholders in countries with strong investor protections do not. Further, it is

documented that the result on creditors' demand for asymmetric timeliness is driven by differences in asymmetric timeliness between private firms and closely held public firms, while no difference is found between private and widely held public firms. PCB argues that this is consistent with shareholder-lender conflicts being more pronounced in closely held relative to widely held firms, creating a greater debt-contracting demand for asymmetric timeliness by closely held firms.

While the existence of asymmetric timeliness is well documented, the ultimate sources of underlying demand for asymmetric timeliness is still an open question (e.g., Ball, Robin, and Sadka 2008; Watts 2003; Holthausen and Watts 2001). Here, PCB makes a nice contribution to the literature. The paper's empirical strategy of incorporating public and private is interesting and exploited usefully. The empirical analysis is carefully and thoroughly executed, and the paper exhibits a high level of scholarship, weaving a large literature into a coherent rationale for the results. Overall, this is a solid piece of empirical research, and I will not nitpick the empirical analysis. Instead, I offer a critique of the paper that is pertinent to the broader literature on asymmetric timeliness and debt contracting. In particular, I build on recent theory work in accounting to suggest that future progress in this area will require researchers to more precisely pinpoint channels through which conservative accounting operates to enhance debt contracting efficiency.

PCB presents a big picture, cross-country perspective which suppresses significant texture concerning the underlying debt contracts of public and private firms, leaving a vague sense that we have not really reached bedrock on the issue. But it is not

the cross-country nature of the paper that is my concern. Cross-country research designs serve an important role in accounting research, and indeed PCB advances the literature. Turning to the heart of the matter, my main criticism of PCB, which applies equally to many other papers (including some of my own published research), is the overly simplistic theory put forth to explain the efficiency enhancing role of asymmetric timeliness in debt contract design. PCB states: “We expect that asymmetric timeliness improves the efficiency of accounting-based debt contracting because it triggers timely covenant violations. As a result, creditors have more frequent and timely opportunities to recall or renegotiate their loans.” This statement of the “theory” of the role of asymmetric timeliness in debt contracting has been repeated over and over in the literature. But this cannot be the whole story! I believe that we must push deeper into understanding more precisely how accounting conservatism influences debt contracting efficiency. In what follows, I build on recent theory papers by Gigler, Kanodia, Sapatra, and Venugopalan 2009 and Li 2009 to delineate several ideas for consideration.

The story put forth by PCB and others posits that the role of conservatism in triggering early violation of debt covenants unambiguously increases debt contracting efficiency. But as I argue next, it is not a trivial exercise to connect early intervention by creditors per se to enhanced debt contracting efficiency given that conservative financial reporting fundamentally impacts the informativeness of accounting numbers. If conservative accounting simply involved bias, say for example subtracting a fixed amount from every accounting number, it would be innocuous in that such a known bias could be easily backed out in drawing inferences from accounting reports. Such

conservatism would not lead to more timely intervention by creditors as endogenous debt contracts could simply lower covenant thresholds by the known bias. In general, if conservatism does not change the information content of accounting signals, it cannot affect the efficiency of debt contracting since simple shifts in debt covenants would perfectly offset the effect of conservatism (e.g., Guay and Verrecchia 2006). Thus, we must allow for conservatism to impact the information properties of accounting and consider the implications of changes in informativeness for debt contracting efficiency.

Recent papers by Gigler et al. 2009 and Li 2009 formally model the impact of accounting conservatism on the efficiency of debt contracts. These models focus on the fundamental conflict of interest between equity holders and lenders regarding the decision to liquidate investment projects midstream or continue forward with the project. Equity holders, as residual claimants, have incentives to continue a project regardless of its future prospects as they stand to receive little or nothing in liquidation, but benefit from the upside if the project ultimately succeeds. On the other hand, lenders do not share in the upside and prefer to take the proceeds from liquidation rather than ride a poor project to completion where they may get nothing. This shareholder-creditor conflict of interest over project liquidation is fundamental to debt contract design, and is quite naturally handled via accounting based debt covenants that shift decision making control to lenders in the event of low accounting outcomes.

A central element in both the Gigler et al. 2009 and Li 2009 models is their characterizations of the impact of accounting conservatism on the information properties of accounting. While the two papers differ in model specifics, both papers posit that

conservative accounting alters the information content of accounting information by making low accounting signals less informative about the firm's underlying economics. The following analogy from Gigler et al. 2009 makes the idea clear. They compare conservative accounting to an exam grading scheme in which an instructor grades exams very rigorously, making it difficult for even good students to get a high score. Under this conservative grading scheme, high scores are very diagnostic of student talent because only the best students are likely to emerge on top under such rigorous grading, while low scores are less diagnostic because low scores mingle poor students along with more talented students. The opposite holds for more liberal grading schemes.

