# Business Strategy, Accounting Conservatism and Company Innovation

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This research is motivated by a debate about accounting conservatism. An important point of accounting conservatism is prudence in accounting reporting by managers. Several studies of conservatism have been conducted where financial reporting is associated with users of financial statements. However, very little research has been carried out relating to the effect of conservatism on managers' behaviour in investment decision making. In a high-risk environment, managers are faced with cost efficiency choices. However, there are demands from owners to innovate that require large costs. We conducted a series of tests with a sample of 606 companies on the Indonesia Stock Exchange in the 2015-2018 period. The results show conservatism is related to innovation, where stronger conservatism will reduce company innovation, while the company's strategy is not related to company innovation. We identify companies with a prospector strategy, who have an average ROA and DER lower than the defender strategy.

**Key words:** *Conservatism, Strategy, Prospector, Defender, Innovation.*

## Introduction

This research was motivated by a debate about accounting conservatism, which was seen as an important characteristic of financial reporting by users, but was opposed by standard setters (FASB, 1980). Conservatism is defined as the differential proof required for recognition of profit versus loss or anticipating no gain but anticipating a loss. Although criticized, conservatism has persisted in accounting practices for centuries and has increased in the last 30 years. In 2010, the Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB) removed conservatism from the conceptual framework (Bentley, Omer, & Sharp, 2013). The FASB believes that financial information must be neutral; that accounting information is not intended for one interest or group. For this reason, the

conceptual framework does not include conservatism among the qualitative characteristics of accounting information. Eliminating conservatism will change managerial behavior and impose significant costs on investors and the economy in general (Watts, 2003a).

An important point of conservatism is "be careful when dealing with uncertainty," where uncertainty is the probability of predictable and unpredictable events (Bentley et al., 2013). When companies operate in a predictable environment, the accounting framework is a good guide for decision making. When future events cannot be predicted, the accounting framework cannot be relied on as an analysis tool because it is prone to errors. Decision-makers who face ambiguity are advised to follow a completely different approach to maximize the expected results. Decision making is faced with the choice of the right business strategy to maximize results, by developing a reliable framework.

The business strategy developed in the accounting literature identifies companies as prospectors and defenders (Hsieh, Ma, & Novoselov, 2019), (Bentley et al., 2013). The company implements different strategies that involve various levels of risk. Prospectors are the types of companies that are actively looking for new business opportunities to invest in R&D and focus on innovation. Companies become pioneers in competing, and sacrifice efficiency for innovation, and creation. Whereas where the defender strategy is concerned, the company focuses on efficient products and services, developing expertise in a narrow field. Because the prospector is actively creating his future, he faces a greater degree of ambiguity than the companies that are identified as defenders.

Companies with high uncertainty will be more conservative (Hsieh et al., 2019), (Iatridis, 2011). Accounting conservatism increases caution in decision making and thereby encourages company managers to implement it. In this study, uncertainty is peroxide by the company's strategy as a prospector and defender. Compared to defenders, the prospector's strategy is to innovate by spending R&D funds to find new business opportunities. Thus, companies with prospector strategies will face great challenges to invest in research and development. In this situation, the company will be more conservative.

Accounting conservatism can hamper corporate innovation. Previous research has shown that managers are under pressure to meet short-term accounting goals and cut R&D spending to create innovation (Chang, Hilary, Kang, & Zhang, 2012). Accounting conservatism will result in information asymmetry to increase targets that are not achieved and thus reduce R&D investment. However, if there is no report of conservatism, managers are not under pressure to achieve short-term goals, by delaying the recognition of bad news and thus avoiding a reduction in R&D investment. The effect of conservative reporting on innovation is exacerbated in companies where myopic manager or shareholder aspects, such as manager salaries, are more sensitive to accounting performance, or where pressure from institutional investors is greater.

## Agency Theory

Agency theory is related to accounting conservatism, where managers engage contracts with owners. Agency theory assumes the rationality of the parties involved, which implies that the contract between the owner and manager will contain all available information and that the conditions stipulated in the contract will consider all possible situations in the future (Linder & Foss, 2015). Therefore, owners and managers are assumed to differ in terms of information about the characteristics of agents or their actions, and agency theory assumes that each party makes full use of available information to design a contract and decide how to act.

