

# Do Board Characteristics affect Information Asymmetry?

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## **Abstract:**

In this paper, we investigate the empirical relationship between corporate governance and information asymmetry across a range of French firms. Based on a cross-sectional analysis, our study of the empirical relationship between corporate governance and information asymmetry involved 160 companies over the years 2008-2010. Mechanisms of corporate governance include the characteristics of the board of directors.

Our results seem to indicate a significant relationship between certain mechanisms of corporate governance and the information asymmetry of the French market. These mechanisms can reduce adverse selection costs, and make exchanges more transparent.

These results suggest that firms with efficient corporate governance mechanisms may reduce informative asymmetry and improve transparency between investors.

**KEY WORDS:** Corporate governance, information asymmetry, adverse selection costs.

## **Introduction**

The impact of corporate governance mechanisms on transparency is generally explained, in research, in terms of the increases risk of that an investor making an adverse selection in a context of asymmetric information (Glosten and Milgrom, 1985). From the investor's

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perspective, the only guarantee of accuracy of disclosed information is good corporate governance. In fact, several researchers state that this concept makes it possible to potentially reduce information asymmetry. The potential for conflicts of interest between managers and shareholders, the possibility of expropriation of minority shareholders, and embezzlement are thereby weakened. Consequently, there will be fewer opportunities for informed parties to take advantage of private information available to them at the expense of uninformed parties. Therefore, uninformed agents will find no interest in broadening the adverse selection component of the spread.

In this context, it is important to remember that a system of efficient corporate governance raises investor confidence in the market, and furthers the establishment of more stable investment flows in the long run. This is a lever for establishing a relationship of trust between the company and investors, thereby attracting new investors. Moreover, the recent turbulence in financial markets has underlined how important it is to adopt good forms of corporate governance.

Corporate governance is thus conceived as a set of mechanisms which makes it possible to reduce agency costs by controlling managerial actions, and by reducing the asymmetry of information borne by the shareholders. In fact, managers of a business with weak governance increasingly expropriate the wealth of shareholders in situations of poor performance (Chen and Al, 2003). Thus, good corporate governance produces a cash-flow that is both high and available to investors.

In this study, our goal was to analyze mechanisms of governance that can improve the transparency of companies. This sphere of research is usually based on theoretical foundations such as agency theory (Jensen and Meckling, 1976), the theory of entrenchment (Shleifer and Vishny, 1989) and stewardship theory (Davis and al., 1997). These theories justify the relationship between the modes of governance and asymmetric information. Charoenwong and al. (2010) are unusual in having studied the effect of governance quality on price spread, in the specific context of Singapore. They found that the mechanisms of governance studied had a significant and negative relationship with the information asymmetry component.

This research is innovative in its approach, studying the effect of different governance mechanisms on asymmetric information in an order driven market, in a context where information asymmetry is exacerbated by the presence of insiders (family, majority shareholders, and institutional investors) combined with a weak protection of minority interests.

This article is organized as follows: the first section presents the theoretical framework of the relationship between mechanisms of governance and information asymmetry. The second presents the sample and methodology used, followed by results and discussions. The last section concludes the paper.

## **1. Literature review and Hypotheses Development**

### **1.1. French corporate governance landscape**

Family firms dominate the French corporate landscape and feature highly concentrated ownership structures. Faccio and Lang (2002) demonstrated that family firms accounted for roughly 65% of French listed firms in 1996. Boubaker (2007) found that family firms accounted

for 69.61% of French listed firms in 2000, 90% of which were run by members of the controlling family. In France, as in other Western Continental European countries where ownership structure is highly concentrated, listed firms appear to be reluctant to voluntarily provide investors with extra information and prefer private communication channels to public disclosure. Such conditions motivate us to study the corporate governance characteristics that encourage voluntary disclosure in France, thus mitigating information asymmetry.

