THE IMPACT OF ACCOUNTING CONSERVATISM ON CASH HOLDINGS: THE MODERATING ROLE OF BOARD INDEPENDENCE IN SBF 120 FRENCH LISTED COMPANIES

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Abstract

The objective of this paper is to identify the relationship between accounting conservatism and cash holdings and to include the moderating effect of board independence in this relationship. The study is based on a sample of 100 French companies listed on the SBF 120 Index. The sample includes 1000 firm-year observations for the period of 2010–2019. The analysis employs quantitative methods to examine the effects of accounting conservatism on cash holdings, considering the role of independent board members as a moderating variable. The data were collected from the DataStream database and the annual reports of the firms listed on the SBF 120 Index. The results indicate a positive and significant impact of accounting conservatism on cash holdings. Moreover, the presence of independent board members strengthens this relationship, suggesting that board independence plays a crucial role in enhancing the impact of accounting conservatism on liquidity management. This study contributes to the literature by demonstrating the importance of accounting conservatism in influencing corporate liquidity. It also offers new insights into the moderating role of board independence, which strengthens the relationship between conservatism and cash holdings, especially in the context of French listed companies. Furthermore, the study provides practical recommendations for integrating this conservative approach into corporate cash management strategies by highlighting the impact of board structure on corporate financial management.

Keywords: Cash Holdings, Accounting Conservatism, Board Independence, French Listed Companies, Corporate Governance

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1. INTRODUCTION

In an ideal economic world, corporate liquidity management would not pose any problems. Firms could easily raise funds in the capital markets to finance their investments or meet their financial obligations (Brown & Petersen, 2011). However, in an unstable economic context, companies must maintain sufficient liquidity to meet their needs, which is not left to chance. This necessity is explained by several theories, the most famous of which is that of Keynes (1936), who argued that holding liquidity is essential due to psychological and commercial factors. Keynes (1936) identifies four main motives for holding liquidity: transactional needs, precautionary motives, speculative purposes, and financing.

Although the issue of cash holdings initially did not garner much interest in financial theory, research on this topic emerged in the late 1990s, with a particular focus on managerial practices. Authors such as Morris (1983) and Brealey et al. (2006) have emphasized that the issue of cash holdings remains one of the ten unresolved problems in corporate finance.

In the early 2000s, interest in this concept increased, notably through the works of Ogundipe et al. (2012), Gill et al. (2010), Tahir and Alifiah (2015), and Seifert and Gonenc (2018).

However, despite this growing interest, a low consensus has been reached regarding the relationship between cash holdings and other financial or accounting concepts. Thus, the topic remains at the center of theoretical and empirical debate due to the diversity of proposed justifications.

This study specifically focuses on the relationship between cash holdings and accounting conservatism, while also assessing the moderating role of board independence.

Indeed, accounting conservatism, often viewed as the prudent practice of recognizing losses and deferring gains (Watts, 2003; Alves, 2023), can enhance the effectiveness of investment policies by mitigating agency problems. It allows for better control over managers' investment decisions, thus facilitating more effective liquidity management.

While extensive research has explored its implications, the relationship between accounting conservatism and cash holdings remains a contested area. Prior studies conducted in various country contexts, such as Jordan (Atwa et al., 2022; Hamad et al., 2019), Egypt (Abdelalim Krema, 2022), and Gulf Cooperation Council (GCC) countries (Al-Amri et al., 2017), have found mixed results on whether conservatism leads to an increased or decrease in cash holdings. This divergence highlights the need for further investigation.

The French context, specifically the SBF 120 Index, provides an opportunity to deepen this understanding. As a major European market, France operates under a distinct regulatory framework influenced by both national and EU policies. Moreover, the SBF 120 Index encompasses a diverse set of firms, offering a rich landscape for analysing the interaction between conservatism and cash holdings. Despite its importance, this context remains underexplored in the existing literature.

This study aims to address this gap by examining the impact of accounting conservatism on cash holdings among SBF 120 companies. It seeks to contribute to the ongoing debate by clarifying whether conservatism promotes disciplined cash management or encourages excessive liquidity retention, and by assessing the moderating role of board independence.

Using a sample of 1,000 firm-year observations over the period 2010–2019, we find that accounting conservatism is positively associated with cash holdings. When testing for the moderating effect of board independence on the relationship between accounting conservatism and cash holdings, the results indicate that the presence of independent board members strengthens this association.

This study contributes to the literature by demonstrating the importance of accounting conservatism in influencing corporate liquidity. It also offers new insights into the moderating role of board independence, which reinforces the link between conservatism and cash holdings in the context of French listed firms. Furthermore, the study provides practical recommendations for integrating this conservative approach into corporate cash management strategies, highlighting the impact of board structure on corporate financial management.

The rest of the paper is structured as follows. Section 2 presents the literature review and hypotheses development. Section 3 describes the research methodology. Section 4 outlines the research results and Section 5 discusses the results of the study. Finally, Section 6 concludes the paper.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1. Accounting conservatism on cash holdings

Several studies demonstrate that the quality of accounting information is positively associated with favourable economic outcomes, such as a reduction in the cost of capital (Francis et al., 2004; Daske, 2006; Li, 2010), increased securities liquidity (Daske et al., 2008), and improved investment policy, explained by a reduction in over- or underinvestment (García Lara et al., 2016). By reducing information asymmetry, higher-quality accounting information (Leuz & Verrecchia, 2000; Bushman & Smith, 2001) can make investment policy more effective (Biddle et al., 2009).

Conservatism, considered as a key dimension of accounting information quality, is an important governance mechanism according to Watts (2003) because it mitigates moral hazard problems arising from information asymmetry among stakeholders. In fact, accounting conservatism limits opportunistic behaviour among managers by limiting their ability to overstate profits and assets. Chen et al. (2011) examined the relationship between accounting information quality and investment decision performance in the context of unlisted companies in emerging markets, empirically demonstrating that even in this setting, accounting information quality has a positive effect on investment policy performance.

Watts (2003) and Holthausen and Watts (2001) advocate for the important role of conservatism in addressing agency problems. Francis and Martin (2010) also report a positive association between accounting conservatism and the profitability of acquisition investments, especially among companies with higher *ex-ante* agency costs. Hu et al. (2014) found that higher accounting conservatism improves a company's informational environment, particularly for those with strong governance mechanisms. Recently, Pujiono et al. (2023) reinforced this idea, showing that companies adopting higher levels of accounting conservatism in their financial reports benefit from greater investor confidence.

Moreover, LaFond and Roychowdhury (2008) and Cullinan et al. (2012) found that accounting conservatism was negatively related to managerial ownership. A study conducted in the United States revealed that firms with effective governance structures practice higher levels of accounting conservatism (Leventis et al. 2013). Dechow et al. (2010) also demonstrated that the quality of accounting information enhances the efficiency of corporate investment policies. More recently, a study by Wiharno et al. (2023) found that firms that apply stricter standards of conservatism in their accounting practices tend to make more prudent investments, minimizing the risks of underinvestment.