The use of contractual accounting has been very long, covering centuries of use (Watts & Zimmerman, 1990), (Milne, 2002) and for management control. The contract between the parties refers to the company's use of accounting numbers to reduce agency costs. Agency costs arise because managers maximize their welfare, not the value of the company. This includes the costs incurred to align the incentives of the parties by maximizing the value of the company, reducing agency costs to increase company value.

Contracts for reducing agency costs include debt contracts between companies and lenders, management compensation, and employment contracts. Timely measurement of performance and valuation of net assets is needed by parties who enter into agreements for the purpose of compensation and debt contracts. Managerial performance measures in compensation contracts are more effective when financial statements are presented on time and reflect the effect of the manager's actions on the value of the company in the period when the action is taken.

Contracts for management compensation encourage managers to improve company performance and increase company value. Managers who can manage the company and take risks through the creation of innovation can increase company value. However, accounting conservatism has encouraged managers to act prudently. Does the manager's conservatism hinder the development of innovation? We know that the cost of research and development for the creation of a patent, for example, is a high-risk action, because a large R&D expenditure does not guarantee innovation.

## Accounting Conservatism

Accounting conservatism is to anticipate nothing in profit but to anticipate loss. Anticipating profits means recognizing profits before there are claims for income that can be verified (Watts, 2003a). In the empirical literature, conservatism is the tendency of accountants to verify good news as an advantage rather than recognize bad news as a higher loss. This interpretation allows for the level of conservatism: the greater the difference in the level of verification needed for profit versus loss, the greater the conservatism.

Conservatism is a careful reaction to uncertainty to ensure that the uncertainty and risks inherent in business are adequately considered (FASB, 1980). The philosophy of conservatism generally anticipates no gain and recognizes the possibility of loss. Watts and Zimmerman (1990) define conservatism as reporting the lowest value among alternative possible values for assets and the highest alternative value for liabilities.

Accounting researchers have identified two forms of conservatism that produced earlier statements: (1) conditional conservatism, and (2) unconditional conservatism (LaFond & Watts, 2008). The main difference between the two forms of conservatism is that the application of conditional conservatism depends on economic news events, whereas the application of conservatism without conditions does not. Conditional conservatism occurs when negative news is recognized as accounting income rather than positive news. In other words, conditional conservatism is characterized by asymmetrical recognition of positive and negative news.

It is important to distinguish between conditional and unconditional conservatism, for three reasons. First, these two conservatisms have different effects on financial statements. The adoption of accounting policies that are consistent with unconditional conservatism tends to have a relatively consistent impact on the income statement from period to period (for example, research and development costs). Conversely, the application of conditional conservatism is more likely to be temporary on the income statement because of economic news between periods (Chen, Folsom, Paek, & Sami, 2014). On the balance sheet, both types of conservatism produce smaller net assets. However, conditional and unconditional conservatism has different effects at the time of recognition of the income statement, and in turn, different effects at the time of recognition of the balance sheet (for example, impairment in net assets).

**Table 1:** Type of Accounting Conservatism

| Type of Accounting conservatism | Examples |
|---|---|
| Conditional Conservatism | Impairment of Goodwill<br>Declining Long-term Assets<br>Inventory valuation at the lowest cost or market<br>Profit or loss contingencies |
| Unconditional Conservatism | The accelerated depreciation method<br>R&D expense<br>Advertising expense<br>Provision for doubtful accounts, warranty |

The conditions that give rise to conditional conservatism may be different from unconditional conservatism. For example, (Qiang, 2007) examines unconditional and conditional conservatism in each of the four explanations for conservatism offered by (Watts, 2003b), namely contracts, litigation, taxation, regulations and finding conditional conservatism arises in settings where there are contract costs and high litigation, while unconditional conservatism arises in settings where litigation, regulatory and tax costs are high.

## Company Strategy

The company implements a different business strategy, but in general, the dichotomy of the business strategy is that the company actively pursues new and reactive opportunities in harnessing power. The typology put forward by (Miller & Friesen, 1982), distinguishes between entrepreneurship and what they call conservative companies. Whereas (March, 1991), identified exploration vs. exploitation as the main difference; and Miles and Snow (2003), linked strategies as potential investors and defenders, sharing the dichotomy above as the basic characteristics of the strategy. We follow Bentley et al., (2013) who propose measures of business strategy based only on information that can be publicly observed. The strategy that Bentley et al. (2013) consider consists of prospectors (innovative market leaders who actively pursue R&D activities and quickly respond to new opportunities in the product market) and defenders (who tend to maintain a narrow and stable focus on existing core products).