This notion of conservatism is quite intuitive and has deep implications for the theory of debt contracting efficiency. In particular, the fact that conservative accounting reduces the information content of low signals implies that debt covenants, which are tripped for low accounting outcomes, are based on less informative signals under conservative accounting regimes. Gigler et al. 2009 and Li 2009 explicitly show that more conservatism leads to higher incidence of "false alarms" where creditors intervene in the firm (the covenant is violated) when the borrower is healthy, while reducing the incidence of "undue optimism" where the accounting signal does not lead to a covenant violation when indeed it is a failed project. This idea that conservative accounting increases the incidence of false alarms is shown to be crucial to debt contracting efficiency.

PCB address this issue in section 2 of their paper, stating: "In debt contract design, the costs of type 1 errors, unwarranted interventions by creditors, will be traded

off against the costs of type 2 errors, creditors not intervening when warranted. Because type 2 errors are typically more costly to creditors, we expect them to rationally demand asymmetric timeliness.” But, what is PCB’s evidence that type 2 errors (undue optimism) are more costly than type 1 errors (false alarms)? In fact, an important result in both Gigler et al. 2009 and Li 2009 (in the case of no renegotiation) is that the tradeoff actually goes the other way, and that higher expected costs from an increased incidence of false alarms under more conservative accounting dominates the expected benefits from reducing undue optimism. That is, increasing accounting conservatism reduces the efficiency of debt contracts by increasing the incidence of unwarranted interventions by creditors! It is important to note that this result is fundamental and follows directly from the uncontroversial assumption that ex ante, the investment project has positive net present value. Gigler et al. 2009 further show that endogenously determined debt covenants are unable to fully adjust to offset the loss of information implied by more conservative accounting. Thus, as I argued earlier, it is not enough to simply claim that conservatism, by allowing earlier debt covenant violation increases debt contracting efficiency. We need to dig deeper.

In a further effort to counter the conclusions of Gigler et al. 2009 and Li 2009, PCB (section 2) argue that the option to intervene early may be valuable to the extent that covenant violations trigger the availability of non-accounting information to help creditors prevent type 1 errors. PCB states that such information can be made available to creditors especially in their setting where almost all corporate debt comes from private creditors. However, this argument is not convincing to me. However, private lenders

already have access to significant, private information from borrowers even without a covenant violation. The evidence based on syndicated loans in the U.S. is quite convincing on this point. Through private communication with a borrower, private lenders may receive quarterly or monthly financial disclosures, covenant compliance information, amendment and waiver requests, financial projections, plans for acquisitions or dispositions, and a range of other potential information (e.g., Wittenberg-Moerman 2008; Bushman, Smith and Wittenberg-Moerman 2009; Ball, Bushman and Vasvari 2008). If such information is available to syndicated loan participants, similar information would surely be available to private lenders on single lender loans as well. Thus, I am not convinced by the argument that it is optimal to demand a conservative accounting system in order to cause costly covenant violations to get access to non-accounting information. While there may be some additional information transfer to creditors following covenant violations, it is not clear given the continuous flow of private information to private lenders, that any additional information generated by covenant violations is enough to dominate the expected costs of such interventions. As discussed below, the impact of intervention on the borrowing firm can be substantial.

I turn now to the final leg of my discussion and present some future opportunities to establish connections between accounting conservatism and debt contracting efficiency. Li 2009 theoretically establishes such connections by introducing the possibility for costly contract renegotiation between lenders and borrowers following covenant violations. Whereas without renegotiation possibilities more conservative accounting can only reduce debt contracting efficiency through the costs of increased

false alarms, Li 2009 shows that the possibility of renegotiation following covenant violations can create an efficiency enhancing role for conservatism. In particular, Li 2009 shows that given renegotiation possibilities, the efficiency enhancing role of accounting conservatism is a function of renegotiation costs, the liquidation value of the project, and the firm's ex-ante investment opportunity set.

Recent empirical research documents that renegotiation is a key element of private debt contracting. For example, Nini, Smith and Sufi 2009 find that during the period 1996 through 2007, between 10% and 20% of public firms are in violation of a covenant during any particular year and nearly 40% of the firms are in violation at some point during the period. Further, they show that creditors protect their financial claims through the bargaining that occurs around covenant violations. In particular, creditors impose stronger contractual restrictions on firm behavior via amendments to the existing credit agreement that can cover virtually all aspects of financial and investment decisions. In addition, loans renegotiated following a violation are smaller, have shorter maturity, and carry higher fees and interest rate spreads. These results, in conjunction with the results in Li's 2009, suggest significant possibilities for examining the efficiency enhancing role of accounting conservatism, and the role played by accounting more generally in debt contracting.