The information asymmetry between executives and capital providers generates frictions, such as moral hazard and adverse selection problems, that undermine the effectiveness of investment policies, leading to behaviours of over- or underinvestment. Managers may use their discretionary power over financial information to conceal losses. However, companies that adopt a conservative financial information culture and policies are more likely to promptly report losses on new projects than those with less conservative policies.

Skinner (1993) suggests that to maximize firm value, managers may voluntarily commit to adopting conservative accounting procedures, often determined by contracting parties and enforced by external auditors. Various studies indicate that the choices for conservative accounting tend to be relatively stable over time (Khan & Watts, 2009; Callen et al., 2010).

Generally, conservative firms continue to practice prudent reporting even after investments, as accounting conservatism implies the quick recognition of losses and the delayed recognition of gains, which can also lead to underinvestment. In contexts where underinvestment is a concern, accounting conservatism may exacerbate this issue. However, the observed reduction in cash holdings is typically linked to overinvestment, specifically the tendency of executives to engage in projects with negative net value (Jensen, 1986; Dittmar & Mahrt-Smith, 2007).

This observation is consistent with Jensen's (1986) free cash flow hypothesis, which posits that when conflicts of interest arise between shareholders and executives, the latter become more opportunistic and tend to accumulate excess cash to serve their interests, often in contradiction to those of shareholders. For opportunistic managers, the favoured choice is cash reserves, as this provides the necessary financial flexibility to entrench themselves and evade shareholder and creditor oversight. This opportunistic behaviour may lead to empire-building, excessive diversification, and overinvestment (in negative net present value (NPV) investment projects). In contrast, shareholders who effectively control managers do not typically fear opportunistic behaviour concerning cash, allowing them to permit executives to accumulate more cash to avoid underinvestment (La Porta et al., 2000).

Ball and Shivakumar (2005) show that accounting conservatism discourages managers from investing in projects with negative NPV because they cannot defer the recognition of losses. Habib and Hossain (2013) demonstrated that in Australia, accounting conservatism positively influences a company's leverage structure. Biddle et al. (2009) hypothesize that higher-quality accounting information is associated not only with reduced sensitivity of investment to cash flows, which may correspond to either a deficit or excess cash, but also with lower levels of underinvestment and overinvestment.

García Lara et al. (2016) are among the few to investigate the relationship between conservatism and over- or underinvestment, finding that higher levels of conservatism, as defined by Basu (1997), correlate with an increased likelihood of over- or underinvestment. Bushman et al. (2011) show that rapid recognition of economic losses increases corporate investment sensitivity to declining international investment opportunities.

Therefore, it is reasonable to conclude that conservative accounting practices may alleviate agency problems in general. Accounting conservatism is also likely to enhance the effectiveness of investment policies, mitigate underinvestment associated with capital rationing, and limit overinvestment by compelling managers to promptly recognize losses. Specifically, accounting conservatism can lead to more efficient investment choices and promote better decision-making by managers, thereby reducing the value destruction associated with cash holdings.

Atwa et al. (2022) examined Jordanian firms and found a significant negative relationship between accounting conservatism and cash holdings. This finding suggests that higher levels of conservatism lead to lower cash holdings over the study period. Shehata and Rashed (2021) supported this conclusion by demonstrating that increased accounting conservatism reduces cash holdings. The authors argue that shareholders prefer to maximize dividend payouts rather than allow firms to accumulate cash holdings, which reinforces this negative relationship.

Similarly, Soliman (2019) reported a negative effect of conservatism on cash holdings. Although firm size positively moderated this relationship, other factors such as managerial ownership, firm growth opportunities, and leverage showed no moderating effect.

Conversely, Abdelalim Krema (2022) analysed Egyptian listed companies and found a statistically significant positive association between accounting conservatism and cash holdings. The study argued that conservative financial reporting enhances corporate performance and reduces the financial burdens related to debt costs by promoting higher cash reserves. Hamad et al. (2019) investigated Jordanian companies and revealed that both conditional and unconditional accounting conservatism have a positive effect on cash holdings. Higher conservatism was found to mitigate the downside risks associated with operating cash flows, leading to increased cash reserves.

Finally, Al-Amri et al. (2017) focused on firms from GCC countries and identified a positive relationship between conservatism and cash holdings, particularly strong among public firms. This finding indicates that conservative accounting practices significantly influence cash management strategies in these contexts.

Based on this, we formulate our first hypothesis as follows:

H1: There is a positive relationship between accounting conservatism and cash holdings.

2.2. The moderating effect of board independence

According to agency theory, internal directors do not have significant power to challenge management decisions; however, the presence of independent directors on the board allows management decisions to be aligned with the interests of shareholders. This theory argues that external directors are more competent than internal ones in resolving conflicts and reducing agency costs and moral hazard obstacles (Fama, 1980; Fama & Jensen, 1983).

Director independence also plays a key role in the effective functioning of a company. On the one hand, directors who serve on the board can provide other members with useful information about the firm's activities. On the other hand, external board members can mitigate the risk of entrenched management, thereby reducing agency costs through a greater proportion of external members.

Independent directors are usually highly qualified professionals with considerable credibility, skills, and the necessary experience. Additionally, at least one-third of the board members must be non-executive independent directors.

This independence empowers them to oppose the most questionable decisions (Ahmed & Henry, 2012). Previous studies by Fama and Jensen (1983) and Fama (1980) suggest that the viability of the board is enhanced by the involvement of external members. Consequently, external directors can challenge poor management decisions.

Various studies in the economic and financial literature support the idea that board independence contributes to improved firm performance. In fact, the research by Fama (1980) and Fama and Jensen (1983) indicates that independent directors effectively facilitate strong oversight of management, which is a result of their motivation to perform this oversight.

This motivation to act in the company's best interest generally stems from the reputation of its directors in the labour market for top managers. These researchers conclude that independence leads to increased firm performance. In this context, Black et al. (2006) also favourably share this connection and endorse the notion that this presence promotes a reduction in agency costs through the alignment of interests between managers and shareholders. Thus, it contributes to the emergence of performance. These researchers affirm that the presence of external directors generates significant returns on investment for the firm.

Moreover, Black et al. (2006) show that the increase in dividends is conditioned by the existence of independent directors. Lefort and Urzua (2008) also confirm this idea and argue that an increase in the number of independent directors on the board stimulates firm performance. Similarly, Dahya et al. (2008) assert that a largely independent board enhances the company's value and ensures effective control over the firm. Kor and Misangyi (2008) agree that outsiders possess valuable skills that can positively influence firm performance. Linck et al. (2008) argue that although outsiders are less informed than insiders, they provide effective oversight to the board. These authors confirm that outsiders are in a better position to oversee the board because they bring their knowledge and experience to the company. In addition, independent directors can counteract poor decisions made by the chief executive officer.

