

Original Paper

Does Institutional Ownership Affect Accounting Conservatism in Portuguese Capital Market?

Sandra Alves¹

¹ School of Accounting and Administration, University of Aveiro, Aveiro, Portugal

Received: December 6, 2020 Accepted: December 24, 2020 Online Published: January 16, 2021
doi:10.22158/ijafs.v4n1p17 URL: <http://dx.doi.org/10.22158/ijafs.v4n1p17>

Abstract

Ownership structures vary among entities. These different ownership structures can result in variation in governance structures, which would reflect the different rights associated with various types of owners. These governance structures in turn could lead a greater or lesser degree of influence over the financial reporting process by large owners and/or managers. In this sense, existing literature suggests that conservatism is related to institutional ownership. For a sample of 26 non-financial listed Portuguese firms-year from 2002 to 2017, we examine the association between accounting conservatism and institutional ownership. The study's results show that the coefficient institutional ownership variable is positive but not statistically significant. Thus, it is not possible to conclude that monitoring institutions are an important class of investors that demands conservatism as a governance device.

Keywords

institutional ownership, conservatism accounting, corporate governance

1. Introduction

The separation of ownership and control results in information asymmetry and potential conflict of interests between management and shareholders (Jensen & Meckling, 1976; Fama, 1980). Agency theory suggests that the monitoring mechanisms can improve the alignment of management and shareholders' interests and mitigate any opportunistic behaviour resulting from conflict of interests. Therefore, properly structured corporate governance mechanisms are expected to provide effective monitoring of management in the financial reporting process.

Literature also suggests that conservatism benefits financial statement users by constraining managerial opportunism, mitigating agency problems associated with managerial investment decisions, and enabling efficient debt agreements in the presence of asymmetric information (Basu, 2005; Ball &

Shivakumar, 2006; Ahmed & Duellman, 2007; Francis et al., 2013; Ruch & Taylor, 2014). Evidence also suggests a direct relationship between corporate governance structure and accounting practice (Ball & Shivakumar, 2006; Ahmed & Duellman, 2007; García Lara et al., 2009). For example, Ahmed and Duellman (2007) and García Lara et al. (2009) provide evidence that firms having certain governance structures engage in more conservative reporting. Chi et al. (2009) explore the relationship between accounting conservatism and corporate governance. Their results indicate that firms with weaker governance structures tend to be more conservative. Parthasarathy (2010) also finds that as the level of incentive alignment increases, financial statements are reported less conservatively. Thus, ineffective governance structures will require higher levels of conservative accounting.

Ideally, an empirical study of governance mechanisms would conduct a joint examination of the entire set of internal and external governance mechanisms that collectively maximize value. However, the identification and estimation of structural equations that jointly explain the choice of governance mechanisms is a very difficult task. We focus on the relationship between institutional ownership and accounting conservatism for two reasons.

First, conservatism has played an important role in accounting theory and practice over the past several decades. Holthausen and Watts (2001) and Watts (2003a) argue that conservatism persists because it also helps to address agency problems. In this sense, for example, LaFond and Roychowdhury (2008) and García Lara et al. (2009) suggest that accounting conservatism may serve to reduce information asymmetry between managers and shareholders and thus lessen agency costs, resulting in better protection of shareholders and firm value. This suggests that accounting conservatism plays a role as an agency deterrent and contracting mechanism.

Second, the ownership structure of a firm is considered an important managers' monitoring mechanism. Extant literature suggests that different ownership structures imply different incentives to control and monitor a firm's management (Shleifer & Vishny, 1986; Morck et al., 1988). In addition, Cullinan et al. (2012, p. 3) refer that "*ownership structures vary among entities. These different ownership structures can result in variation in governance structures, which would reflect the different rights associated with various types of owners. These governance structures in turn could lead a greater or lesser degree of influence over the financial reporting process by large owners and/or managers*". Agency theory suggests that monitoring by institutional ownership can be an important governance mechanism. The presence of institutional investors, with their share ownership and economies of scale in information gathering, can have a direct bearing on the agency costs resulting from such separation of ownership and control. Institutional investors have the opportunity, resources, and ability to monitor managers. Therefore, institutional investors can provide active monitoring that is difficult for smaller, more passive or less-informed investors (Almazan et al., 2005; Lin et al., 2016). If conservative accounting is a vehicle to reduce agency costs, uncertainty and information asymmetry, it is expected that institutional ownership affects the level of conservative accounting. As a result, studying the relationship between institutional ownership and conservatism is potentially interesting.