I conclude with some general thoughts on future possibilities. First, Li 2009 shows the importance of renegotiation costs in determining the efficiency enhancing potential of conservative accounting. While I am not currently aware of powerful proxies for renegotiation costs, there appear to be large potential gains to developing such proxies

at both the specific contract level and at the country level. For example, to the extent that renegotiation costs are lower for private bank loans than for public bonds, or lower for single-lender loans creditor relative to multiple-lender loans, it is possible that the demand for conservative accounting can be ordered. Second, Li 2009 suggests possible interactions between the investment opportunity set and the role of accounting information in the debt covenants. In essence, she shows that the efficiency enhancing potential of conservative accounting is greater for firms facing generally poor investment prospects, which suggests that the role of accounting in debt contracting may differ across firms or industries sorted on investment opportunities. Li 2009 also finds that the liquidation value of projects can influence the role played by accounting information in debt contracts. For example, Li 2009 suggests that debt contracts may demand more conservative accounting for industries with more tangible assets in place, where more liberal accounting is demanded for high-tech industries with more intangible assets.

Finally, it is also promising to consider how the role played by accounting information in facilitating creditors' ability to accurately assess liquidation values and redeployability of assets can influence contract structure. In this regard, it may be profitable for accounting researchers to tap into the recent finance literature that empirically examines the implications of incomplete financial contracts for the importance of liquidation value in financing arrangements. Benmelech, Garmaise, and Moskowitz 2005 focus on the redeployability of property as determined by commercial zoning regulation. They find that properties that are more redeployable, and therefore have higher liquidation value, receive larger loans with longer maturities and durations,

lower interest rates, and fewer creditors. Benmelech and Bergman 2009 examine the difference in pricing of debt claims based on collateral and redeployability in the U.S. airline industry, and find that liquidation value and redeployability are negatively correlated with yield spreads (see also Benmelech 2009). Also, Benmelech and Bergman 2008 examines how liquidation value of collateral affects renegotiation.

References

- Ball, R., R. Bushman, and F. Vasvari,. 2008. The debt-contracting value of accounting information and loan syndicate structure. *Journal of Accounting Research* 46: 247–287.
- Ball, R., A. Robin, and G. Sadka. 2008. Is financial reporting shaped by equity markets or by debt markets? An international study of timeliness and conservatism. *Review of Accounting Studies* 13: 168–205.
- Benmelech E. 2009. Asset salability and debt maturity: Evidence from nineteenth-century American railroads. *Review of Financial Studies* forthcoming..
- Benmelech E, and N. Bergman. 2009, Collateral pricing. *Journal of Financial Economic* 91: 339–360.
- Benmelech E, Bergman N. 2008. Liquidation values and the credibility of financial contract renegotiation: evidence from U.S. airlines. *Quarterly Journal of Economics* 123: 1635-1677.
- Benmelech E, M. Garmaise, and T. Moskowitz. 2005. Do liquidation values affect financial contracts? Evidence from commercial loan contracts and zoning regulation. *Quarterly Journal of Economics* 120: 1121-1154.
- Bushman, R., A. Smith and R. Wittenberg-Moerman. 2009. Price Discovery and Dissemination of Private Information by Loan Syndicate Participants. Working paper, University of Chicago.
- Gigler, F., C. Kanodia, H. Sapa, and R. Venugopalan. 2009. Accounting conservatism and the efficiency of debt contracts. *Journal of Accounting Research* 47 (3): 767–97.
- Guay, W., and R. Verrecchia. 2006. Discussion of an economic framework for conservative accounting and Bushman and Piotroski (2006). *Journal of Accounting and Economics* 42: 149–165.
- Holthausen, R. W., and R. L. Watts. 2001. The relevance of the value-relevance literature for financial accounting standard setting. *Journal of Accounting and Economics* 31 (1–3): 3– 75.
- Li, Jing. 2009. Accounting Conservatism and Debt Contract: Efficient Liquidation and Covenant Renegotiation. Working paper, Carnegie Mellon University.
- Nini, G., D. Smith and A. Sufi. 2009. Creditor Control Rights, Corporate Governance, and Firm Value. Working paper, University of Chicago.
- Peek, E., R. Cuijpers, Rick and W. Buijink, 2010. Creditors' and Shareholders' Reporting Demands in Public Versus Private Firms: Evidence from Europe. This issue.

Watts, R.L. 2003. Conservatism in accounting part I: Explanations and implications. *Accounting Horizons* 17 (3): 207–21

Wittenberg-Moerman, R. 2008. The role of information asymmetry and financial reporting quality in debt trading: Evidence from the secondary loan market. *Journal of Accounting and Economics* 46:240–260.