Additionally, Lin et al. (2009) reiterate these findings, indicating that governance theory, with its mechanisms, emerged to neutralize agency costs, support the interests of all stakeholders, enable shareholders to increase the returns and performance of their investments, and consequently achieve higher liquidity. These researchers support the view that the board of directors is an instrument through which the firm's performance is enhanced by protecting the interests of both minority and majority shareholders. Lin et al. (2009) demonstrate that board independence leads to a 10% increase in firm performance due to good governance practices. Chen et al. (2009) also support these findings through an analysis of 101 Australian firms.

An independent board of directors guarantees highly effective oversight of management, consequently promoting the company's performance and returns. Other studies by Sarkar and Sarkar (2009), and Schiehll and Bellavance (2009) notably confirm that independent directors primarily encourage value creation as they ensure good governance practices compared to internal directors. Vafeas (2003) highlighted the impact of the presence of external members on the improvement of accounting information.

Vafeas (2003) also argues that having an optimal number of external directors on the board guarantees the usefulness of the accounting information related to profits. Dahya and McConnel (2005) note that if the majority of the board of directors consists of external members, the board is likely to make better decisions.

Klein (2002), Xie et al. (2003), and Bowen et al. (2010) indicate that earnings management is low when the percentage of external directors is high. Stepniewski and Souid (2010) examined the relationship between board independence and earnings management in French companies, showing that independent directors constrain management to be more involved in earnings management. Additionally, companies with a higher proportion of external directors recognize losses more quickly than those with fewer external directors (García Lara et al., 2009). According to Yusoff (2010), the boards of Malaysian companies tend to be dominated by independent directors because an independent board of directors contributes to higher-quality financial reporting.

Other studies indicate that higher proportions of independent directors tend to be more conservative (Ahmed & Duellman, 2007; Lin et al., 2011). Similarly, Ahmed and Henry (2012) find that firms that adopt better corporate governance practices use unconditional accounting conservatism as a complementary mechanism to agency control. Furthermore, Lin et al. (2012) demonstrate that Chinese firms that practice accounting conservatism have a high percentage of independent directors on their boards, which encourages the expansion of this accounting practice.

Amran and Manaf (2014) chose to study the relationship between board autonomy and accounting conservatism by examining a sample of companies in Malaysia from 2000 to 2012. They argue that accounting conservatism is an effective mechanism to address the agency problem. Based on their results, these authors indicate that greater board independence does not necessarily lead to higher conservatism. Instead, independent directors who do not have executive power are unable to exercise genuine oversight on the board.

Certain literature takes into account various characteristics of corporate boards, particularly independence, and examines their impact on liquidity holdings. Boubaker et al. (2015) explore the role of the board of directors in relation to liquidity management. Their findings indicate that companies with effective boards are better equipped to mitigate agency problems.

This means that independent directors hold less liquidity than those in companies with less effective boards. Additionally, they find that agency conflicts influence cash management policies, and effective boards play an important disciplinary role in the context of concentrated ownership.

Hsu et al. (2015) study the role of independent board members and independent finance committee members on the liquidity holdings of insurers. They report that insurers with a higher proportion of outsiders on their boards and financial committees have more liquidity. They note that independent board members and financial committee members enable managers to hold excess liquidity to avoid underinvestment problems resulting from a lack of liquidity. Chen and Chuang (2009) find that independent directors have a positive effect on liquid assets in high-tech firms. Chen et al. (2009) also showed that greater board independence increases liquidity holdings in newly listed companies, justifying this conclusion by stating that the presence of an independent board ensures the appropriate investment of liquidity by the company.

Likewise, Masood and Shah (2014) find that the board of directors plays its role in monitoring and confirming the accuracy of information communicated to shareholders. They suggested that by increasing board independence, liquidity issues can be resolved, as it reduces managerial control.

Another study by Lee and Lee (2009) examines the relationship between liquidity, board structure, and ownership structure using a sample from five Asian countries (Malaysia, the Philippines, Indonesia, Singapore, and Thailand). They found that companies with smaller boards and greater independence have lower liquidity levels.

In contrast to agency theory, many studies consider that such an approach positively impacts board independence. In fact, a second wave of studies examining this relationship argues that board independence has a negative effect on firm performance.

According to stewardship theory, managers are honest and can act in the company's interest without resorting to external directors. Yermak (1996) found that companies with boards consisting of a significant percentage of independent directors perform poorly. In the same vein, Adams and Mehran (2003) reach the same conclusion, stating that a higher proportion of independent directors does not enhance firm performance. Therefore, companies with a limited number of independent directors on their boards will achieve better performance. Thus, Bhagat and Bolton (2008) assert that board independence is maintained to improve management, but sometimes certain strategies are poorly executed and do not protect performance. Additionally, Sarkar and Sarkar (2009) confirm this finding in a sample of Indian listed companies. Xingquan and Jie (2007) reported different results from the previously mentioned studies while examining the cash management behaviour of listed Chinese firms. They demonstrated that ownership concentration, independent directors, and governance structure have no effect on liquidity holdings. This is because corporate governance mechanisms are inadequate for Chinese companies, leading to less oversight and control, which increases agency conflicts (Ping et al., 2011).

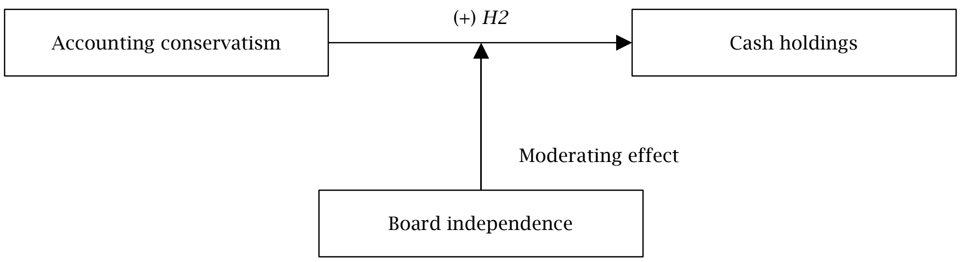
Seo et al. (2014) examined the impact of board independence on liquidity holdings of firms. They concluded that liquidity levels are lower in firms subjected to financial constraints and in those subject to higher levels of external monitoring. Kaymak and Bektas (2008) indicate that board member independence does not automatically lead to improved performance since insiders are responsible for increasing asset returns, not outsiders.

Bhagat and Black (2002) favourably confirm this conclusion and go further in their studies, showing that performance and value creation for the company can be explained by other variables, notably board independence. These authors argue for a neutral relationship based on the incompetence of external directors who are unable to interpret the complexities of the company's initiatives and policies. They add that this characteristic of directors faces greater difficulties in overseeing management.

Consequently, we can formulate our second hypothesis as follows:

H2: Board independence moderates the relationship between accounting conservatism and cash holdings.

Figure 1. Conceptual framework for the associations



Source: Authors' elaboration.

3. RESEARCH METHODOLOGY

3.1. Sample

The sample for this study consists of a repeating population of companies included in the SBF 120 Index over a period of ten consecutive years. However, adjustments were necessary to exclude companies that were involved in mergers and acquisitions during the study period; banks and insurance companies, which are subject to specific regulations; companies whose annual reports were not available online; and those that submitted incomplete reports or data, or whose accounts were not complete as of December 31 of the reporting year.