The business strategy will consider the risks and results to be achieved. The prospector business strategy will be faced with great risks, by seeking new opportunities and innovations. In companies that are in the field of innovation, prospector strategies are not an option, because pressure from the owner for the development of the company is part of the contract with the manager. However, all companies must face a decision to choose risk, where accounting conservatism is a consideration in choosing a strategy. Defender strategy emphasizes the strategy of stability, and business survival; the company maintains its core business and does not change much . Managerial attention is focused on the company's long-term stability.

## Conceptual Framework and Hypothesis

Managers tend to invest in negative NPV projects and continue underperforming projects, especially when the company has abundant cash flow (Roychowdhury, 2010). Accounting conservatism increases investment efficiency by giving managers incentives and forcing managers to leave projects that are performing poorly (Watts, 2003a). On the one hand, accounting conservatism forces managers to use timely recognition of losses, reducing investment in negative NPV projects because managers' incentives are related to financial performance. On the other hand, if the project runs slowly, accounting conservatism recognizes losses and delivers bad news to investors on time. Companies that enter into debt contracts are

more likely to be broken, and investors will ask managers to stop projects that are performing poorly through corporate governance mechanisms. Therefore, accounting conservatism increases investment efficiency and impacts on the development of innovation.

Companies with less conservative financial reporting will reduce investment activity more after the crisis compared to companies with more conservative financial reporting (Balakrishnan, Watts, & Zuo, 2016). Conservatism increases investment efficiency by reducing managers' incentives to invest in risky projects. Thus, more conservative financial reporting results in less risky acquisitions when companies have accounting-based debt agreements (Kravet, 2014).

Conservatism will encourage the behavior of company managers to carefully decide on investments, including investing in research and development (R&D). Companies that are faced with a situation of high uncertainty tend to make safe investments. However, managers are required to innovate so that the company always grows. In situations where a company applies a prospector strategy, conservatism is related to innovation, compared to companies that apply a defender (Hsieh et al., 2019), (Dai & Ngo, 2013). On the other hand, companies that implement conservatism will reduce investment in research and development (R&D). (García Lara, García Osma, & Penalva, 2016). So, we investigate:

**H1:** The effect of Accounting Conservatism on Company Innovation.
**H2:** The effect of Company Strategy on Company Innovation.

In this study, we use control variables such as ROA and leverage. Companies that have large resources can conduct R&D. Several studies have shown that ROA is related to corporate innovation (Lu & Wang, 2018) (Hsieh et al., 2019). The company will take strategic steps to increase the company's growth, by taking huge risks. In this situation, companies with large profits will tend to innovate in the form of products or service developments. So, we have argued that high profitability will encourage companies to innovate.

**H3:** The effect of ROA on Company Innovation.

Leverage is the company's ability to manage long debt compared to equity. The greater the debt of the company, the larger the interest cost. Corporate innovation requires large R&D costs, if the company has a large debt, then the impact will reduce R&D costs and have an impact on corporate innovation, so we argue that the greater the company's debt, the smaller the innovation will be.

**H4:** The effect of DER on Company Innovation.

## Conceptual Framework

The prospector strategy will be aggressive in pursuing profit growth or increasing company value compared to the defender strategy, where the company will focus more on staying in its core business. Managers will incur R&D expenses to create innovations, however, managers will be faced with accounting conservatism. The more conservative, the more managers will tend to hold programs with negative NPV such as R&D projects. In these cases, R&D activities will require a long time, high costs, and high risks.