Using a sample of 26 non-financial firms listed on Euronext Lisbon over a period of 16 years, from 2002 through 2017, we analyse the association between institutional ownership and accounting conservatism. We find that the coefficient institutional ownership variable is positive but not statistically significant. Thus, it is not possible to conclude that monitoring institutions are an important class of investors that demands conservatism as a governance device.

This study makes some interesting contributions to the existing literature. First, it extends the corporate governance literature on ownership structures by extending the research into the effects of institutional ownership on accounting conservatism beyond US and Asia environments (LaFond & Roychowdhury, 2008; Chen et al., 2009; Shuto & Takada, 2010; Cullinan et al., 2012; Ramalingegowda & Yu, 2012). Second, the majority of literature on institutional ownership and accounting conservatism to date has been conducted in the Anglo-American context, which is characterized by dispersed ownership. Hence, this study provides the opportunity to examine an environment where listed firms typically have large shareholders. Finally, this study will be important to Euronext Lisbon and other regulators, especially the Portuguese Securities Commission and Portuguese Accounting Commission, that are concerned about earnings reported and improving the quality of financial reporting, as well the transparency of financial disclosure and the ability to predict each company's future.

This paper is structured as follows. In section two, we provide an overview of the literature review and develop testable hypothesis. We present the variable measurement and research design in section three. The results are reported and discussed in section four. Finally, section five concludes the study.

2. Literature Review and Testable Hypothesis

Conflicts of interest between managers and other parties to the firm arise because managers effectively control firms' assets but generally do not have a significant equity stake in their firms (Jensen & Meckling, 1976). Corporate governance mechanisms can improve the alignment of management and shareholders' interests and mitigate any opportunistic behaviour resulting from conflict of interests. Governance mechanisms differ in terms of costs and benefits, and these costs and benefits likely vary across firms, resulting in governance structures with different compositions and effects (Agrawal & Knoeber, 1996; Watts, 2006; Boone et al., 2007; McKnight & Weir, 2009). Thus, properly structured corporate governance mechanisms are expected to provide effective monitoring of management in the financial reporting process. The extant literature also suggests that ownership structure may also significantly influence firm accounting, affecting the quality of accounting information (Shleifer & Vishny, 1986; Morck et al., 1988).

Accounting conservatism has emerged as an effective mechanism that helps reduce agency costs caused by incomplete contracts. Watts (2003) states that accounting conservatism is part of an efficient mechanism employed in the organization of the firm, that helps reducing deadweight losses resulting from agency problems and ultimately increase the value of the firm. In fact, accounting conservatism reduces managers' ability and incentives to overstate earnings and net assets by requiring higher

verification standards for gain recognition and reduces managers' ability to withhold information on expected losses (Lin, 2006; Watts, 2003). According to Ahmed et al. (2002), accounting conservatism plays an important role in mitigating bondholder-shareholder conflicts over dividend policy, and in reducing firm's debt costs. Conservatism also provides managers with incentives to avoid taking on negative net present value (NPV) projects (Ball, 2001; Ball & Shivakumar, 2006; Watts, 2003). For example, Francis and Martin (2010) find that accounting conservatism is associated with better acquisition-investment decisions. Kravet (2014), also, finds that under more conservatism accounting managers make less risky acquisitions and that firms with accounting-based debt covenants drive this association. Accounting conservatism increases the likelihood that managers will abandon or shut down negative NPV projects because it generates timely signals that can trigger further investigation by the board (Ball, 2001; Watts, 2003). In addition, conservative accounting, on average, defers earnings and generates lower net assets, probable reducing expected litigation costs for the firm (García Lara et al., 2009). LaFond and Watts (2008) provide evidence that conservatism is positively associated with the degree of information asymmetry. If conservative accounting is a vehicle to reduce agency costs, uncertainty and information asymmetry, it is expected that institutional ownership affects the level of conservative accounting.