The final sample comprises 100 companies. Thus, the study was conducted on 100 companies from the SBF 120 Index between 2010 and 2019, resulting in a total of 1,000 observations. The data were collected from the DataStream database and annual reports of firms included in the SBF 120 Index.

The analysed sample of 100 companies is distributed according to the Level 1 Industry Classification Benchmark (ICB) sectoral classification, which divides companies into nine main industries (excluding the financial sector). The distribution is as follows below.

Table 1. Industrial structure of the sample

Sector	*Number of companies*	*Percentage*
Consumer goods	20	20%
Telecommunications	7	7%
Industrials	25	25%
Basic materials	3	3%
Oil and gas	4	4%
Healthcare	6	6%
Utilities	3	3%
Consumer services	12	12%
Technology	20	20%
Total	100	100%

3.2. Definition of variables

3.2.1. Dependent variable

The variable related to companies' cash holdings (*CASH*) will be defined based on the measure developed by Opler et al. (1999), and Zeljko and Nemanja (2017). This variable is calculated by dividing the total amount of cash and cash equivalents by the total amount of the company's balance sheet.

3.2.2. Independent variables

In our study, which aims to assess the degree of conservatism practiced by French firms, we will rely on the models developed by Ball and Shivakumar (2005), Ball et al. (2008), and more recently, the model by Ho et al. (2015), which measure accounting conservatism through accruals.

To maintain the negative value of the accruals, we will add an interaction variable *DACC* * |*ACC*| to our two models for testing, where *ACC* represents the value of discretionary accruals, and *DACC* is a binary variable equal to 1 if *ACC* is negative and 0 if *ACC* is positive.

This negative measure of accounting conservatism is consistent with several previous studies that support the proposition that accruals are generally conservative in nature (Ball & Shivakumar, 2005; Basu, 1997; Givoly & Hayn, 2000).

If the coefficient of the interaction variable *DACC* * |*ACC*| is positive and statistically significant, it indicates that accounting conservatism affects the level of liquidity holdings.

3.2.3. The moderating variable

This variable is measured by a binary variable (*DINDP*), which takes the value of 1 if the percentage of independent directors on the board of directors is above the median, and 0 otherwise. The percentage of independent directors is calculated as the percentage of the number of independent directors to the total number of directors on the board of directors.

The assessment of independence was based on the definition provided in the French Association of Private Enterprises and Movement of the Enterprises of France's (AFEP & MEDEF, 2002) report. This work involves obtaining the list of members who served as directors during the previous fiscal year for each year and each firm. Executives are systematically excluded from the list of directors since, by definition, they are not independent. For the remaining directors, their independence must then be evaluated.

3.2.4. Control variables

Firm size (*SIZE*) is a significant variable for explaining corporate performance, as highlighted in numerous studies. This factor has direct and indirect effects on cash holdings.

On the other hand, return on assets (*ROA*) is frequently utilized in research to measure corporate financial performance. It reflects the profitability of invested capital and illustrates its capacity to generate operational gains (Adams & Santos, 2006).

Table 2. Data description and sources

Variable	*Description*	*Source*	*References*
CASH	Cash holdings: Cash and cash equivalents / Total assets	Datastream database	Opler et al. (1999), Zeljko et al. (2017), Chaieb (2021)
DACC * |*ACC*|	*Accounting conservatism,* where, *ACC* = (Net income - Operating cash flow) / Total assets; *DACC* = Binary variable equal to 1 if *ACC* is negative, and 0 if *ACC* is positive.	Datastream database	Ho et al. (2015), Chaieb (2021)
DINDP	Binary variable: Takes the value 1 if the percentage of independent directors on the board of directors is above the median, and 0 otherwise.	Datastream database	AFEP and MEDEF (2002)
SIZE:	Firm size: Logarithm of total assets	Datastream database	Bauer et al. (2008)
ROA	Return on assets: Net income / Total assets	Datastream database	Adams and Santos (2006)

3.3. Models specification

To investigate the relationship between accounting conservatism and cash holdings (*H1*), and to test the hypothesis (H2) about the moderating effect of board independence on the relationship between accounting conservatism and cash holdings, the following regression models were implemented.

Model 1

$$CASH_{it} = \beta_0 + \beta_1 DACC_{it} + \beta_2 ACC_{it} + \beta_3 DACC * |ACC|_{it} + \beta_4 DINDP_{it} + \beta_5 SIZE_{it} + \beta_6 ROA_{it} + \varepsilon_{it} \quad (1)$$

Model 2

$$CASH_{it} = \beta_0 + \beta_1 DACC_{it} + \beta_2 ACC_{it} + \beta_3 DACC * |ACC|_{it} + \beta_4 DINDP_{it} + \beta_5 DACC * DINDP_{it} + \beta_6 ACC * DINDP_{it} + \beta_7 DACC * ACC * DINDP_{it} + \beta_8 SIZE_{it} + \beta_9 ROA_{it} + \varepsilon_{it} \quad (2)$$

where,

- $CASH$ = cash holdings (cash and cash equivalents / total assets);
- ACC = discretionary accruals ([net income for the period - operating cash flow] / total assets);
- $DACC$ = binary variable equal to 1 if ACC is negative and 0 if ACC is positive;
- $DACC * |ACC|$ = interaction variable between discretionary accruals and the discretionary accruals binary variables;
- $DINDP$ = board independence (binary variable takes 1 if *DINDP* is above the median and 0 if not);
- $SIZE$ = firm size (logarithm of total assets);
- ROA = return on assets (net income / total assets);
- $DACC * DINDP$ = interaction variable between the discretionary accruals binary variable (*DACC*) and the board independence variable (*DINDP*);
- $ACC * DINDP$ = interaction variable between discretionary accruals (*ACC*) and board independence (*DINDP*);
- $DACC * ACC * DINDP$ = interaction variable among discretionary accruals (*ACC*), the discretionary accruals binary variable (*DACC*), and board independence (*DINDP*).

4. RESEARCH RESULTS

4.1. Descriptive statistics

Cash holdings have an average value of 0.121, with a range from 0.001 to 1.987. Discretionary accruals vary between 0.009 and 0.112, showing a mean of 0.064 and a standard deviation of 0.043. Additionally, the binary variable for discretionary accruals (*DACC*) ranges from 0 to 1, with an average of 0.895 and a standard deviation of 0.454.

Board independence exhibits a mean of 4.532, with a range from 0 to 1. As for the other control variables, firm size and return on assets present mean values of 5.071 and 0.063, respectively. Table 3 offers a more detailed overview of the descriptive statistics for all variables in Model 1.

