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## Chief Executive Officer attributes, board structures, gender diversity and firm performance among French CAC 40 listed firms

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### Abstract

Reflecting investor expectations, most prior corporate governance research attempt to find the effect duality Role of Chief Executive Officer, board structures and firm financial performance. Specifically, we refer to devote this paper on investigating the relationship between the Duality Role of Chief Executive Officer (CEO), the CEO tenure, board structures and gender diversity with tow measurement of performance in listed companies in CAC 40. We found evidence provide that board characteristics are positively correlated to the firm' performance. However, our results show a significant association between ROE, ROA and the board of directors' composition. We find significant negative association between financial information and equity-based management compensation. On the other hand, the presence of independent directors on the board seems to affect, positively, the level of financial performance CAC 40 firms. Likewise, the stewardship theory assumption, the CEO duality is very high and is significantly associated with a higher level of firm performance. Our results suggest a constant negative relation between firm performance and CEO's tenure. The results show that there is a significant relationship between board gender diversity and firm performance from our samples CAC 40 companies.

**Keywords:** Duality of Chief Executive Officer (CEO), CEO tenure, board structure, gender diversity, firm performance.

## 1. Introduction

The board of directors, as an important mechanism of governance, has been the subject of an attention of several researchers of different disciplines (law, economics, finance...). As well, the operation of this body of control is at the centre of interests of many debates and proposals for reform of its composition and its characteristics including the size, the presence of the independent members, the participation of women, the duality of functions ... And therefore it has an abundant literature who is interested in studying the impact of the Board of Directors on the performance. The board of directors is one form of internal control mechanisms in corporate since the board members appoint, supervise and remunerate top managers in organizations in addition to strategy formulation (Campbell and Minguéz, 2010). The subject of women on boards of directors is a growing area of research. Indeed, the presence of women on board was identified by Brennan and McCafferty (1997), more recent study continue in the same path (Luckerath-Rovers and Wood 2011; Shehata 2013) identified the reasons that presence of women on board directors leads to increasing firms' values. Firstly, with independent women in the board, and as they are not part of the "old boys" network, thus can increase the firm's value.

Secondly, women member at the board of directors might provide more insights about the firms' opportunities in meeting their customers' needs, since they can better understand customers' some needs and behaviours. In a similarly study, Bernardi et al. (2002) support the idea that board of director with presence of women will enhance board's monitoring (Carter et al., 2003), thus improvement of corporate governance which can lead to ameliorate firms' competitive advantage. The authors summarized the advantages of presence of women on board of directors as follows: that can improve the diversity of opinions in the boardroom, provide the female role models and mentors bringing strategic input to the board of directors, influence the making decision and leadership styles of the corporate, female's capabilities and availability for director positions and ensuring "better" boardroom behaviour.

Nielsen and Huse (2010) was identified another aspect, that the presence of women on board contribute to reducing the level of interest conflict and ensure high a quality of development activities board of directors. In a recent study, and to conclude the advantages of gender diversity, Francoeur et al. (2008) was provides that the smoother communication and coordination associated with less diverse sets it comes to improve the advantages related to the knowledge, quality of decision making, perspective, creativity, and judgment brought forward by heterogeneous groups. . Similarly, other study was found that the presence of

female gender on board of directors is positively associated to companies' level of profitability Burke (1997).

Carter et al. (2003) and Erhardt et al. (2003) find a positive association between the percentage of women on board and firm value. Adams and Ferreira (2009) also support the view that increasing the percentage of women on board will enhance the board's successfulness as they will raise issues at board meetings that would not have been raised in homogenous boards. The positive correlation is more pronounced in, first, sectors where women form a larger share of the labour force (such as the services sector) and, second, where complementarities in skills and critical thinking are in high demand (such as high-tech and knowledge-intensive sectors).

Francoeur et al. (2008) reported a positive relationship between the proportion of women in senior management levels and abnormal returns in complex environments but no significant relationship concerning women on board. Nielsen and Huse (2010) also find a positive relationship between women on board and the board's strategic control. Carter et al. (2010) find no significant association between gender type and firm performance. Finally, Gul et al. (2011) argue the existence of a positive association between gender diversity and the level of stock price informativeness.