Several codes of best-practice for corporate governance have been established in France since the mid-1990s to enforce minority shareholder rights and improve market transparency. These codes, including the Viénot reports (1995, 1998) and the Bouton report (2002), create a blueprint of corporate governance. They have encouraged French firms to appoint independent directors, separate the functions of chief executive officer (CEO) and chair of the board, create board committees, and voluntarily disclose more information to improve market transparency and attract shareholders back to the financial markets. In 2003, the French Parliament adopted the Financial Security Law to uphold and strengthen the legal provisions related to corporate governance. This law - in the spirit of the Sarbanes-Oxley Act - aims to increase CEO responsibilities, promote internal control, and reduce or eliminate sources of conflict of interests. Notwithstanding the newly enacted laws and recently adopted governance codes, businesses failures and accounting scandals continue to surface, shaking confidence in the French corporate environment (e.g., Vivendi Universal and the Sentier II financial scandals in 2001 and the Autorité des Marchés Financiers (AMF) penalties against BNP Paribas and Société Générale in 2007). Examining the financial reporting practices of CAC 40 firms in 2004, Fitch Ratings (2004) concluded that these firms can do better in terms of financial disclosure and accountability. The study also observed significant differences in the content of annual reports across these firms, though without explaining the reasons for these disparities.

## **1.2. Theoretical framework**

The identification of organizational problems arising from a situation of information asymmetry was one factor leading to the emergence of corporate governance. In this sense, Attig and Morck (2005) argue that in the case of companies whose boards are ineffective, the asymmetry of information may be more troubling to shareholders because it usually results in significant opacity. In other words, external investors may fear a significant difference between what they know and what other investors may have learned about. Indeed, they find that if the board is working effectively, the level of information asymmetry should be small (i.e. less informed trading, shares are actively traded). So, an effective board should improve the transparency of information and reduce both the diversion and the expropriation of minority interests.

The effectiveness of the board of directors is often conditioned by characteristics such as size and the independence of directors:

### ***The size of the Board of Directors***

Agency theory relies on the assumption that a large sized board favors the dominance of the leader by raising coalitions and group conflicts. This results in fragmented board that have difficulty functioning effectively and reaching consensus on decisions. In this context, Jensen (1993) recommends small sized boards. This means that potential manipulation of assessments

by the directors is greatly facilitated, leading to a lower quality of published information and aggravating the problem of information asymmetry.

However, according to resource dependence theory, improving relationships between companies and different stakeholders is made possible under an expanded Council. This allows easy access to in-house expertise and better communication with investors. Agrawal and Knoeber (1999) confirmed this hypothesis and suggest that a large board size is more suited to businesses where information is difficult to obtain. Anderson et al. (2004) argued that if the large size of a board provides greater oversight of the financial accounting process, the company will consequently offer better transparency. According to this argument, a large board size reduces problems of asymmetric information and allows investors to adjust their subjective probability distributions. Using a sample of UK firms during the period 1999-2003, Cai et al. (2006) showed that adverse selection is lower when the size of the board is high.

Taking into account the structure of ownership, Attig (2007) tested the relationship between adverse selection and characteristics of the board of directors in Canadian listed companies. The study demonstrated that the impact of board size on price spread depends on the ownership structure. In fact, companies with dispersed ownership and a large board were shown to be associated with a low price spread. However when it comes to pyramidal family business groups, Attig (2007) found that the size of the board and the excessive control of the directors widen the price spread. The variable (*boardSiz*) represents the number of directors on the board, for each company in the sample.

*H1: The degree of information asymmetry is negatively associated with the size of the board*

### ***The Independence of Directors***

Broadly speaking, the role of directors is to monitor the tasks performed by management, to oppose bad decisions, and to provide advice at a high level. The independence of directors has been the subject of much debate in corporate governance literature. Since the work of Fama and Jensen (1983), it has been widely agreed that the independence of the board of directors and its degree of effectiveness are linked. Rooting theory predicts that external directors do not have sufficient power to oppose any strategies used by leaders to enhance their power, and that of their partners, including the development of asymmetric information. In this framework, Fama (1980) and Fama and Jensen (1983) argued that the most influential members in the council naturally have to be internal members, since they have valid and specific information regarding the activity of the organization. This information is primarily obtained by internal mutual supervision of other managers. Furthermore, Eng and Mak (2003) found that increasing the proportion of external directors reduces the voluntary disclosure of information by business leaders, consequently raising the problem of adverse selection and widening the price spread.