Table 3. Descriptive statistics

Variables	*Observations*	*Mean*	*Std. dev.*	*Minimum*	*Maximum*
CASH	1,000	0.121	0.201	0.001	1.987
ACC	1,000	0.064	0.043	0.009	0.112
DACC	1,000	0.895	0.454	0	1
DINDP	1,000	0.532	0.621	0	1
SIZE	1,000	5.071	0.744	1.987	7.201
ROA	1,000	0.063	0.087	-0.221	0.689

4.2. Univariate analysis

Table 4 presents the results of the univariate analysis. The findings indicate that discretionary accruals and the binary variable for discretionary accruals are positively correlated with cash holdings, with a Pearson correlation coefficient. This result may provide preliminary support for *H1*. Additionally, board independence, firm size, and return on assets also show correlations with cash holdings, with Pearson correlation coefficients of 0.382, -0.174, and 0.124, respectively.

Table 4. Correlation matrix

Variables	*CASH*	*ACC*	*DACC*	*DINDP*	*SIZE*	*ROA*
CASH	1.000					
ACC	0.272**	1.000				
DACC	0.137*	0.142**	1.000			
DINDP	0.382***	0.064	0.084	1.000		
SIZE	-0.174**	0.179**	0.037	0.092	1.000	
ROA	0.124**	-0.112**	-0.174**	-0.041	-0.421***	1.000

*Note: ***, **, * indicate significance at 1% and 5% or 10% level, respectively.*

4.3. Multivariate analyses

The regression results in Table 5 demonstrate that accounting conservatism significantly influences cash holdings. The regression coefficient for the interaction term ($DACC * |ACC|$) is positive and statistically significant (Coeff. = 0.014; t = 2.240), supporting *H1*. This finding aligns with Watts (2003), who argues that accounting conservatism mitigates agency problems, promotes efficient investment decisions, and prevents both under- and overinvestment. As a result, these practices contribute to reducing the value destruction often associated with cash holdings.

Table 5. Multivariate regression analyses

Variables	*Model 1*	*Model 2*
Intercept	0.274 (2.450)	0.564*** (5.281)
ACC	-1.384 (-2.721)**	-0.003 (-1.96)*
DACC	-0.006 (-6.110)***	-0.198 (-3.112)***
*DACC * |ACC|*	0.014 (2.240)**	0.021 (3.930)***
DINDP	0.522 (3.840)***	0.652 (3.240)***
*DACC * DINDP*	-	0.684 (4.150)***
*ACC * DINDP*	-	0.208 (1.990)*
*DACC * ACC * DINDP*	-	0.229 (5.630)**
SIZE	-0.041 (-1.114)*	-0.048 (-2.470)**
ROA	0.294 (2.001)**	0.325 (2.910)**
Number of observations	1000	1000
F-statistic (p-value)	28.22 (0.000)***	48.34 (0.000)***
Adjusted R-squared	36.25	38.13
Max VIF	1.24	1.24

*Note: ***, **, * indicate significance at 1% and 5% or 10% level, respectively. VIF — variance inflation factor.*

Similarly, board independence is positively and significantly related to cash holdings, as indicated by the coefficients and t-statistics (Coeff. = 0.522; t = 3.840). This can be explained by the fact that independent directors possess sufficient authority to freely oppose poor managerial decisions, particularly those that could undermine shareholder value creation. Consequently, they play a crucial role in mitigating the risks associated with managerial entrenchment, as highlighted by Masood and Shah (2014). Moreover, due to their neutrality and expertise, these external members are more effective than internal ones in resolving agency conflicts and mitigating moral hazard issues, as supported by the findings of Lin et al. (2009) and Boubaker et al. (2015).

Among the control variables, firm size (*SIZE*) negatively impacts cash holdings, as explained by the arbitrage hypothesis and the pecking order theory. Larger firms benefit from economies of scale in financing and face fewer constraints, reducing the need for large cash reserves. In contrast, return on assets (*ROA*) positively and significantly affects cash holdings, suggesting that more profitable firms tend to maintain higher liquidity.

Model 1 shows no evidence of multicollinearity as indicated by the reported variance inflation factors, with the highest VIF being 1.240. The adjusted R^2 is 36.25%, indicating a strong overall explanatory power of the model (F = 28.220; p < 0.000).

To assess the moderating effect of board independence on the relationship between accounting conservatism and cash holdings (Model 2), the coefficients and t-statistics for the interaction variable ($DACC * ACC * DINDP$) are (Coeff. = 0.229; t = 5.630). Therefore, *H2* is also supported. These results confirm that board independence strengthens the relationship between accounting conservatism and cash holdings. This suggests that accounting conservatism has a significantly positive impact on cash holdings when the board has a significant percentage of independent directors.

5. DISCUSSION

The findings highlight the critical role of accounting conservatism in enhancing corporate liquidity management. By requiring managers to anticipate potential losses and adopt a more cautious approach, accounting conservatism reduces the value destruction risks often associated with inefficient cash management, as suggested by Watts (2003). This underscores its importance as a tool for mitigating agency problems and aligning managerial decisions with shareholder interests. Additionally, our results are consistent with previous results presented by Abdelalim Krema (2022), Hamad et al. (2019), and Al-Amri et al. (2017), which indicate that conservative financial reporting leads to higher cash reserves.

Board independence further enhances the positive effects of accounting conservatism on cash holdings. This can be explained by the fact that the presence of independent directors on the board of directors also seeks to play a key role in the effective functioning of the company. Their favourable contribution to efficient oversight of management ultimately leads to an increase in company value (Fama, 1980; Fama & Jenson, 1983; Kor & Misangyi, 2008; Dahya et al., 2008). Consequently, their presence undoubtedly contributes to good corporate governance practices (Lin et al., 2009; Schiehll & Bellavance, 2009; Sarkar & Sarkar, 2009). Their moderating role reinforces the prudent allocation of financial resources by ensuring that cash reserves are maintained at levels that prevent underinvestment and mitigate the risks of overinvestment. This positive correlation is supported by Hsu et al. (2015), who explain that a higher proportion of outsiders on the board results in greater cash holdings, aimed at preventing underinvestment issues caused by a lack of liquidity.

The negative relationship between firm size and cash holdings supports the arbitrage hypothesis, as larger firms benefit from easier access to external financing and lower costs. Conversely, the positive relationship between ROA and cash holdings indicates that profitability encourages firms to retain more liquidity, possibly to seize investment opportunities or bolster financial stability.

These results emphasize the critical roles of accounting conservatism and board independence in shaping effective liquidity management strategies. They also reinforce the value of strong governance mechanisms in fostering financial efficiency and corporate resilience.

6. CONCLUSION

This study allowed for a thorough analysis of corporate cash management behaviour in relation to the concept of accounting conservatism. It also contributed to the interpretation of the moderating effect of board independence on this relationship based on an empirical study using a hypothetic-deductive approach using panel data of 100 French companies included in the SBF 120 Index for the period 2010 to 2019.