**Figure 1.** Conceptual Framework
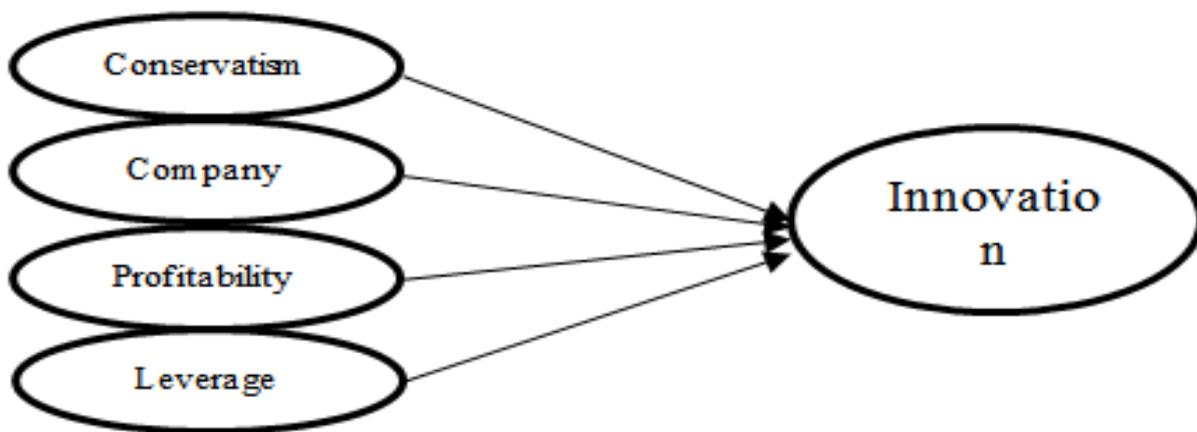


## Research Methods

The research sample is taken from manufacturing companies listed on the Indonesia stock exchange. The sampling technique is the purposive sampling approach, in which the research sample is selected according to a certain criteria. The research sample criteria are manufacturing companies that did not experience losses during the 2014-2017 financial statement period. The research variables consist of business strategy, conservatism, and innovation.

Conservatism is to anticipate nothing in profit but to anticipate loss. Anticipating profits means recognizing profits before there are claims for income and can be verified (Watts, 2003a). Conservatism is measured by a model developed by (Givoly, Hayn, & Natarajan, 2007), where:

CONSV = NI - CFO

Where CONSV is conservatism, NI is Net Profit and CFO is cash inflows. The conservatism model above can be explained by stating that if the accrual value is higher than operating cash, then it is classified as accounting conservatism.

Innovation is the cost of research and development to create value-added products or services. R&D expenditures can describe the overall risk-taking process, not just successful risk-taking as patents. The measurement of innovation variables is the cost of research and development coupled with employee training (Lu & Wang, 2018).

INOV = Ln (R&D)

INOV is the logarithm of research and development costs plus employee training.

The company's strategy was proxy by the organization's business strategy. A higher STRATEGY score represents a company with a prospector and a lower score represents a defender. We use the following characteristics for strategy measures: (1) the ratio of research and development to sales, (2) the ratio of employees to sales, and (3) sales growth in one year (Bentley et al., 2013). In each company year, observations with the highest average variable are given a score of five, the second-highest is given a score of four, and so on, and the lowest is given a score of one. Then for each company, we add up the scores of all three variables so that the company can receive a maximum score of 15 (prospector) and minimum score three (defender), where the prospector strategy is given a value of one and defender = zero (dummy).

This study uses control variables such as profitability and leverage, because the results of the study indicate that company characteristics are related to company innovation. The following is an explanation related to the control variable. The following is a summary of the research variables.

**Table 2:** Summary of Variables

| Variable | | Measurement |
|---|---|---|
| *INOV* | = | Logarithm of research and development costs plus employee training |
| *CONSV* | = | Net profit less operating cash flow |
| *STRATEGY* : | | |
| (1) RDS | = | The ratio of research and development costs to sales |
| (2) RPS | = | The ratio of employees to sales |
| (3) RCAP | = | The ration of property, plant and equity to total assets |
| *ROA* | = | The ratio of net income to total assets |
| *DER* | = | The ratio of debt to capital |

The regression equation uses Partial Least Square (PLS).

$$INOV = \gamma 1\ CONSVa + \gamma 2\ STRATEGY + \gamma 3\ ROA + \gamma 4\ DER$$

Where CONSV is conservatism as explained above and STRATEGY is a dummy variable (PROSPECTOR = 1, DEFENDER = 0). We include several controls in the equation, such as profitability ratios (ROA) and leverage ratios (LEV).

**Results and Discussion**

We use a sample of companies listed on the Indonesia stock exchange during the period 2011-2018. Financial sector companies do not include a sample, because accounting and investment methods differ. The selection procedure has produced 606 research samples.