However, according to agency theory, internal directors do not have enough power to challenge the leadership selection. In contrast, external directors tend to weigh more favorably on the decisions of leaders, who would thereby be more constrained to regularly provide information to the market (Dahya et al., 2008). The signalling theory provides a framework to explain this relationship. In fact, external directors often use their office for reporting to external markets. They specifically target parties who are experts in making decisions, who know the importance of controlling decision, and who can effectively work with a monitoring

system to chart the impact of a decision. This is seen by the market as a positive signal, thereby increasing confidence among investors. Along with these assumptions, the external directors of the board effectively control managerial decisions, and reduce information asymmetry between management and investors.

Chen and Jaggi (2000) highlighted a positive link through the examination of the association between external directors and the spread of information in Hong Kong. Their results indicate that the presence of independent directors enhances corporate compliance with regulatory requirements, and determines the transparency of the market. In the same way, Kanagaretnam et al. (2007) examined the effect of board characteristics on information asymmetry in the U.S. context, around the announcement dates of quarterly results. The results of their analysis showed that the independence and activity of the council, along with the percentage of capital held by the directors and the management team, associate negatively to the price spread. This result contradicts the results found by Ho and Wong (2001). Indeed, using data from Hong Kong companies, these authors showed that the presence of independent directors does not affect the spread of the published information. In addition, when it comes to Canadian firms listed in 1996, Attig (2007) demonstrated that the presence of independent directors reduces the price spread. Abbott et al. (2004) confirmed this result on a sample of U.S firms over the period 1991-1999.

Cheng and Courtenay (2006), Patelli and Prencipe (2007) and Akhtaruddin et al. (2009), for instance, provided evidence that transparency increases in line with the number of independent directors in Singapore, Italy, and Malaysia. More recently, García-Meca and Sánchez-Ballesta (2010) reached the same conclusion for countries with high investor protection rights after meta-analyzing 27 worldwide empirical studies.

Thus our hypothesis is as follows:

*H2: The degree of information asymmetry is negatively associated with the percentage of independent directors on the board (boardIndep)*

### ***The Financial Expertise of Directors***

Several debates on corporate governance revolve around the composition of boards of directors. The potential benefits of having financial expertise at the organizational level of directors was studied by Güner et al. (2008), who found that the existence of directors expert in financial control could affect the confidentiality of companies through the creation of more accurate information and better audited financial states. Wagner (2008) added that during the composition of a board, a compromise must exist between independence and competence in order to create an optimally efficient group. Thus, the existence of qualified directors is an indicator of the quality of published information. Haniffa and Cooke (2002) reported that firms with a higher proportion of board members with accounting and finance expertise tend to disclose more voluntary information to reflect their credibility and reputation.

The existence of expertise within the board of directors is implied, since the law does not define the criteria or the nature of skills required for directors. It was only with the publication of the Bouton report (2002) that we started talking about the competence of directors in the auditing of companies' financial states. This report stated that the board should be a mix of expert and experienced directors. It further explained that one of the major conditions to appoint a director is his/her competence.

The Bouton report therefore encouraged companies to appoint competent directors while simultaneously remaining silent on the definition of that competence. For this reason, this paper has explicitly referred to the work of Jeanjean and Stolowy (2009), Wagner (2008) and the report of the Blue Ribbon Committee (1999). Using these combined sources, we can therefore describe as financial expert any director who meets the following criteria:

-The expert (boardExp) is assigned according to academic training (1) and / or professional experience (2) of the administrator.

(1): we assign financial expertise to any director who is a graduate of business school or university in the field of management, with accounting or finance.

(2): we assign financial expertise to any director who has exercised or exercises functions dealing with finance. In this way, financial managers, financial inspectors, auditors, and lawyers with an accounts specialism or similar capacity are regarded as financial experts.

According to this classification of expertise, a binary variable takes the value 1 when the director is a financial expert, and takes 0 otherwise.

*H3: The degree of information asymmetry is negatively associated with the proportion of the board with accounting and/or finance expertise*

### ***Meeting Frequency of the Board of Directors***

To ensure efficiency and good communication from the management team, the board must keep a certain regularity in the meetings of directors. The establishment of a well-defined plan of meetings and the publishing of reports gives more confidence to stakeholders and reduces the asymmetry of information between them.