2.1 Institutional Ownership and Accounting Conservatism

Institutional investors are generally seen as playing a critical role in corporate governance-monitoring managers through explicit actions or "voting with their feet" (Lin, 2016). In fact, institutional investors can provide active monitoring that is difficult for smaller, more passive or less-informed investors (Almazan, Hartzell, & Starks, 2005). So, relative to an individual small investor, the institutional investor has both greater resources to monitor and greater incentive to monitor due to more concentrated ownership. As institutional investors have the opportunity, resources, and ability to monitor managers, these are less likely to make accounting policy choices opportunistically (aggressive accounting choices) to serve their self-interest. Therefore, institutional ownership may reduce agency costs by increasing monitoring, since these investors have longer investment horizons, which make them enjoy the benefits of conservative reporting.

In this sense, for example, Ramalingegowda and Yu (2012) find that higher ownership by institutions is positively associated with more conservative financial reporting. Additionally, they find that this positive association is more pronounced among firms with more growth options and higher information asymmetry. Chen et al. (2009) also find that conservatism is positively related to large institutional ownership. Lin (2016) finds a positive relationship between dedicated institutional ownership and conservative accounting. Khalil et al. (2020) provide supporting evidence on the positive relationship between foreign institutional ownership and conservative reporting.

The above discussion suggests that institutional investors who monitor corporate managers are more likely to require conservatism than individuals. Therefore, institutional ownership is expected to

monitor the financial information elaboration process by constraining executive's attempts to use aggressive (more conservative) accounting. Thus, we test the following hypothesis:

Hypothesis (H1): Institutional ownership in the firm is positively related to accounting conservatism.

3. Variable Measurement and Research Design

3.1 Measuring Institutional Ownership

Institutional ownership (*Institutional*) is measured as an indicator variable taking the value 1 if there are institutional investors who own at least 2% of the common stock of the company, and 0 otherwise.

3.2 Measuring Accounting Conservatism

Following previous studies, we use a market-value based proxy to measure accounting conservatism (e.g., Givoly & Hayn, 2000; Ahmed et al., 2002; Zhang, 2007; Beatty et al., 2008; Hamdan et al., 2012). The market-value based measure of conservatism, *Conservatism*, is the market-to-book ratio. "Intuitively, conservative accounting results in reducing book values relative to market values" (Ahmad & Duellman, 2011, p. 616). As conservatism results in understating book value of equity relative to market value of equity, firms using conservative accounting should have higher market-to-book ratios.

3.3 Control Variables

Given that the institutional ownership is not the sole factors affecting accounting conservatism, we also evaluate the association between institutional ownership and accounting conservatism, after controlling for the impact of other relevant variables. Several control variables are introduced to isolate other factors that may be influence managers' accounting conservatism. Previous studies suggest that audit committee (*Audit*), leverage (*Leverage*), profitability (*Profit*) and political costs (*Size*) are associated with accounting conservatism (Ahmed et al., 2002; Ahmed & Duellman, 2007; LaFond & Roychowdhury, 2008; Chen et al., 2009; Shuto & Takada, 2010; Ahmed & Henry, 2012; Wistawan et al., 2015).

Among the specific committees that can be created within boards of directors, the audit committee (*Audit*) has been considered as having a very important role within the governance structure. Accounting conservatism is considered an important characteristic of high-quality accounting information (Basu, 1997; Watts, 2003a; Xu & Lu, 2008). Consequently, it is expected that audit committees encourage conservative accounting approaches resulting in reliable accounting information. Krishnan and Visvanathan (2008), Ahmed and Henry (2012) and Wistawan et al. (2015) find that the existence of an audit committee is related to more conservative accounting.

Firms with high levels of *leverage* tend to have greater debt holders and shareholders conflicts (Ahmed & Duellman, 2007). Watts (2003a) argues that conservatism is an important feature of financial reporting in ensuring efficient contracting between shareholders and debt holders. Kothari et al. (2010) further argue that the demand for credible financial information from shareholders and debt holders leads to conservatism. Literature suggests that the degree of conservatism in financial reports is associated with the extent of the agency problem that arises from debt financing (Ahmed et al., 2002;

Zhang, 2008). For example, Shuto and Takada (2010), Sun and Lin (2011), Ahmed and Henry (2012), Cullinan et al. (2012) and Alves (2019) find that firms with higher leverage are more conservative in their financial reporting.