The findings indicate that accounting conservatism has a positive effect on cash holdings. This result aligns with Watts (2003), who argues that conservative accounting practices can alleviate agency problems in general. Furthermore, it is likely to enhance the effectiveness of investment policies, mitigate underinvestment associated with capital rationing, and limit overinvestment by compelling managers to promptly recognize losses. Moreover, accounting conservatism can provide incentives for efficient investment decisions, facilitate the monitoring of managers' investment choices, and thereby reduce the destruction of cash reserves.

Additionally, this study demonstrates that board independence is a factor that strengthens this relationship. In other words, accounting conservatism has a more positive and significant impact on cash holdings when the board has a significant percentage of independent directors.

Although this study provides valuable insights into cash holdings, accounting conservatism and board independence in the French context, it has several limitations. First, the analysis is restricted to French companies, without considering the specificities of other contexts, which may lead to different results in other countries. Second, the study period (2010–2019) excludes recent events such as the COVID-19 pandemic that may have significantly affected corporate cash management and corporate governance practices. Finally, some variables such as corporate ethical behaviour were not included in the analysis.

Future empirical research could extend this line of research to include additional variables such as corporate ethical behaviour to provide a more comprehensive understanding of the relationship between accounting conservatism and cash holdings.

REFERENCES

Abdelalim Krema, D. (2022). The effect of the relationship between accounting conservatism and cost of debts on cash holding: Evidence from Egyptian listed companies. *The Scientific Journal of Accounting Studies, 4*(2), 274–310. https://doi.org/10.21608/sjar.2022.248314

Adams, R. B., & Santos, J. A. C. (2006). Identifying the effect of managerial control on firm performance. *Journal of Accounting and Economics, 41*(1–2), 55–85. https://doi.org/10.1016/j.jacceco.2005.08.001

Adams, R., & Mehran, H. (2003). Is corporate governance different for bank holding companies? *Economic Policy Review, 9*(1), 123–142. https://www.newyorkfed.org/medialibrary/media/research/epr/03v09n1/0304adampdf.pdf

Ahmed, A. S., & Duellman, S. (2007). Accounting conservatism and board of director characteristics: An empirical analysis. *Journal of Accounting and Economics, 43*(2–3), 411–437. https://doi.org/10.1016/j.jacceco.2007.01.005

Ahmed, K., & Henry, O. (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

Al-Amri, K., Al Shidi, S., Al-Busaidi, M., & Akguc, S. (2017). Real earnings management in public vs private firms in the GCC countries: A risk perspective. *Journal of Applied Accounting Research, 18*(2), 242–260. https://doi.org/10.1108/JAAR-11-2014-0124

Alves, S. (2023). Do female directors affect accounting conservatism in European Union? *Cogent Business & Management, 10*(2), Article 2219088. https://doi.org/10.1080/23311975.2023.2219088

Amran, N. A., & Manaf, K. B. A. (2014). Board independence and accounting conservatism in Malaysian companies. *Procedia – Social and Behavioral Sciences, 164,* 403–408. https://doi.org/10.1016/j.sbspro.2014.11.095

Atwa, R., Bsoul, R., Kharabsheh, B., & Azzam, M. (2022). The Association between accounting conservatism and cash holding, dividends and leverage. *Academic Journal of Interdisciplinary Studies, 11*(4), 203–213. https://doi.org/10.36941/ajis-2022-0109

Ball, R., & Shivakumar, L. (2005). Earnings quality in UK private firms: Comparative loss recognition timeliness. *Journal of Accounting and Economics, 39*(1), 83–128. https://doi.org/10.1016/j.jacceco.2004.04.001

Ball, R., Robin, A., & Sadka, G. (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. https://doi.org/10.1007/s11142-007-9064-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

Bauer, R., Frijns, B., Otten, R., & Tourani-Rad, A. (2008). The impact of corporate governance on corporate performance: Evidence from Japan. *Pacific-Basin Finance Journal, 16*(3), 236–251. https://doi.org/10.1016/j.pacfin.2007.05.001

Bhagat, S., & Black, B. (2001). The non-correlation between board independence and long-term firm performance. *Journal of Corporation Law, 27,* 231–274. https://heinonline.org/HOL/LandingPage?handle=hein.journals/jcorl27&div=18&id=&page=

Bhagat, S., & Bolton, B. (2008). Corporate governance and firm performance. *Journal of Corporate Finance, 14*(3), 257–273. https://doi.org/10.1016/j.jcorpfin.2008.03.006

Biddle, G. C., Hilary, G., & Verdi, R. S. (2009). How does financial reporting quality relate to investment efficiency? *Journal of Accounting and Economics, 48*(2-3), 112–131. https://doi.org/10.1016/j.jacceco.2009.09.001

Black, B., Jang, H., & Him, W. (2006). Predicting firms' corporate governance choices: Evidence from Korea. *Journal of Corporate Finance, 12*(3), 660–691. https://doi.org/10.1016/j.jcorpfin.2005.08.001

Boubaker, S., Derouiche, I., & Nguyen, D. K. (2015). Does the board of directors affect cash holdings? A study of French listed firms. *Journal of Management and Governance, 19*, 341–370. https://doi.org/10.1007/s10997-013-9261-x

Bowen, R. M., Rajgopal, S., & Venkatachalam, M. (2010). Accounting discretion, corporate governance, and firm performance. *Contemporary Accounting Research, 25*(2), 351–405. https://doi.org/10.1506/car.25.2.3

Brealey, R., Myers, S. C., & Allen, F. (2006). *Corporate finance* (8th ed.). McGraw-Hill.

Brown, J. R., & Petersen, B. C. (2011). Cash holdings and R&D smoothing. *Journal of Corporate Finance, 17*(3), 694–709. https://doi.org/10.1016/j.jcorpfin.2010.01.003

Bushman, R. M., & Smith, A. J. (2001). Financial accounting information and corporate governance. *Journal of Accounting and Economics, 32*(1–3), 237–333. https://doi.org/10.1016/S0165-4101(01)00027-1

Bushman, R. M., Piotroski, J. D., & Smith, A. J. (2011). Capital allocation and timely accounting recognition of economic losses. *Journal of Business Finance and Accounting, 38*(1–2), 1–33. https://doi.org/10.1111/j.1468-5957.2010.02231.x

Callen, J., Segal, D., & Hope, O. (2010). The pricing of conservative accounting and the measurement of conservatism at the firm-year level. *Review of Accounting Studies, 15*, 145–178. https://doi.org/10.1007/s11142-009-9087-6