About the association between the presence of female gender on board of directors and corporate disclosure can be explained by the agency theory and the stakeholder theory. For the agency theory, it has been criticised with respect to the relationship between board diversity and firm value by Francoeur et al. (2008). In deed the authors provide that from an agency-theoretic standpoint, when one considers the overall impact of gender diversity on the various duties being assumed by a board of directors, it is thus impossible to tell, whether promoting greater female participation will enhance or impair corporate governance and, as a direct consequence, firm financial performance.

Also, they supported using the stakeholder theory rather than the agency theory and they argued also that there are many studies have confirmed the accuracy of stakeholder theory. In a similarly study, Carter et al. (2003) was used the agency theory to explain the association between presence of women on board and firm value. Gul et al. (2011) provide that the gender diversity in the boards of directors improve the quality of disclosure through better monitoring. Based on the agency theory, since presence of women on board increases board independence as discussed earlier, therefore, a positive relationship between presence of

women on board and corporate disclosure is expected. Accordingly, both of the agency theory and the stakeholder theory predict a positive association between presence of women on board and corporate disclosure.

In the literature concerning the separation of the roles of Director General and President of the Board of Directors, the conclusions are divergent: some are for the duality, other against. The supporters of the Duality (Godard 1998) see that the cumulation of the two functions allows having a good leader and it should therefore lead to a superior performance. While others argue that the duality appears as a hindrance to the performance.

The remainder of this paper is structured as follows. The A literature review and research hypotheses, followed by a description of the data and variables measurement. We then present the regression models and results, followed by concluding remarks.

## **1. Literature review and research hypotheses**

In the framework of this research, we are interested in several aspects of the board of directors including: The board size: the size of the Board of Directors is the subject of various debates. It reflects the number of directors within the Council saw that the latter are able to control the leaders. Indeed, some countries set an optimum size, while others choose a minimum and maximum size. In this context, Hermalin and Weisbach (2003) have concluded that the size of the board of directors is negatively correlated with the performance of companies' saw that the increase in the size leads to problems of coordination. Indeed, the agency theory (Jenson, 1993) finds that a high size motivates the domination and the authority of the leaders which gives birth to conflicts. In contrast, Pearce and Zahra 1992, Dalton et al. (1999) have shown a positive relationship between the size of the Board of Directors and the performance; therefore a board composed of a high number of administrators, can effectively control the decisions taken by the chief executive officer, of where this officer cannot take decisions against the interests of shareholders.

There are several studies investigates in whether or not the board size has an impact on the firm performance. Indeed, Coles et al. (2008) argues that the company tends to have larger boards, and it is likely to improve the level of financial performance. In contrast, Guest (2009) reports an inverse relationship linked the board size of directors and firm performance. Similar result provided by Reddy et al. (2008) for New Zealand listed-firms. Furthermore, the

median board size for New Zealand companies is six directors which is less than what Jensen and Milking (1976) suggests for companies in the U.S. However, the board of directors with small size in New Zealand firms fits with its small market criteria. Though the result is inconclusive, it is assumed that larger boards provide more expertise, greater management oversight and access to a wider range of resources; therefore to balance the skills required in the board room, New Zealand companies may require larger boards.

*H1: board size and firm performance are positively correlated.*

An independent director may improve the management hierarchy with the identities of 3rd party. For the potential investor who invests, the firm's value would elevate if outside directors are employed. With independent directors, investors will think that the financial and nonfinancial aspects of the firm are better than other without outside board member. Ertimura, et al. (2010) report that firm with independent directors would yield better performance than other without independent directors. Indeed, the independent directors are able to supervise and to control the operation of the internal of company through the implementation of their supervision authority. Also, Chau and Gray, (2010) provide that the performance of company with independent directors would be better than company without independent directors. Against the current, Linck et al. (2008) found a negative relationship between performance and the presence of independent directors within the board. They assume that the independent directors are incompetent to effectively control the leaders.

So this research establishes hypothesis 2 according to the literatures described above.