For firms with low profitability (*Profit*), the reduction in profits due to accounting conservatism will be relatively costly. That is, high-profitability firms are more likely to adopt conservatism since they can better afford the conservative choice (Ahmed et al., 2002). In addition, managers that performed poorly are more likely to manage earnings because of the threat of dismissal (Lim, 2011). This suggests a positive relationship between profitability and accounting conservatism. Ahmed et al. (2002) find that high-profitability firms employ more conservatism.

Larger firms may face greater political costs relative to small firms' due to higher analyst following and investor scrutiny, which induces them to use more conservative accounting (Watts & Zimmerman, 1978, 1986). Consequently, the political cost (*size*) hypothesis suggests that large firms are more conservative accounting in order to reduce the probability of adverse impact from political exposure. Ahmed et al. (2002), Sun and Lin (2011) and Alves (2019) find that large firms are more conservative in accounting choices.

3.4 Regression Model

We evaluate the association between institutional ownership and accounting conservatism by estimating the following OLS regression:

$$\text{Conservatism}_{it} = \beta_0 + \beta_1 (\text{Institutional}_{it}) + \beta_2 (\text{Audit}_{it}) + \beta_3 (\text{Leverage}_{it}) + \beta_4 (\text{Profit}_{it}) + \beta_5 (\text{Size}_{it}) + \varepsilon_{it} \quad (1)$$

Where:

Conservatism_{it} = market-to-book ratio of firm i for period t.

Institutional_{it} = dummy variable: 1 if there are institutional investors who own at least 2% of the common stock of firm i for period t, and 0 otherwise.

Audit_{it} = dummy variable: 1 if the firm i for period t has an audit committee and 0 otherwise.

Leverage_{it} = ratio between the book value of all liabilities and the total assets of firm i for period t.

Profit_{it} = return on equity ratio of firm i for period t.

Size_{it} = logarithm of market value of equity of firm i for period t.

ε_{it} = residual term of firm i for period t.

β_0 is a constant, β_1 to β_5 are the coefficients.

3.5 Sample Selection

The initial sample includes all companies whose stocks are listed in the main market, Euronext Lisbon. A total of 52, 50, 48, 51, 51, 51, 50, 49, 52, 51, 49, 48, 50, 50, 47 and 43 companies were listed at the year-end of 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016 and 2017 respectively (792 firm-year observations in total).

Foreign companies (52 in total) are excluded. Football companies (14 in total) are excluded, too. Companies not having shares listed in the previous year and companies whose shares were delisted in the following year are also excluded (227 in total). Companies (12 in total) with missing data are also excluded. Financial companies (71 in total) are excluded, too. As a result, the final sample size is 26 non-financial companies per year and, thus, 416 observations in total. This reduced number of observations may influence some results. Nevertheless, this limitation is an immediate consequence of the small size of the Portuguese stock market.

Information on institutional ownership, total equity, audit committee, and leverage are collected from the Annual Report and Corporate Governance Report. Both Annual Report and Corporate Governance Report are available on-line at www.cmvm.pt. We obtain stock price data from the Euronext Lisbon, which allows measuring the market value of equity.

4. Results and Discussion

4.1 Descriptive Statistics

Table 1 presents the sample descriptive statistics for the variables used in this research. Spearman correlations between the explanatory variables are documented in Table 2.

Table 1. Summary of Descriptive Statistics Number of Observations: 416; Period: 2002-2017

	Mean	Median	Min.	Max.
Conservatism	1.213	0.852	-12.980	28.256
Institutional	0.700	1.000	0.000	1.000
Audit	0.362	1.000	0.000	1.000
Leverage	0.778	0.729	0.062	4.148
Profit	0.125	0.077	-5.147	27.932
Size	19.910	18.743	12.429	23.517

Conservatism is the market-to-book ratio; *Institutional* dummy variable which takes a value 1 if there are institutional investors who own at least 2% of the common stock of firm, and 0 otherwise; *Audit* dummy variable which takes a value 1 if the firm has an audit committee and 0 otherwise; *Leverage* represents the ratio between the book value of all liabilities and the total assets; *Profit* is the return on equity ratio; *Size* represents the firm's size.