Neither the market authorities nor the Blue Ribbon Committee will be drawn on the optimal number of meetings (Jenkins, 2002). However, a Price Waterhouse document (1993), named: "Improving Audit Committee Performance: What Works Best", suggests four meetings per year, with the addition of special meetings as deemed necessary.

The Viénot report argued that boards must meet when circumstances require and that, in the absence of special circumstances, four to six meetings annually are sufficient to monitor the progress of the group and make critical decisions. In addition, the board should allow a thorough examination and discussion of matters within the council's jurisdiction and of any powers delegated to board committees.

Godard and Schatt (2004) described the main characteristics of 97 French boards and their operations in 2002. They found the average number of meetings to be about 7 times a year (the median is 6), or approximately every two months. The results of the study conducted by Godard and Schatt also show strong differences between firms<sup>4</sup>. Jenkins (2002) showed that a greater frequency of committee meetings contributes to a better quality of financial reporting. Vafeas (1999) argued that the time needed to gather sensitive information in preparation for board meetings makes the dates of these meetings important. Board directors require deep background knowledge and timely updates about firm activities and results. Thus, a higher meeting frequency implies greater pressure on managers to provide supplementary

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<sup>4</sup> Authors found that less than 15% of boards now meet four or fewer times per year.



information. This view is supported by Brick and Chidambaran (2010), who suggested that frequent board (and audit committee) meetings are a pledge to continuously share information with managers. Beasley et al. (2000) provided evidence that a lower frequency of audit committee meetings is associated with a higher likelihood of financial statement fraud. A similar study by Farber (2005) showed that the audit committees of firms engaged in fraudulent activities have fewer independent members and do not meet frequently.

Drawing on the above-mentioned studies, we expect a board's high meeting frequency to be related to less information asymmetry. Hence, we posit the following hypothesis.

The variable (boardMeet) measures the number of meetings conducted during one year.

*H4: The degree of information asymmetry is negatively associated with frequency of board meetings.*

### **Meeting attendance**

Irregular attendance at meetings of the board of directors is incompatible with the due diligence of directors and best practice corporate governance principles. Greater participation in board meetings allows directors to provide useful advice, share points of view, and benefit of each other's experience. Hence, a higher attendance rate decreases information asymmetry between directors and promotes more effective functioning of the board and its committees. Moreover, busy directors are less likely to question managerial proposals and decisions and are therefore less effective monitors. In this respect, Jiraporn et al. (2009) and Ahn et al. (2010) suggested that directors holding multiple outside directorships face tight time constraints, and their limited attention capacities may hamper their capacity to properly fulfill their monitoring duties, which in turn negatively affects firm performance.

Similarly, Ferris et al. (2003) posit that, due to lack of time, busy directors are often unable to serve on various board committees. The complexity of accounting and financial reports reviewed by the audit committee requires significant resources in terms of directors and time spent in monitoring. Regular attendance at board meetings shows directors' strong commitment to earnestly perform their supervision duties. Their presence pressures top management to provide further information to reduce oversight. Moreover, directors who usually attend board meetings (boardDili) are expected to ask for more detailed and varied information to assess management performance, implying more transparency. In light of these arguments, we present the following hypothesis.

*H5: The degree of information asymmetry is negatively associated with participation in board of director meetings.*

### **The unitary structure of the board**

Companies in which a single person combines the roles of CEO and Chairman of the Board of Directors are considered to have a unitary board in the Board.

The Act of May 15, 2001 helped to bring a better separation of roles in the SA classic board. Following the recommendations of the Viénot report (1999), inspired by the Anglo-Saxon model, the functions of Chairman of the Board and CEO can be separated. The chairmanship of a company's general management can be provided either by the Chairman of the Board of Directors or by a person appointed by him/her, with the title of CEO.

The concentration of power in decision making caused by the overlapping functions of control and decision making (duality) by the officer may compromise the board's independence, damaging the board and its oversight role of governance (Fama and Jensen, 1983; Millstein, 1992; Whittington, 1993; Brickley et al. 1994; Worrell et al., 1997).

In fact, this duality both highlights the absence of separation between decision control and decision management, and additionally indicates that the board is not an effective means for decision control if it does not limit the discretion of individual decisions by top managers (Fama and Jensen, 1983).