Chaieb, S. (2021). The moderating effect of the presence of female executives on the relationship between accounting conservatism and cash holdings. *International Journal of Accounting and Financial Reporting, 11*(3). https://doi.org/10.5296/ijafr.v11i3.18850
Chen, F., Hope, O.-K., Li, Q., & Wang, X. (2011). Financial reporting quality and investment efficiency of private firms in emerging markets. *Accounting Review, 86*(4), 1255–1288. https://doi.org/10.2308/accr-10040
Chen, R., Dyball, M. C., & Wright, S. (2009). The link between board composition and corporate diversification in Australian corporations. *Corporate Governance: An International Review, 17*(2), 208–223. https://doi.org/10.1111/j.1467-8683.2009.00734.x
Chen, Y., & Chuang, W. (2009). Alignment or entrenchment? Corporate governance and cash holdings in growing firms. *Journal of Business Research, 62*(11), 1200–1206. https://doi.org/10.1016/j.jbusres.2008.06.004
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), 1–16. https://doi.org/10.1016/j.intaccaudtax.2012.01.001
Dahya, J., & McConnell, J. J. (2005). Outside directors and corporate board decisions. *Journal of Corporate Finance, 11*(1–2), 37–60. https://doi.org/10.1016/j.jcorpfin.2003.10.001
Dahya, J., Dimitrov, O., & McConnell, J. J. (2008). Dominant shareholders, corporate boards, and corporate value: A cross-country analysis. *Journal of Financial Economics, 87*(1), 73–100. https://doi.org/10.1016/j.jfineco.2006.10.005
Daske, H. (2006). Economic benefits of adopting IFRS or US-GAAP — Have the expected cost of equity capital really decreased? *Journal of Business Finance & Accounting, 33*(3-4), 329–373. https://doi.org/10.1111/j.1468-5957.2006.00611.x
Daske, H., Hail, L., Leuz, C., & Verdi, R. (2008). Mandatory IFRS reporting around the world: Early evidence on the economic consequences. *Journal of Accounting Research, 46*(5), 1085–1142. https://doi.org/10.1111/j.1475-679X.2008.00306.x
Dechow, P., Weili, G., & Schrand, C. (2010). Understanding earnings quality: A review of proxies, their determinants and their consequences. *Journal of Accounting and Economics, 50*(2–3), 344–401. https://doi.org/10.1016/j.jacceco.2010.09.001
Dittmar, A., & Mahrt-Smith, J. (2007). Corporate governance and the value of cash holdings. *Journal of Financial Economics, 83*(3), 599–634. https://doi.org/10.1016/j.jfineco.2005.12.006
Fama, E. (1980). Agency problems and the theory of the firm. *Journal of Political Economy, 88*(2), 288–297. https://doi.org/10.1086/260866
Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *Journal of Law and Economics, 26*(2), 301–325. https://doi.org/10.1086/467037
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
Francis, J. R., LaFond, R. Z., Olsson, P., & Shipper, K. (2004). Costs of equity and earnings attributes. *The Accounting Review, 79*(4), 967–1010. https://doi.org/10.2308/accr.2004.79.4.967
French Association of Private Enterprises (AFEP), & Movement of the Enterprises of France (MEDEF). (2002). *"Pour un meilleur gouvernement des entreprises cotées": Rapport du groupe de travail présidé par Daniel Bouton, président de la Société Générale* ["For a better governance of listed companies": Report of the working group chaired by Daniel Bouton, Chairman of Société Générale]. https://www.ecgi.global/sites/default/files/codes/documents/rapport_bouton.pdf
García Lara, J. M., García 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
García Lara, J. M. G., 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
Gill, A., Biger, N., & Mathur, N. (2010). The relationship between working capital management and profitability: Evidence from the United States. *Business and Economics Journal, 2010*(10), 1–9. https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=4fbaa2174386ee0cc6e90de5d098b9e36962f2de
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
Habib, A., & Hossain, M. (2013). Accounting conservatism, environmental uncertainty, and the capital structure. *Corporate Ownership and Control, 11*(1–1), 123–135. https://doi.org/10.22495/cocv11i1c1art1
Hamad, A., Mohammad, A. M., & Al-Mawali, H. (2019). Does accounting conservatism mitigate the operating cash flows downside risk? *The Journal of Social Sciences Research, 5*(2), 472–483. https://arpgweb.com/pdf-files/jssr5(2)472-483.pdf
Ho, S. S. M., Li, A. Y., Tam, K., & Zhang, F. (2015). CEO gender, ethical leadership, and accounting conservatism. *Journal of Business Ethics, 127*, 351–370. https://doi.org/10.1007/s10551-013-2044-0
Holthausen, R., & Watts, R. (2001). The relevance of the value-relevance literature for financial accounting standard setting. *Journal of Accounting and Economics, 31*(1–3), 3–75. https://doi.org/10.1016/S0165-4101(01)00029-5
Hsu, W. Y., Huang, Y. R., & Lai, G. (2015). Corporate governance and cash holdings: Evidence from the U.S. property-liability insurance industry. *The Journal of Risk and Insurance, 82*(3), 715–748. https://doi.org/10.1111/jori.12049
Hu, J., Li, A., & Zhang, F. (2014). Does accounting conservatism improve the corporate information environment? *Journal of International Accounting, Auditing and Taxation, 23*(1), 32–43. https://doi.org/10.1016/j.intaccaudtax.2014.02.003
Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *The American Economic Review, 76(*2), 323–329. https://www.jstor.org/stable/1818789
Kaymak, T., & Bektas, E. (2008). East meets West? Board characteristics in an emerging market: Evidence from Turkish banks. *Corporate Governance, 16*(6), 550–561. https://doi.org/10.1111/j.1467-8683.2008.00713.x
Keynes, J. M. (1936). *The general theory of employment, interest and money.* Macmillan. https://www.files.ethz.ch/isn/125515/1366_keynestheoryofemployment.pdf
Khan, M., & Watts, R. (2009). Estimation and empirical properties of a firm-year measure of conservatism. *Journal of Accounting and Economics, 48*(2–3), 132–150. https://doi.org/10.1016/j.jacceco.2009.08.002