Table 2. Pearson Correlation Coefficients Matrix

	Conservatism	Leverage	Profit	Size
Conservatism	1			
Leverage	0.021	1		
Profit	-0.041	-0.053	1	
Size	0.140**	-0.155**	0.133**	1

Conservatism is the market-to-book ratio; *Leverage* represents the ratio between the book value of all liabilities and the total assets; *Profit* is the return on equity ratio; *Size* represents the firm's size.

** Correlation is significant at the 0.01 level (2-tailed); * Correlation is significant at the 0.05 level (2-tailed).

Table 1 shows that, while *Conservatism*, ranges between about -12.980 and 28.256, the mean and median are about 1.213 and 0.852. About 70% of companies have institutional ownership (*Institutional*) as shareholders. In our sample, about 36.2% of companies have an audit committee (*Audit*). *Leverage* variable represents on average 0.778 of the total assets of the company (with a median of 0.729). Table 1 shows that, while *Profit*, ranges between about -5.147 and 27.932, the mean and median are about 0.125 and 0.077. The mean of firm size (*Size*) is about EUR 980 million with a minimum of EUR 250 thousand and a maximum of EUR 16.345 million.

The analysis of Table 2 shows that there are some significant correlations between the variables. *Size* is positively correlated with *Conservatism*, suggesting that large firms have greater conservatism accounting activity. *Size* is negatively associated with *Leverage*, suggesting that larger firms have lower leverage constraint levels. *Size* is positively associated with *Profit*, suggesting that greater the size of the firm, the higher the profitability of the firm. Correlation coefficients are, in general, low (below the 0.9 threshold) (Tabachnick & Fidell, 2001), suggesting the absence of serious statistical problems related with multicollinearity.

4.2 Regression results

Table 3 presents OLS regression estimates for the equation 1 developed in section three.

Table 3. OLS Regression Results Number of observations: 416, Period: 2002-2017

Dependent variable	Conservatism	
Independent variables	Coef.	t test
Constant	0.397	0.998
Institutional	0.363	1.112
Audit	0.209	0.751
Leverage	0.176	3.113***

Profit	0.168	3.022***
Size	0.101	4.897***
R-squared		15.81%
Adjusted R-squared		13.62%
F-statistic		15.763***

Conservatism is the market-to-book ratio; *Institutional* dummy variable which takes a value 1 if there are institutional investors who own at least 2% of the common stock of firm, and 0 otherwise; *Audit* dummy variable which takes a value 1 if the firm has an audit committee and 0 otherwise; *Leverage* represents the ratio between the book value of all liabilities and the total assets; *Profit* is the return on equity ratio; *Size* represents the firm's size.

*** Significant at the 1-percent level; ** Significant at the 5-percent level; * Significant at the 10-percent level.

Table 3 reports the results from equation (1) which examines the association between institutional ownership and accounting conservatism.

The study's results show that the coefficient institutional ownership variable is positive but not statistically significant. Thus, it is not possible to conclude that monitoring institutions are an important class of investors that demands conservatism as a governance device.

Regarding the other variables, included as control variables, we find, a positive relationship between *Leverage* and accounting conservatism, suggesting, as in Shuto and Takada (2010), Sun and Lin (2011), Ahmed and Henry (2012), Cullinan et al. (2012) and Alves (2019), that higher leverage adopt more conservatism accounting methods. As in Ahmed et al. (2002), we find that high-profitability firms employ more conservatism. In addition, the results suggest that conservatism accounting is significantly higher for firms with greater political costs (*Size*), confirming the results of Ahmed et al. (2002), Sun and Lin (2011), Cullinan et al. (2012) and Alves (2019). These results are consistent with the political cost hypothesis of Watts and Zimmerman (1978), which suggests that firms choose accounting methods that minimise reported current earnings to lower their public profile and avoid political scrutiny. Results suggest no evidence that the existence of an audit committee directly influences the level of conservatism accounting.

5. Summary and Conclusions

Literature suggests that ownership structure plays a role in accounting conservatism (Ahmed et al., 2007; LaFond & Roychowdhury, 2008; Chi et al., 2009; Kung et al., 2010; Shuto & Takada, 2010; Cullinan et al., 2012; Ramalingegowda & Yu, 2012; Lin, 2016; Alves, 2019; Khalil et al., 2020).