*Hypothesis 2: the level of independent director in board of directors and financial*

The stewardship theory offers a complementary perception states that the stakeholders are good stewards to firms' resources and can contribute in the improvement of her efficiency (Donaldson and Davis 1991). In a recent study, Gillan (2006) has provided a positive relationship between CEO duality and firm financial performance. Similarly, Faleye (2007) found that CEO duality is positively correlated to organizational complexity, the CEO reputation and the level of managerial ownership. These findings are similarly with those of Adams et al. (2005) and Jackling and Johl (2009) were argued that the shareholders' benefits are enhanced by combination of chairman and CEO function. The stewardship theory yields that the CEO duality founds in more consistent strategies' formulation and implementation; and subsequently better firm performance. The theory voices a view of a positive managerial

attitude and motivation such as a sense of achievement, altruism or responsibility, and may offer an alternative to agency theory explanation regarding a positive relationship between CEO duality and firm performance (Donaldson and al, 1991). For Rego and Wilson (2012) have found that the duality of functions is a signal from a low system of governance as it promotes the rooting of leaders. Indeed, Kaymak and BEKTAŞ (2008) have demonstrated that the duality is negatively related with the performance in Turkey. Therefore, under the stewardship framework, it is hypothesized that:

*H 3: duality of function of CEOs and Chairman of the Board and firm performance are positively correlated.*

Gender diversity studies have evolved into a challenging study issue in academia for the last years. Most of this studies have commenced from the fact that there are an enhancement numbers of women in top management as well as on boards of directors. Most of the studies in the area of the effect of gender diversity of the board are focused on profitability and, so far, there is no consensus in the literature review on the association between female presence and corporate performance. Several researches provide that gender diversity leads to increase corporate performance while others argue there is no such relationship (Carter, et al., 2003; Gregory-Smith, et al. 2014).

Similarly, the presence of women within the board is studied by various researchers including Singh et al., (2001,2008) for the context of Britain; Adams and Ferreira (2007, 2009) for the context of the United States, and Rose (2007) for the Danish enterprises. In this way, Vander and Ingley (2003) show that the presence of women in the board of directors has an impact on the composition of the board, of its characteristics and expertise provided by the presence of the feminine values which are involved in the process of control. In the same sequence of ideas, Adams and Ferreira (2009) stipulate that women directors to participate more actively in the meetings of the board. This promotes the control exercised by the board and the various committees. And therefore the diversity of gender is a source of alignment of the interests of the leaders on those of shareholders and therefore the Agency costs decrease.

Associated to the above is idea from prior literature on the existence of differences between men and women, risk taking, decision-making, communication and firm performance (Rose, 2007). Gender diversity literature emphasizes that diversity may enhance the board's decision making process as new perceptions on various issues are presented and combined with a mutual exchange of ideas between members of the board with dispersed backgrounds and

experience (Alvarez and McCaffery 2000). Watson et al., 1993, was argues that the gender diversity leads to increase the creativity and innovation, knowledge, and therefore becoming a competitive advantage.

The findings provided by Huse and Solberg (2006) reveal that the women on board decision making processes starts from the point that decision-making does not only take place within the boardroom but also before, during and after meetings as well as outside the meetings. This can be indicated that women are more prepared than men for meetings and are therefore they will be more likely to make the best decisions. Fehr-Duda et al., (2006) argues that the women have better multi-tasking skills, methods of risk management and communication abilities as compared to their male counterparts. These abilities make women more competent and willing to take on different responsibilities at the same time as well making them better at communication and management of different situations within and outside the firm. The findings provided by these two studies are similar than the argument raised by Burke (1997) “increasing women’s board presence enriches board information, perspectives, debate and decision making”.

In addition to improving the effectiveness of corporate governance, literature indicates that gender diversity also improves firm performance. A vast amount of literatures has examined the relationship between gender diversity and performance (Carter et al., 2003; Rose, 2007; Erhardt et al., 2003). Whilst the literature on gender diversity continues to grow, the empirical study on board gender diversity and corporate performance remains mixed and largely concentrated. Carter et al. (2003) have examined the association between board composition and firm value for Fortune 1000 firms and provide that there is a significant and positive relationship associate the fraction of women or minorities on the board to the firm value.

The authors found that firms making a commitment to enhance the number of women on board also to have more minorities on their boards of directors and vice versa. Similarly, the studies by Erhardt et al. (2003) argues a positive relationship associate the gender diversity and firm performance when they investigated the relationship between board composition diversity and the level of financial performance for large US firms and the relationship of board gender diversity to organizational performance respectively.