The role of governance and oversight may extend to the dissemination of information from the firm to the external directors. Firms with a dual executive will therefore have a weak level of voluntary disclosure, because the board seems to be less effective in controlling management and ensuring a high level of transparency. Such a low level of transparency can be used to hide fraud and incompetence (Gul and Leung, 2004). The results of a study by Cai et al. (2006) revealed that the separation of functions enhances the process of information dissemination to the public and reduces the opportunities for informed trading. Nevertheless, both the theory of stewardship and the theory of resource dependence assert that the concentration of CEO power is beneficial to the company, since it facilitates decisions making and the acquisition of resources necessary for the company. Haniffa and Cooke (2002) noted a negative association between the presence of an external officer and a voluntary disclosure of information for Malaysian companies. These results refute the hypothesis suggesting that an external chairman strengthens the independence of the board of directors. Haniffa and Cooke (2002) conclude, therefore, that the executive chairman of the board plays an important role in holding private information.

Moreover, Ho and Wong (2001) showed that the cumulative distribution of functions does not affect voluntary information disclosure. They explain this by the fact that the person jointly holding the positions of CEO and Chairman of the Board is generally a major shareholder of the company. Depending on the existence or absence of a dual function, the variable (Dual) is defined as a dummy variable equal to 1 if the council is unitary and to 0 otherwise.

*H6: The degree of information asymmetry is negatively associated with the presence of a unitary structure.*

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## **2. SAMPLE AND METHODOLOGY**

### **2.1. Data-gathering**

Our sample includes all industrial and commercial companies listed in the Paris stock exchange. The initial sample was composed by 469 companies for the years 2008, 2009 and 2010. Financial companies were excluded. A significant amount of missing or unavailable data has made it necessary to abandon a large section of this initial sample. The final sample therefore comprised 160 firms.

Financial data related to stock prices, trading volumes, and bid and ask prices were retrieved from the Thomson Reuters and Orbis databases. The information concerned with the governance mechanisms were also partially collected via these databases. Dafsaliens, Who's



Who, and Top Management also made up a necessary complement in order to define expertise and administrator independence.

## **2.2 Definition and variables measures**

### **2.2.1. The information asymmetry**

In order-driven markets, such as the Paris stock-exchange, the spread is determined by the order book, and is equal to the difference between the best price associated with a selling limit order (ask price) and the best price associated with a buying limit order (bid price). Market microstructure literature shows that the spread comprises three components: order processing costs; adverse selection costs; and inventory holding costs. The adverse selection component of the spread balances the liquidity of suppliers in transacting with better informed traders, and increases with the degree of information asymmetry.

Empirically, several analyses present methods to estimate the spread components. Huang and Stoll (1997) proposed the consideration of two broad classes of spread decomposition models. The first class decomposes the spread using serial covariance properties of quotes and transaction prices. Models were developed by Stoll (1989) and George, Kaul, and Nimalendran (1991), based on Roll (1984), and Choi, Salandro, and Shastri's (1988) estimations of the spread. The second class uses a trade direction indicator regression to decompose the spread. These trade indicator models are mainly driven by whether incoming orders are purchases or sales, and the response of the price to this order arrival. Models are those of Glosten and Harris (1988), Lin, Sanger and Booth (1995), Madhavan, Richardson, and Roomans (1996) and Huang and Stoll (1997).

Clarke and Shastri (2001), Van Ness, Van Ness et Warr (2001) and Winne and Majois (2004) view this model as one of the most appropriate to study the bid-ask spread components. This method therefore appears to be the most appropriate for the Paris stock-exchange, and also the most robust concerning components estimation. Lin, Sanger and Booth (1995) designed their model<sup>5</sup> on the basis of Huang and Stoll (1994), Lin (1992) and Stoll's approach (1989).

## **2.3. Methodology**

Our methodology relies on linear regression using the method of ordinary least square (OLS). We apply a logistic transformation for financial variables (trading volume, share price and volatility) to convert bounded variables to unbounded ones.