**Table 3:** Descriptive Statistics

| Variable | N Sample | Strategy | | Conservatism | |
| --- | --- | --- | --- | --- | --- |
| | | Predictor N=328 | Defender N=278 | Strong N=316 | Weak N=290 |
| INOV | 606 | 18,13 | 19,81 | 20,27 | 17,39 |
| ROA $_{Average}$ | 606 | 0,058 | 0,071 | 0,049 | 0,076 |
| DER $_{Average}$ | 606 | 0,419 | 0,451 | 0,468 | 0,403 |

Table 3 shows a statistical summary of the data analyzed, where the data are grouped by strategy (predictor and defender) and conservatism (weak and strong). The average ROA and DER for predators is lower than the defender. While the average ROA for conservatism is greater, conservatism is weak compared to strong conservatism, while the average DER is greater than weak conservatism.

Then the data is analyzed using PLS 5.0, where the data matches the criteria and model fit test. The Model match test was carried out using average path coefficient (APC), average R-squared (ARS) and average variance factor (AVIF) with APC and ARS criteria accepted with the terms P-value <0.05 and AVIF <5. The following is a model fit test presented in the table.

**Table 4:** Model Fit Test

| The Criteria of Model Fit Test | Indexs | P-Value |
| --- | --- | --- |
| Average path coefficient (APC) | 0.195 | 0.001 |
| Average R-squared (ARS) | 0.240 | 0.001 |
| Average adjusted R-squared (AARS) | 0.235 | 0.001 |
| Average block VIF (AVIF) | 1.008 | 1.008 |

Table 4 shows that APC has a value of 0.195 with a p value < 0.001, while ARS has an index of 0.240 with a p-value < 0.001. Based on APC and ARS criteria, it has fulfilled the criteria (p-value < 0.05). AVIF value < 5 has fit because based on these data, there is an AVIF value of 1,008. Thus, the inner model can be accepted.

**Table 5:** Correlation between INOV, CONSV, ROA, LEV, and STRATEGY

| Variable | Consv | Inov | Roa | Lev | Strategy |
|---|---|---|---|---|---|
| Consv | (1.000) | | | | |
| Inov | -0.192 | (1.000) | | | |
| Roa | 0.134 | -0.043 | (1.000) | | |
| Der | -0.090 | 0.189 | -0.320 | (1.000) | |
| Strategy | 0.009 | 0.095 | 0.041 | 0.045 | (1.000) |

Table 5 shows the Pearson correlations between the variables used in the main regression. The correlation of variables is indicated, where high correlation is shown as correlation approaching 1. The correlation between the highest variable is 0.189 and the lowest is 0.009. This shows there are no symptoms of correlation between variables. The results show that INOV was negatively related to CONSV, while STRATEGY is positively related to INOV, although the value is small.
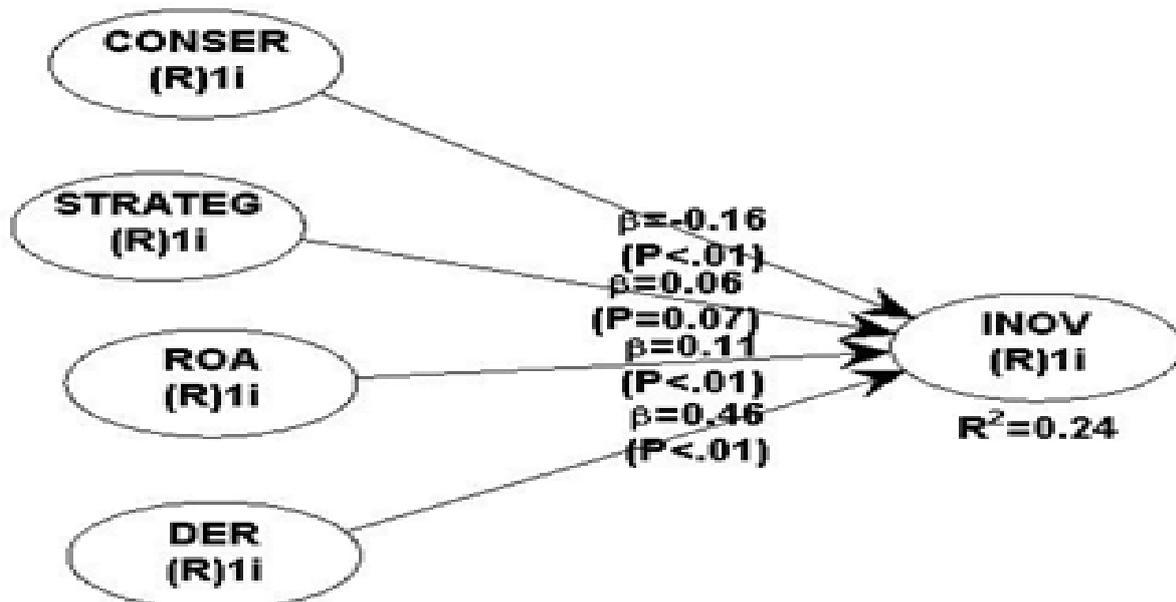
**Regression Analysis: Effects of Conservatism, Strategy, ROA, and DER on Company Innovation**