Inversely, Rose (2007) found there is no significant relationship between director’s gender diversity and financial performance. Indeed, Watson (2002) in a study based on the argument that female entrepreneurs are more likely to maximize the firm size thresholds (smaller than



those of their male counterparts) beyond which they would not prefer to expand hypothesizes that female controlled businesses will generate lower outputs compared to male controlled business.

Carter et al. (2003) provide a positive association between board diversity and firm value amongst Fortune 1000 firms measured by Tobin's Q. Similarly, Julizaerma and Sori (2012) provide a positive relationship linked the presence of female gender on the board of directors to the firm performance in Malaysian companies. Whereas, Rose (2007), Farrell and Hersch (2005) show that there is no effect of the diversity gender on the performance. Conversely, Wang and Clift (2009) argues that board gender diversity does not significantly improve accounting measures of financial performance measured by the return on equity (ROE) and the return on assets (ROA). Adams and Ferreira (2009) reports a negative relationship between gender diversity on the board of directors and firm performance, the authors suggest that board of directors with female gender may lead to over monitoring for companies that already have strong governance in place.

According to the theory of human capital (Westphal and Zajac, 1995), each member of the board constitutes a source of knowledge, expertise and skills and therefore a source of a better performance.

As well, the conclusions on the participation of women are mixed and in this context Kang et al., (2007) have concluded that the diversity of gender is a source of improvement of the yields of the company. This conclusion is confirmed by Carter et al. (2003), Adams and Ferreira (2003), Erhardt et al. (2003) who see that the presence of women is a source of new ideas, a better communication, creation of a approving debate.

In effect, Singh et al. (2008) conclude that the presence of women presents an asset within the board saw that they are highly qualified and have a good experience accumulated through their holdings in the board of the small and medium-sized enterprises. So, the diversity of the genus within the board to improve the image of the company.

Similarly, Farrell and Hersch (2005) even believe that the increase in the number of women in the advice is especially important to improve the image of the company in order to attract new investors. In this framework of ideas, in the United Kingdom in 2010, the participation of women is 12.5% to the board of directors of enterprises comprising the FTSE 100. Similarly, according to Le Figaro and Reuters (2011) in France, the presence of women in the boards of

directors of enterprises comprising the CAC 40 index has increased between 2009 and 2011 to reach a proportion of 20.7%. Similarly, according to IFA (2006) and Spencer Stuart (2011), Spain, the feminization rate of the Boards of Directors has increased from 3% to 10% between 2006 and 2011. We posit our hypothesis:

*H4. Board gender diversity and firm's financial performance are positively correlated.*

Knowing the average tenure of the CEO can help for the knowing of existing' possibility of convergence interests or entrenchment situation by the CEO. However, along with these positive connotations, more significantly, negative aspects can appear (Barroso et al., 2010). In this respect some studies suggest that long tenures are associated with a higher resistance to change (Musteen et al, 2006). Golden and Zajac (2001) suggest that extended tenure of board members is associated with a greater rigidity, and can result in trenching behind existing practices and procedures, with directors distancing themselves from new ideas. Moreover, according to Vafeas (2003), board members who serve longer on the board and who therefore have greater experience are more likely to form friendships and less likely to supervise the management. The information about the CEO tenure would serve to know if the rotation is relatively common, which gives a notion of efficiency in the functioning of the board of directors. Having established a relatively short tenures, should help to increase the capacity for monitoring of this body, because of the rotation promotes the appearance of new people and, therefore, different attitudes and views on certain situations or decisions. In this context, the following hypothesis is proposed.

*H5: There is a negative association between the length of the tenure of the CEO and firm performance.*

## **2. Data and variables measurement**

### **DATA**

The data for this study is based on CAC 40 companies. Following prior research like Owusu-Ansah (1998) and Akhtaruddin (2005), this study is limited to non-financial companies and therefore are ignored four financial institution refers to their different disclosing requirements in question. The sample period is 2011 to 2013. The remaining 108 firms representing a significant proportion (92.5% ) of the total population of French firms listed on the CAC 40 respectively comprise the final sample for this study. The sample composed by firm distributed as follows: 22.2% belongs to the manufacturing sector and the technology sector, followed by firms engaged in health activities (11.1%). No other general business sector

yielded more than 10% of the sample (Basic materials, the construction and building materials, Gas oil firms represent 8.3%; the trade activities 5.6% while firms pertaining to other tertiary/service business represent 14% of the sample). Our study seeks to explore the publicly available information, to achieve this, a web-based search was performed during the fourth quarter of 2014, locating the corporate websites of the sample firms was identified.