Therefore, this paper explores the relationship between a firm's institutional ownership and its degree of conservatism, within the Portuguese capital market. The study's results show that the coefficient

institutional ownership variable is positive but not statistically significant. Thus, it is not possible to conclude that monitoring institutions are an important class of investors that demands conservatism as a governance device. The results also reveal that there is more accounting conservatism when leverage, profitability and political costs are high.

The findings of this study make the following contributions. First, the study contributes to the existing literature on the association between corporate governance attributes and accounting conservatism practice in the company. The results indicate that, institutional ownership does not affect conservative accounting in Portuguese listed firms. In addition, the results indicate that, on average, leverage, profitability and political costs affect conservative accounting in Portuguese listed firms. Second, the findings are relevant for countries with an institutional environment similar to that of Portugal. Third, individual investors may also benefit from the findings because they provide insight into the impact of institutional ownership on conservative accounting and earnings quality. Really, individual investors may wish to consider how institutional ownership may help them to protect their equity interests and reduce information asymmetry through accounting conservatism. Finally, the results could also be of interest to regulators in considering regulatory reforms which may engender greater transparency, and which may modify the relative power among management and institutional shareholders.

References

- Agrawal, A., & Knoeber, C. (1996). Firm Performance and Mechanisms to Control Agency Problems Between Managers and Shareholders. *Journal of Financial and Quantitative Analysis*, 37, 337-397. <https://doi.org/10.2307/2331397>
- Ahmed, A. S., Billings, B. K., Morton, R. M., & Stanford-Harris, M. (2002). The role of accounting conservatism in mitigating bondholder-shareholder conflicts over dividend policy and in reducing debt costs. *The Accounting Review*, 77(4), 867-890. <https://doi.org/10.2308/accr.2002.77.4.867>
- Ahmed, A. S., & Duellman, S. (2007). Accounting conservatism and board of directors characteristics: An empirical analysis. *Journal of Accounting and Economics*, 46(2/3), 411-437. <https://doi.org/10.1016/j.jacceco.2007.01.005>
- Ahmed, A. S., & Duellman, S. (2011). Evidence on the role of accounting conservatism in monitoring managers' investment decisions. *Accounting & Finance*, 51, 609-633. <https://doi.org/10.1111/j.1467-629X.2010.00369.x>
- Ahmed, K., & Henry, D. (2012). Accounting conservatism and voluntary corporate governance mechanisms by Australian firms. *Accounting & Finance*, 52(3), 631-662. <https://doi.org/10.1111/j.1467-629X.2011.00410.x>
- Almazan, A., Hartzell, J. C., & Starks, L. T. (2005). Active Institutional Shareholders and Costs of Monitoring: Evidence from Executive Compensation. *Financial Management*, 34(4), 5-34. <https://doi.org/10.1111/j.1755-053X.2005.tb00116.x>