Based on the hypothesis, we next examine the effects of conservatism, strategy, ROA, and DER on Company Innovation. Below are the test results using PLS 5.0.

**Table 6:** Regression Result

| Variable | Coeff. | P. Value | Decision |
|---|---|---|---|
| CONSV | -0.156 | <0.001 | significant |
| ROA | 0.109 | 0.003 | significant |
| DER | 0.456 | <0.001 | significant |
| STRATEGY | 0.059 | 0.074 | Not significant |
| $R^2$ | 0,24 | | |

**Figure 2.** Regression Correlation



**Effect of Conservatism on Company Inovation**

Table 6 shows the effect of conservatism on Company innovation, where $\gamma = -0.156$ and p-value $<0.001$. Statistically, this shows that CONSERV has a negative effect on INOV, this is indicated by the negative. The greater the conservative level of accounting, the lower the innovation of the company. In situations where the manager is required to achieve the target given to the owner, then the manager will make the efficiency of the project that is not profitable (NPV) negative and tends to pursue short-term targets.

Costs for R&D will result in innovation in the long run, where projects with R&D expenses fail to produce innovation. In conditions of high uncertainty, managers do not take risks by reducing R&D expenditures. Project costs with uncertain future cash flows will result in a negative NPV and become a burden on the company. However, the reduction in R&D spending is also due to other factors, such as companies implementing a cost leadership strategy. Conservative reporting practices apply stricter verification standards to recognize good news and reduce the possibility of risky innovation. However, this will produce a favorable report in the future. More conservative reporting will weaken managers' incentives to work on innovative ideas. However, managers' payment plans will change in response to changes in the accounting system. We show that under optimal contracts, more conservative accounting does not inhibit innovation in organizations, but rather increases incentives for innovation, as long as conservatism reduces excessive risk (Laux & Ray, 2016).

**Effect of Company Strategy on Company Innovation**

Table 6 shows the effect of corporate strategy on corporate innovation, where $\gamma = 0.0059$ and $p = 0.074$. Statistically, this shows STRATEGY has no effect on INOV, where the value of P> 0.05. In high-risk business environments, managers will make the right decision. The prospector strategy requires innovations for the development of products and services. Where innovation programs require large costs, the results will be obtained in the long run. In such situations, managers will reduce R&D activities. The company will selectively make cost-effective negative NPV programs and switch to more profitable short-term programs.

**Conclusion**

Accounting conservatism has a negative effect on company innovation, and corporate strategy has no effect on innovation. In an uncertain global situation, the selection of generic strategies is more appropriate. In general, there are two generic strategies, namely cost leadership and product or service differentiation. Compared with the prospector or defender strategy, which is the proxy of the study, we suggest using a generic strategy as a proxy of the research variables. In the cost leadership strategy, managers will implement cost efficiency, and select programs accordingly.

# REFERENCES

Balakrishnan, K., Watts, R., & Zuo, L. (2016). The Effect of Accounting Conservatism on Corporate Investment during the Global Financial Crisis. *Journal of Business Finance and Accounting*. https://doi.org/10.1111/jbfa.12206

Bentley, K. A., Omer, T. C., & Sharp, N. Y. (2013). Business strategy, financial reporting irregularities, and audit effort. *Contemporary Accounting Research*. https://doi.org/10.1111/j.1911-3846.2012.01174.x

Chang, X., Hilary, G., Kang, J.-K., & Zhang, W. (2012). Does Accounting Conservatism Impede Corporate Innovation? *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.2189938

Chen, L. H., Folsom, D. M., Paek, W., & Sami, H. (2014). Accounting conservatism, earnings persistence, and pricing multiples on earnings. *Accounting Horizons*. https://doi.org/10.2308/acch-50664

Dai, L., & Ngo, P. T. H. (2013). Political Uncertainty and Accounting Conservatism. *Ssrn*, *61*(2). https://doi.org/10.2139/ssrn.2196224

David, J. S., Hwang, Y., Pei, B. K. W., & Reneau, J. H. (2002). The performance effects of congruence between product competitive strategies and purchasing management design. *Management Science*. https://doi.org/10.1287/mnsc.48.7.866.2819

FASB. (1980). Statement of Financial Accounting Concepts No. 2 - Qualitative Characteristics of Accounting Information. *FASB Concepts Statements*.