Klein, A. (2002). Audit committee, board of director characteristics, and earnings management. *Journal of Accounting and Economics, 33*(3), 375–400. https://doi.org/10.1016/S0165-4101(02)00059-9
Kor, Y. Y., & Misangyi, V. F. (2008). Outside directors' industry-specific experience and firm's liability of newness. *Strategic Management Journal, 29*(12), 1345–1355. https://doi.org/10.1002/smj.709
La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. (2000). Agency problems and dividend policies around the world. *Journal of Finance, 55*(1), 1–33. https://doi.org/10.1111/0022-1082.00199
LaFond, R., & Roychowdhury, S. (2008). Managerial ownership and accounting conservatism. *Journal of Accounting Research, 46*(1), 101–135. https://doi.org/10.1111/j.1475-679X.2008.00268.x
LaFond, R., & Watts, R. (2008). The information role of conservatism. *The Accounting Review, 83*(2), 447–478. https://doi.org/10.2308/accr.2008.83.2.447
Lee, K. W., & Lee, C. F. (2009). Cash holdings, corporate governance structure, and firm valuation. *Review of Pacific Basin Financial Markets and Policies, 12*(03), 475–508. https://doi.org/10.1142/S021909150900171X
Lefort, F., & Urzua, F. (2008). Board independence, firm performance, and ownership concentration: *Evidence from Chile. Journal of Business Research, 61*(6), 615–622. https://doi.org/10.1016/j.jbusres.2007.06.036
Leuz, C., & Verrecchia, R. E. (2000). The economic consequences of increased disclosure. *Journal of Accounting Research, 38,* 91–124. https://doi.org/10.2307/2672910
Leventis, S., Dimitropoulos, P., & Owusu-Ansah, S. (2013). Corporate governance and accounting conservatism: Evidence from the banking industry. *Corporate Governance: An International Review, 21*(3), 264–286. https://doi.org/10.1111/corg.12015
Li, S. (2010). Does mandatory adoption of international financial reporting standards in the European Union reduce the cost of equity capital? *Accounting Review, 85*(2), 607–636. https://doi.org/10.2308/accr.2010.85.2.607
Lin, C., Ma, Y., & Su, D. (2009). Corporate governance and firm efficiency: Evidence from China's publicly listed firms. *Managerial and Decision Economics, 30*(3), 193–209. https://doi.org/10.1002/mde.1447
Lin, C., Ma, Y., Malatesta, P., & Xuan, Y. (2011). Ownership structure and the cost of corporate borrowing. *Journal of Financial Economics, 100*(1), 1–23. https://doi.org/10.1016/j.jfineco.2010.10.012
Lin, W., Fan, X., & Cheng, X. (2012). Board independence and accounting conservatism: Evidence based on listed companies in China. *Proceedings of the 2011 International Conference on Management and Service Science* (pp. 1–5). Wuhan, China. https://doi.org/10.1109/ICMSS.2011.5998441
Linck, J. S., Netter, J. M., & Yang, T. (2008). The determinants of board structure. *Journal of Financial Economics, 87*(2), 308–328. https://doi.org/10.1016/j.jfineco.2007.03.004
Masood, A., & Shah, A. (2014). Corporate governance and cash holdings in listed non-financial firms of Pakistan. *Business Review, 9*(2), 48–72. https://doi.org/10.54784/1990-6587.1271
Morris, J. (1983). The role of cash balances in firm valuation. *Journal of Financial and Quantitative Analysis, 18*(4), 533–545. https://doi.org/10.2307/2330946
Ogundipe, L. O., Ogundipe, S. E., & Ajao, S. K. (2012). Cash holding and firm characteristics: Evidence from Nigerian emerging market. *Journal of Business, Economics & Finance, 1*(2), 45–58. https://dergipark.org.tr/tr/download/article-file/374621
Opler, T., Pinkowitz, L., Stulz, R., & Williamson, R. (1999). The determinants and implications of cash holdings. *Journal of Financial Economics, 52(*1), 3–46. https://doi.org/10.1016/S0304-405X(99)00003-3
Ping, T., Chang-qing, S., & Li, S. (2011). Empirical research on the interactive relationship between cash holdings and corporate performance of listed companies in China. *Proceedings of the 2011 International Conference on Management Science & Engineering* (pp. 938–949). IEEE. https://doi.org/10.1109/ICMSE.2011.6070072
Pujiono, Radityo, E., Kusumaningtias, R., & Putra, R. (2023). An overview of fair play regulation in the English premier league: Accounting information for leverage and financial distress to conservatism. *Cogent Business & Management, 10*(1). https://doi.org/10.1080/23311975.2023.2164996
Sarkar, J., & Sarkar, S. (2009). Multiple board appointments and firm performance in emerging economies: Evidence from India. *Pacific-Basin Finance Journal, 17*(2), 271–293. https://doi.org/10.1016/j.pacfin.2008.02.002
Schiehll, E., & Bellavance, F. (2009). Boards of directors, CEO ownership, and the use of non-financial performance measures in the CEO bonus plan. *Corporate Governance: An International Review, 17*(1), 90–106. https://doi.org/10.1111/j.1467-8683.2008.00723.x
Seifert, B., & Gonenc, H. (2018). The effects of country and firm-level governance on cash management. *Journal of International Financial Markets, Institutions and Money, 52*, 1–16. https://doi.org/10.1016/j.intfin.2017.12.001
Seo, H., Tompkins, D. L., & Yi, S. (2014). Board independence and corporate cash holding. *Journal of Finance and Accountancy, 15*(1). https://www.aabri.com/manuscripts/131627.pdf
Shehata, W., & Rashed, A. (2021). Accounting conservatism, information asymmetry and cash holdings. *Journal of Accounting, Business and Management (JABM), 28*(1), 63–72. https://doi.org/10.31966/jabminternational.v28i1.826
Skinner, D. (1993). The investment opportunity set and accounting procedure choice: Preliminary evidence. *Journal of Accounting Economics, 16*(4), 407–445. https://doi.org/10.1016/0165-4101(93)90034-D
Soliman, W. S. (2019). The moderating effect of firm characteristics on the association between accounting conservatism and cash holdings. *International Journal of Accounting and Financial Reporting, 9*(4), 385–402. https://doi.org/10.5296/ijafr.v9i4.15887
Stepniewski, J., & Souid, S. (2008). Indépendance du conseil d'administration et gestion des résultats [Independence of the board of directors and results management]. *La Comptabilite, Le Contrôle Et L'audit Entre Changement Et Stabilite.* HAL SHS. https://shs.hal.science/halshs-00525985v1
Tahir, M. S., & Alifiah, M. N. (2015). Corporate cash holding behaviour and financial environment: A critical review. *International Journal of Economics and Financial Issues, 5*(1), 277–280. https://www.econjournals.com/index.php/ijefi/article/view/1391
Vafeas, N. (2003). Further evidence on compensation committee composition as a determinant of CEO compensation. *Financial Management, 32*(2), 53–70. https://www.jstor.org/stable/3666336
Watts, R. L. (2003). Conservatism in accounting Part I: Explanations and implications. *American Accounting Horizons, 17*(3), 207–221. https://doi.org/10.2308/acch.2003.17.3.207
Wiharno, H., Hamzah, A., & Pangestu, R. H. (2023). Determinants of accounting conservatism. *Global Financial Accounting Journal, 7*(1), 14–27. https://doi.org/10.37253/gfa.v7i1.7252

Xie, B., Davidson, W., & DaDalt, P. (2003). Earnings management and corporate governance: The role of the board and the audit committee. *Journal of Corporate Finance, 9*(3), 295–316. https://doi.org/10.1016/S0929-1199(02)00006-8
Xingquan, Y., & Jie, S. (2007). A positive study on the determinants of corporate cash holdings: The empirical evidence from listed companies of China. *Nankai Business Review, 6*, 47–54.
Yermack, D. (1996). Higher market valuation of companies with a small board of directors. *Journal of Financial Economics,40*(2), 185–211. https://doi.org/10.1016/0304-405X(95)00844-5
Yusoff, W. F. W. (2010). *Characteristics of boards of directors and board effectiveness: A study of Malaysian public listed companies* [Doctoral dissertation, Victoria University]. https://vuir.vu.edu.au/15798/
Zeljko, R., & Nemanja, S. (2017). Analysis of the determinants of corporate cash holdings: Examples from companies in Serbia. *The European Journal of Applied Economics, 14*(1), 13–23. https://doi.org/10.5937/ejae14-13574