- Alves, S. (2019). Ownership Concentration and Accounting Conservatism: Portuguese Evidence. *Journal of Business & Economic Policy*, 6(3), 82-90. <https://doi.org/10.30845/jbep.v6n3a10>
- Ball, R. (2001). Infrastructure requirements for an economically efficient system of public financial reporting and disclosure. *Brookings-Wharton Papers on Financial Services*, 127-182. <https://doi.org/10.1353/pfs.2001.0002>
- Ball, R., & Shivakumar, L. (2006). The role of accruals in asymmetrically timely gain and loss recognition. *Journal of Accounting Research*, 44(2), 207-242. <https://doi.org/10.1111/j.1475-679X.2006.00198.x>
- Basu, S. (1997). The conservatism principle and the asymmetric timeliness of earnings. *Journal of Accounting and Economics*, 24(1), 3-37. [https://doi.org/10.1016/S0165-4101\(97\)00014-1](https://doi.org/10.1016/S0165-4101(97)00014-1)
- Basu, S. (2005). Discussion of conditional and unconditional conservatism: Concepts and modeling. *Review of Accounting Studies*, 10(2/3), 311-321. <https://doi.org/10.1007/s11142-005-1533-5>
- Beatty, A., Weber, J., & Yu, J. (2008). Conservatism and debt. *Journal of Accounting and Economics*, 45(2/3), 154-174. <https://doi.org/10.1016/j.jacceco.2008.04.005>
- Boone, A. L., Field, L. C., Karpoff, J. H., & Raheja, C. G. (2007). The determinants of corporate board size and composition: An empirical analysis. *Journal of Financial Economics*, 84(1), 66-101. <https://doi.org/10.1016/j.jfineco.2006.05.004>
- Chen, S., Chen, X., Cheng, Q., & Hutton, A. (2009). *Accounting conservatism and large shareholders: An empirical analysis*. Working Paper.
- Chi, W., Liu, C., & Wang, T. (2009). What affects accounting conservatism: A corporate governance perspective. *Journal of Contemporary Accounting & Economics*, 5, 47-59. <https://doi.org/10.1016/j.jcae.2009.06.001>
- Cullinan, C. P., Wang, F., Wang, P., & Zhang, J. (2012). Ownership structure and accounting conservatism in China. *Journal of International Accounting, Auditing and Taxation*, 21, 1-16.
- Fama, E. F. (1980). Agency Problems and the Theory of the Firm. *Journal of Political Economy*, 88(2), 288-307. <https://doi.org/10.1086/260866>
- Francis, B., Hasan, I., & Wu, Q. (2013). The Benefits of Conservatism Accounting to Shareholders: Evidence from the Financial Crisis. *Accounting Horizons*, 27(2), 319-346. <https://doi.org/10.2308/acch-50431>
- Francis, J. R., & Martin, X. (2010). Acquisition profitability and timely loss recognition. *Journal of Accounting and Economics*, 49(1/2), 161-178. <https://doi.org/10.1016/j.jacceco.2009.09.003>
- García Lara, J. M., Osma, B. G., & Penalva, F. (2009). Accounting conservatism and corporate governance. *Review of Accounting Studies*, 14, 161-201. <https://doi.org/10.1007/s11142-007-9060-1>
- Givoly, D., & Hayn, C. (2000). The changing time-series properties of earnings, cash flows and accruals: Has financial reporting become more conservative? *Journal of Accounting and Economics*, 29(3), 287-320. [https://doi.org/10.1016/S0165-4101\(00\)00024-0](https://doi.org/10.1016/S0165-4101(00)00024-0)

- Hamdan, A. M. M., Kukrija, G., Awwad, B. S. A., & Dergham, M. M. (2012). The Auditing Quality and Accounting Conservatism. *International Management Review*, 8(2), 33-50.
- Holthausen, R. W., & Watts, R. L. (2001). The relevance of value-relevance literature for financial accounting standard setting. *Journal of Accounting and Economics*, 31, 3-75. [https://doi.org/10.1016/S0165-4101\(01\)00029-5](https://doi.org/10.1016/S0165-4101(01)00029-5)
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the Firm: Managerial Behavior, Agency and Ownership Structure. *Journal of Financial Economics*, 4, 305-360. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
- Khalil, M., Ozkanc, A., & Yildiz, Y. (2020). Foreign institutional ownership and demand for accounting conservatism: Evidence from an emerging market. *Review of Quantitative Finance and Accounting*, 55, 1-27. <https://doi.org/10.1007/s11156-019-00834-3>
- Kothari, S. P., Ramanna, K., & Skinner, D. J. (2010). Implications for GAAP from an analysis of positive research in accounting. *Journal of Accounting and Economics*, 50(2/3), 246-286. <https://doi.org/10.1016/j.jacceco.2010.09.003>
- Kravit, T. D. (2014). Accounting conservatism and managerial risk-taking: Corporate acquisitions. *Journal of Accounting and Economics*, 57(2/3), 218-240. <https://doi.org/10.1016/j.jacceco.2014.04.003>
- Krishnan, G. V., & Visvanathan, G. (2008). Does the SOX Definition of an Accounting Expert Matter? The Association between Audit Committee Directors' Accounting Expertise and Accounting Conservatism. *Contemporary Accounting Research*, 25(3), 827-858. <https://doi.org/10.1506/car.25.3.7>
- Kung, F. H., Cheng, C. L., & James, K. (2010). The Effects of Corporate Ownership Structure on Earnings Conservatism: Evidence from China. *Asian Journal of Finance and Accounting*, 2(1), 47-67. <https://doi.org/10.5296/ajfa.v2i1.431>
- LaFond, R., & Watts, R. L. (2008). The information role of conservatism. *The Accounting Review*, 83, 447-478. <https://doi.org/10.2308/accr.2008.83.2.447>
- Lim, R. (2011). Are corporate governance attributes associated with accounting conservatism? *Accounting & Finance*, 51(4), 1007-1030. <https://doi.org/10.1111/j.1467-629X.2010.00390.x>
- Lin, H. (2006). Accounting Discretion and Managerial Conservatism: An Intertemporal Analysis. *Contemporary Accounting Research*, 23(4), 1017-1041. <https://doi.org/10.1506/0343-6720-V320-4730>
- Lin, L. (2016). Institutional ownership composition and accounting conservatism. *Review of Quantitative Finance and Accounting*, 46(2), 359-385. <https://doi.org/10.1007/s11156-014-0472-2>
- McKnight, P. J., & Weir, C. (2009). Agency costs, corporate governance mechanisms and ownership structure in large UK publicly quoted companies: A panel data analysis. *The Quarterly Review of Economics and Finance*, 49, 139-158. <https://doi.org/10.1016/j.qref.2007.09.008>