García Lara, J. M., García Osma, B., & Penalva, F. (2016). Accounting conservatism and firm investment efficiency. *Journal of Accounting and Economics*, *61*(1), 221–238. https://doi.org/10.1016/j.jacceco.2015.07.003

Givoly, D., Hayn, C. K., & Natarajan, A. (2007). Measuring reporting conservatism. *Accounting Review*. https://doi.org/10.2308/accr.2007.82.1.65

Hsieh, C. C., Ma, Z., & Novoselov, K. E. (2019). Accounting conservatism, business strategy, and ambiguity. *Accounting, Organizations and Society*, *74*(643010), 41–55. https://doi.org/10.1016/j.aos.2018.08.001

Iatridis, G. E. (2011). Accounting disclosures, accounting quality and conditional and unconditional conservatism. *International Review of Financial Analysis*. https://doi.org/10.1016/j.irfa.2011.02.013

Kravet, T. D. (2014). Accounting conservatism and managerial risk-taking: Corporate acquisitions. *Journal of Accounting and Economics*. https://doi.org/10.1016/j.jacceco.2014.04.003

LaFond, R., & Watts, R. L. (2008). The Information Role of Conservatism. *The Accounting Review*, *83*(2), 447–478. https://doi.org/10.2308/accr.2008.83.2.447

Laux, V., & Ray, K. (2016). Effects of Accounting Conservatism on Investment Efficiency and Innovation. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.2781261

Linder, S., & Foss, N. J. (2015). Agency Theory. In *International Encyclopedia of the Social & Behavioral Sciences: Second Edition*. https://doi.org/10.1016/B978-0-08-097086-8.73038-8

Lu, J., & Wang, W. (2018). Managerial conservatism, board independence and corporate innovation. *Journal of Corporate Finance*. https://doi.org/10.1016/j.jcorpfin.2017.10.016

March, J. G. (1991). Exploration and Exploitation in Organizational Learning. *Organization Science*. https://doi.org/10.1287/orsc.2.1.71

Miller, D., & Friesen, P. H. (1982). Innovation in conservative and entrepreneurial firms: Two models of strategic momentum. *Strategic Management Journal*. https://doi.org/10.1002/smj.4250030102

Milne, M. J. (2002). Positive accounting theory, political costs and social disclosure analyses: A critical look. *Critical Perspectives on Accounting*. https://doi.org/10.1006/cpac.2001.0509

Qiang, X. (2007). The effects of contracting, litigation, regulation, and tax costs on conditional and unconditional conservatism: Cross-sectional evidence at the firm level. *Accounting Review*. https://doi.org/10.2308/accr.2007.82.3.759

Roychowdhury, S. (2010). Discussion of: "Acquisition profitability and timely loss recognition" by J. Francis and X. Martin. *Journal of Accounting and Economics*. https://doi.org/10.1016/j.jacceco.2009.11.003

Shefer, D., & Frenkel, A. (2005). R&D, firm size and innovation: An empirical analysis. *Technovation*. https://doi.org/10.1016/S0166-4972(03)00152-4

Vaona, A., & Pianta, M. (2008). Firm size and innovation in European manufacturing. *Small Business Economics*. https://doi.org/10.1007/s11187-006-9043-9

Watts, R. L. (2003a). Conservatism in accounting part I: Explanations and implications. *Accounting Horizons*. 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*. https://doi.org/10.2308/acch.2003.17.4.287

Watts, R. L., & Zimmerman, J. L. (1990). Positive Accounting Theory: A Ten Year Perspective. *The Accounting Review*.

Wu, P., Gao, L., & Gu, T. (2015). Business strategy, market competition and earnings management. *Chinese Management Studies*, *9*(3), 401–424. https://doi.org/10.1108/CMS-12-2014-0225

Zhang, D. (2012). Strategic Positioning and Asymmetric Cost Behavior. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.2133094