**Table 1.** CAC 40: French companies components our samples distributed by industry

Industry	Code	Number of firms in the sample per country and industry
Basic materials (BM)	1	3
Healthcare (Health)	2	4
Manufacturing (Manf)	3	8
Technology (Tech)	4	8
Trade (Trad)	5	2
Construction and building materials (CBM)	6	3
Other services (OS)	7	8
Total	7	36

### Variables measurement

Our study uses two financial attributes measures were return on equity (ROE) and return on assets (ROA). The OLS regression analysis includes both board composition characteristics and firm characteristics.

According to the agency theory the characteristics of the board can affect the quality and firm financial performance. Several recent theoretical and empirical studies examined this issue such as the studies of Clarkson et al, (2003), Barako et al. (2006) and Cheung (2010). These features concern: The size of the Board; The presence of independent directors; Duality of functions of Chief Executive Officer and Chairman of the Board; Number of years that a CEO has been in office as of the company's end of the fiscal year; and The gender diversity.

Board Size of directors was measured using the total number of directors in the board (Jackling and Johl, 2009).

The measure of the presence of independent directors the independent directors is the number of independent directors divided by total board size (Anderson and Reeb, 2003). Director in the board titles containing the terms "independent", "non-executive" or "outside" are categorized as independent directors and non-independent for otherwise. Adams and Ferreira (2009) found that the relation between board size, board independence and gender diversity can be largely mechanical and difficult to interpret.

Mak and Li (2001) argue that when a single individual wears the hats of both the CEO and chairman of the board, that provide the managerial dominance is greatly enhanced since that individual is more aligned with management than with stockholders. The duality of functions of Chief Executive Officer and Chairman of the Board is a dummy variable that takes a value

of 1 in the presence duality of functions and zero for otherwise (Hanifa and Cook, 2002; Gul and Leung, (2004).

Gender diversity measure: calculated by the average proportion of female directors on the boards of the sample firms during the research period (2011–2013). The use of a multi-period average measure allows better control of changes in board diversity, can increase the reliability and also makes the analysis more dynamic (Erhardt et al. 2003; Ryan and Haslam 2005). In addition to the gender test variable, the study further controls for the effects firm characteristic that have been found in prior research to have an influence on the financial performance. One departure from most of the earlier research on the board gender diversity is the inclusion of a control variable for prior performance, as per Erhardt et al. (2003). There are many arguments for adopting this method. Firstly, as provided by Erhardt et al. (2003), measuring the financial performance at two different points in time better controls for the market fluctuations and gives more consistent results. Secondly, an implantation of a control for prior financial performance reflects that the model' regression captures changes in firm performance from a prior year, and this can mitigate several biases that may arise due to country-level differences such as the variation in the accounting standards and rules. Finally, the effect of gender diversity on financial performance occurs over time, and the effect of strategic decision making on firm performance requires many years to materialize (Carter et al., 2010).

The CEO Tenure measured by the number of years that a CEO has been in office as of the company's end of the fiscal year.

Under this operationalization of different variables and in order to examine the multiple association between firm' financial performance and boards composition of CAC 40 firms, the generic mathematical equation of our analysis upon which an econometric model will be utilized for its verification, has the following form:

$$\text{PERFORM}_{it} = \beta_0 + \beta_1\text{BSIZE}_{it} + \beta_2\text{INDEP}_{it} + \beta_3\text{DUAL}_{it} + \beta_4\text{CEOTENUR}_{it} + \beta_5\text{GNDR}_{it} + \beta_6\text{GEAR}_{it} + \beta_7\text{LOGCP}_{it} + \text{INDUST}_{it} + e_{it} \quad (1) \quad \text{Where; } \text{PERFORM}_{it} = \{ \text{ROE}_{it}, \text{ROA}_{it} \}$$

**Table 2. Summarises the dependent and explanatory variables used in this study and their measurement.**

Variables	Label	Definition and computation
Return on equity	ROE	The return on equity equal to income before extraordinary items scaled by total equities at the end of the year.
Return on assets	ROA	The return on assets equal to income before extraordinary items scaled by total assets at the end of the year.
Board size	BSIZE	Number of directors
Board independence	BINDP	Percentage of independent directors
Duality	DUAL	Equal to 1 if one individual serves as both chairman and CEO and 0 for otherwise.
CEO Tenure	CEOTENUR	Number of years that a CEO has been in office as of the company's end of the fiscal year.
Gender diversity	GNDR	Percentage of female directors
Leverage ratio	GEAR	The total debt scaled by total assets at the end of the year.
Firm size	LOGCP	Is the natural logarithm of total assets at the end of the year.