- Morck, R., Shleifer, A., & Vishny, R. W. (1988). Management ownership and market valuation - an empirical analysis. *Journal of Financial Economics*, 20(1/2), 293-315. [https://doi.org/10.1016/0304-405X\(88\)90048-7](https://doi.org/10.1016/0304-405X(88)90048-7)
- Parthasarathy, K. (2010). *Corporate Governance, Conservatism and the Agency Problem*. Unpublished PhD Thesis, University of Houston.
- Ramalingegowda, S., & Yu, Y. (2012). Institutional ownership and conservatism. *Journal of Accounting and Economics*, 53, 98-114. <https://doi.org/10.1016/j.jacceco.2011.06.004>
- Ruch, G. W., & Taylor, G. (2014). *The Effects of Accounting Conservatism on Financial Statements and Financial Statement Users: A Review of the Literature*. Working Paper, University of Alabama.
- Shleifer, A., & Vishny, R. W. (1986). Large shareholders and corporate control. *Journal of Political Economy*, 94(3), 461-488. <https://doi.org/10.1086/261385>
- Shuto, A., & Takada, T. (2010). Managerial Ownership and Accounting Conservatism in Japan: A Test of Management. *Journal of Business Finance and Accounting*, 37(7/8), 815-840. <https://doi.org/10.1111/j.1468-5957.2010.02196.x>
- Sun, J., & Lin, G. (2011). The effect of analyst coverage on accounting conservatism. *Managerial Finance*, 37(1), 5-20. <https://doi.org/10.1108/03074351111092111>
- Tabachnick, B. G., & Fidell, L. S. (2001). *Using Multivariate Statistics*. Allyn and Bacon, New York.
- Watts, R. L., & Zimmerman, J. (1986). *Positive accounting theory*. Englewood Cliffs, Prentice-Hall, New Jersey.
- Watts, R. L., & Zimmerman, J. (1978). Towards a positive theory of the determination of accounting standards. *The Accounting Review*, 53(1), 112-134.
- Watts, R. L. (2003a). Conservatism in accounting part I: Explanations and Implications. *Accounting Horizons*, 17(3), 207-221. <https://doi.org/10.2308/acch.2003.17.3.207>
- Watts, R. L. (2003b). Conservatism in accounting part II: Evidence and Research Opportunities. *Accounting Horizons*, 17(4), 287-301. <https://doi.org/10.2308/acch.2003.17.4.287>
- Watts, R. L. (2006). What has the invisible hand achieved? *Accounting and Business Research*, 36, 51-61. <https://doi.org/10.1080/00014788.2006.9730046>
- Wistawan, M. A. P., Subroto, B., & Ghofar, A. (2015). The Characteristics Board of Directors, Family Ownership and Accounting Conservatism: Evidence from Family Public Firms in Indonesia. *Research Journal of Finance and Accounting*, 6(22), 113-121.
- Xu, J., & Lu, C. (2008). Accounting Conservatism: A study of market-level and firm level-explanatory factors. *China Journal of Accounting Research*, 1, 11-29. [https://doi.org/10.1016/S1755-3091\(13\)60003-9](https://doi.org/10.1016/S1755-3091(13)60003-9)
- Zhang, F. (2007). Accruals, Investment, Growth, and the Accrual Anomaly. *The Accounting Review*, 82(5), 1333-1363. <https://doi.org/10.2308/accr.2007.82.5.1333>