The OLS regression models are specified as follows:

$$\text{Adverse selection}_i = C + \beta_1 \text{boardSize}_i + \beta_2 \text{boardIndep}_i + \beta_3 \text{boardExp}_i + \beta_4 \text{boardMeet}_i + \beta_5 \text{boardDili}_i + \beta_6 \text{Dual}_i + \beta_7 \text{LnVOLAT}_i + \beta_8 \text{LnPRICE}_i + \beta_9 \text{LnAVOL}_i + \varepsilon_i$$

## **2.4 Analysis and results discussion**

### **2.4.1. Descriptive analysis**

Table 1 provides the set of statistic variables and the results of the univariated tests.

<sup>5</sup> Further details to be found in Lin, Sanger et Booth (1995)

**Table 1: Descriptive statistics**

	<i>boardSiz</i>	<i>boardInde p</i>	<i>boardMe et</i>	<i>boardDili</i>
Mean	9.6	0.37	6.47	0.87
Median	8.00	0.36	6.00	0.89
Maximum	22.00	1.00	23.00	1.00
Minimum	3.00	0.00	2.00	0.00
Std. Dev.	4.25	5.24	3.08	9.25
	<i>Dual</i>	<i>boardExp</i>		
Frequency	0.58	0.51		

As Table 1 shows, the designated variables express the different aspects of firm governance for the sample. They stand as a sample that takes into account a whole set of heterogeneous firms with distinctive specificities. In fact, the size of the board of administration foreshadows the existent divergences between the firms made of a restricted number of administrators (3 members) and the ones counting 22 sitting members. Similarly, the number of meetings reflect the existence of an over-activity of some of the sample firms boards compared to the average (23 meetings compared to an average of 6 meetings), though there are other French firms that hold meetings only twice a year. The other chosen variables reflect the same observations. They generally highlight the inexistence of a clear consensus and standard in French corporate governance. The absence of laws setting minimal proportions, quotas, and the different characteristics of the governance activity taken into consideration in this study, mirrors a French legislative flexibility. This flexibility continues to influence governance practices despite the passing of the 3rd July 2008<sup>6</sup> law.

#### **2.4.2. The correlation study**

According to Gujarati (2004), a serious problem of multicollinearity exists when correlations between the independent variables exceed 0.80, which is not the case in the present study. The

<sup>6</sup> The articles 26 to 30 of the 3<sup>rd</sup> July 2008 aim to increase the duties of companies' transparency in terms of enterprise government and internal control. These companies are bound to the precise code of the enterprise government, which they have chosen to be its point of reference. In the absence of the latter, a company would refer to its retained rules as a complement to the law's requirements;

VIF (variance inflation factor) values were computed to check for the existence of this problem. They range between 1.6 and 2.7, far below the critical value of 10 (Neter, Wasserman, and

	<i>boardSiz</i>	<i>boardIndep</i>	<i>boardExp</i>	<i>boardMet</i>	<i>boardDili</i>	<i>VIF</i>
<i>boardSiz</i>	1,0000	,2014	,3796	,1907	,0357	2,745
		,000	,000	,000	,447	
<i>boardIndep</i>		1,0000	,2348	,0090	-,1427	2,482
			,000	,848	,002	
<i>boardExp</i>			1,0000	,2010	-,1854	2,521
				,000	,000	
<i>boardMet</i>				1,0000	,0393	1,866
					,402	
<i>boardDili</i>					1,0000	2,325

Kunter, 1989). The correlations between the independent variables do not therefore seem to be the originator of the multicollinearity problem.

**Table 2:**  
**Correlation analysis between variables (Pearson's Matrix)**

### 2.4.3. Multivariate Analysis and Discussion

Table 3 summarizes the results of the multivariate regression models. The adjusted R<sup>2</sup> is 64.2 percent and some of the board characteristics have a significant t-value, which implies that board characteristics have some explanatory power on information asymmetry.

**Table 3. Linear regression**

	adverse selection	
<i>Constante</i>	-0.352 *	-1.909
<i>boardSiz</i>	-3,251***	(-4,582)
<i>boardIndep</i>	-1.181***	(-8.916)
<i>boardExp</i>	-0.124**	(-2.679)
<i>boardMeet</i>	-0.166 **	(-2.749)
<i>boardDili</i>	-0,028 ***	(-3,621)
<i>Dual</i>	0,161	1,182
<i>VOLAT</i>	0.304 ***	5.316
<i>PRICE</i>	-0.188***	(-8.794)
<i>AVOL</i>	-0.232***	(-16.784)
<b>R<sup>2</sup></b>	0,642	
<b>F-statistic</b>	33,95 (0,000)	

\*\*\*, \*\*, \* T-statistics are significant at the 1%, 5% and 10% levels respectively.