### 3. The regression models and results

Panel A in the table 3 present the descriptive statistics for the dependent variable full sample used in the empirical model. From the descriptive statistics we observe that on mean the firm performance, respectively for the study' measurement (ROE, ROA), takes value of 19,81%, and 4,70495%. The level of financial performance measured by ROE range from 2,5% to 31,29%, whilst, the value takes by the second measurement range from -5,9% to 10%.

As illustrated in the Panel B of Table 3 summarize the segmentation of the level of financial performance based on the proportion of female in the board of directors of CAC 40 firms. The table present a significant difference between firms' financial performance that have no female directors and other that comprise female gender in the board directors. Indeed, the group of firms with gender diversity present a high level of financial performance such us measured by ROE and ROA in mean and median values then other firms without gender diversity. The result reveals significant differences in board characteristics between the sample countries. As shown in Panel B of Table 3, significant differences exist between firms that have female directors and those that do not. Most notably, firms with at least one female director outperform firms that do not have any female directors by a mean of 1.76% in ROA and 1% in ROE. These findings are consistent with previous studies, Mijntje (2011) who shows that results show that firms with women directors perform better than those without women on their boards.

Overall, the board of directors is characterised by a mean of size equal to 10.81 with a mean proportion of independent directors of 48% and 59% of combination between function of CEOs and Chairman of the Board. Table 3 reports the dispersion of CEO tenure between the firms of our sample. CEO's who retain their positions have been at their companies for 9.5 years, on average. Additionally, the average length of a CEO's tenure prior to their departure is about ten years. The mean leverage (GEAR) is high and amounts to 44.55% of total assets. The mean of firm size (logcp) is 7.01.

**Table 3.** Descriptive statistics

Panel A : descriptive statistics of dependent variable full sample (n = 108)						
PERFORM			Mean	Std. Dev.	Min	Max
ROE: return on equity			0.198125	0.0856976	0.025364	0.312897
ROA: return on assets			0.0470495	0.0315094	-0.059323	0.1
Panel B: comparison between firms that have no female directors and firms that have at least one female director.						
PERFORM	Num. of female director = 0		Num. of female director N>0		Difference	
	Mean	Median	Mean	Median	Mean	Median
ROE	0,201132	0,202578	0,190983	0,198642	0.010150***	0.003939***
ROA	0,052277	0,052401	0,03463	0,039867	0.017647***	0.012534***
Number of observations			76		32	
Panel C : independent variable full sample (n = 108)						
			Mean	Std. Dev.	Min	Max
BFSIZE			10.81	3.97	3	20
BINDP			0.48	0.34	0	1
DUAL			0.5929	0.401	0	1
CEOTENUR			9.45	9.04	3	12
GNDR			0.238186	0.100077	0	0.4
GEAR			0.445524	0.261107	0.1103	0.8871
LOGCP			7.023048	0.4399864	5.9884	8.2009

Table 4 shows the result regression. The findings found support for H1 (board size). Consistent with Saleh et al. (2005), it can be said that the board size is positively correlated to the ROE measurement of firm financial performance at the level of 10%. Consequently, it generates positive influence on the managers to mitigate the conflict of interest and personal interest and thus, able to ensure that the managers are strive to work for the betterment of firm performance. Whilst, it affect none significantly the firm performance such measured by