We note a negative relationship between adverse selection and board size. This means that information asymmetry is lower when the size of the board of directors is high. This finding corroborates our first hypothesis and is consistent with the result found by Agrawal and Knoeber (1999). Indeed, a large board size provides enhanced supervision and ensures greater transparency of financial information, confirming the dependency theory. This result is justified by the reduction of the adverse selection component and converges with Cai et al. (2006).

Similarly, our findings suggest that a higher proportion of independent directors have a negative impact on information asymmetry. The board of directors' independence is also another important aspect of board effectiveness. To fulfill their duties, independent directors

may request extensive and complementary information other than financial statements, thereby inducing managers to release more voluntary information. This result is in conformity with agency theory, which suggests that the board of director has ultimate accountability for ensuring the reliability, integrity, and transparency of the firm's financial reporting system (Jensen, 1993).

Concerning the financial administrator's experience, it appears that this has a negative and significant impact on adverse selection; the existence of financial administrator experts, acquiring financial expertise throughout their careers, improves transparency of the French companies.

In the same way, we observe that the high number of board meetings has a positive influence on the transparency of the French companies. More specifically, its impact is strongly justified by the negative sign of the adverse selection component of the spread. Similar to Brick and Chidambaran (2010), we suggest that frequent board meetings are a pledge to continuously share information with managers. A sufficient number of board meetings can lead to monitoring effectiveness, pressuring management to improve their disclosure decisions.

H5 predicts a negative relationship between board diligence and the degree of information asymmetry. To this extent, board diligence was found to be significant at a 1 percent level, but in the opposite direction. Contrary to prior studies (Jiraporn et al., 2009; Ahn et al., 2010), our results suggest that meeting attendance resulted in a higher degree of information asymmetry. This could be explained by Gray's framework, which defines secrecy as "a preference for confidentiality and the restriction of disclosure of information about the business only to those who are closely involved with its management and financing as opposed to a more Transparent, open and publicly accountable approach." (Gray, 1988). This may additionally be explained by the argument that directors are more likely to establish personal ties with firm insiders they are supposed to monitor when they participate frequently in boards meetings, which can reduce the effectiveness of monitoring, including that of disclosure decisions (Patelli and Prencipe, 2007). Moreover, an audit committee that meets frequently with all its members sends a message of continuous monitoring to the market, reducing transparency.

However, the existence of a monist structure at the level of French companies' boards of administration has no statistically significant effect on the adverse selection component of the spread.

The relationship between trading volume and adverse selection is negative and significant at a 1 percent level. This result supports the predictions of Demsetz (1968) and Tinic (1972). An increase in trading volume is often associated with an increased capacity of operators to carry out transactions without any impact on prices. This, in turn, allows a decrease in the risk related to the maintenance of stocks and thus a shrink in bid-ask spreads. Thus, the more trading volume increases, the more the adverse selection is reduced. The volatility of prices positively and significantly influences adverse selection. This result is consistent with that of Sarin, Shastri and Shastri (2000). As stock returns are volatile, the probability of negotiating with an informed investor increases. Investors are subsequently inclined to increase their bid prices and to decrease their ask prices, widening the adverse selection. The coefficient of share price variable is negative and significant. This result indicates that the shares with weak price have large adverse selection.

### 3. Conclusion

In this paper, we have analysed the relationship between the corporate governance characteristics and the selection adverse component of 160 companies listed in the French market. The set of information required for this study was collected for the period 2008-2010.

We note a direct relationship between the quality of corporate governance and adverse selection costs of French firms. In fact, our results show that corporate governance mechanisms measured via the board of administration size, the independence and the financial expertise of the administrators, the number of the board of administration meetings, and board diligence, cause a reduction of adverse information asymmetry.

In light of our result, we support the contention that a system of efficient corporate governance ameliorates transparency, raises the investor confidence in the markets, and can attract new investors.

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