ROA. The findings support (*H 1*) and provide evidence that larger board size tends to ensure that the management control of the company is strong with ROE performance' measurement. Measured by Percentage of independent directors in the board, it found significantly correlated to the firm performance for both measurement respectively (ROE;  $P > 0.05$  and ROA;  $P > 0.01$ ). The board independence (*H 2*) has a significant association to the performance and subsequently support the expected hypotheses for both measurement of firm performance such as ROE and ROA. The finding reports that companies having more outside directors in the board are able to improve the firm value because there is no personal interest being exercised. The above result is contradict with those of Johari et al. (2008) and Saat et al. (2011) that gives evidence for a positive impact on performance due to more independent directors refer to the agency problem, think objectively since they are not hold executive position in firm and that can buy in external expertise which will yield company performance. Also, the results report a significant and positive effect of duality on the firm performance and subsequently support the expected hypotheses (*H 3*). These findings are supported by prior researches on the relationship between leadership structure and firm performance. In contrast Leng (2004) and Yasser (2011) reports that the duality leadership structure is not significant for the firm performance.

Similarly, the CEO tenure was found to have a negative significant impact on the firm performance for both measurement of performance. This implies that if the CEO tenure increases by one year, the firm performance will decrease by about respectively (for ROE measure: -2.639; and ROA measure -5.721). These negative aspects of COE tenure are supported by prior studies that have been conducted to investigate the relationship between CEO tenure and firms' performance found mixed results (Vafeas 2003; Barroso et al., 2010).

The literature argues that gender diversity in the board of directors adds value by improving board monitoring, providing board of directors' capital and legitimacy, bringing more perspectives to the table, enhancing the collaboration and mentoring of managers and improving the relationships with stakeholders. The results, presented in Table 4, indicate a positive association between board gender diversity and ROE (Model 1) and ROA (Model 2). These significant results may be due to the fact that gender diversity and argues to support the expected hypotheses. In similar vein, using data on Spanish Board of Directors composition, Campbell and Minguez-Vera (2010) provide that the percentage of women in the Board has a significantly positive impact on Tobin's Q value. Adams and Ferreira (2009) also report the positive effect of female directors on firm's outcomes,



Dobbin and Jung (2011) analyze whether effect the presence of female directors in the Board affects the company's profit and stock performance, their idea was motivated by the fact that women have been holding an increasing number of Board seats in U.S firms. The authors provide that firms with high number of women in the Board of Directors do not experience any increase or decrease in performance. On the other hand, the change in the number of female Board members appears to be significant for institutional investors.

Smith et al., (2006) stated the advantages that can be generated by the presence of gender diversity in board, where the women directors may better understand particular market conditions than men, which may bring more creativity and quality to board decision making. Indeed, higher gender diversity on the board may generate a better public image of the firm and enhance firm performance. Also, it is possible that the involvement of gender diversity in board explore external talent pool. Furthermore, the number of female top managers may positively influence the career development of women in lower positions by motivate them as inspiring model.

**Table 4.** Regression

	Model 1		Model 2	
BFSIZE	0.706	0.089***	1.243	0.211
BINDP	3.001	0.092***	2.555	0.008*
DUAL	1.975	0.007*	1.863	0.092***
CEOTENUR	-2.639	0.078***	-5.721	0.036**
GNDR	1.477	0.006*	1.333	0.087***
GEAR	-0.986	0.195	-3.312	0.142
LOGCP	1.751	0.056***	1.111	0.132
R-Squared	.579		.542	
Adj R-Squared	.538		.526	
F (7, 100)	9.034		7.865	
Prob > F	0.000		0.000	

Note: The t-statistics asterisks indicate significance at 0.10 (\*\*\*), 0.05 (\*\*), and 0.001 (\*) levels respectively.

## Conclusion

Several previous studies suggest that firm performance is significantly associated with board of directors' composition and structure. Using ROE and ROA as the proxy for firm performance, the purpose of the study specifically is to investigate the relationship between the boards' size, board independence, CEO duality, CEO tenure and gender diversity and tow measurement of performance in listed companies in CAC 40 for the period of 2011 to 2013. Referring to the literature review of corporate governance there are two alternative

perspectives about the CEO duality; the agency theory advocates that the separation of the two roles is an important determinant to a board's independence and effectiveness. In contrast, the stewardship theory postulates that firms with a unified leadership structure operate more efficiently through better coordination and unambiguous command, thus deal more effectively with strategic challenges. The leadership structure of CAC 40 companies is mostly characterized by the separation of roles of CEO and chairman and the mandatory turnover of CEO tenure.

The current study has both theoretical and practical implications. First and foremost, it takes considers the interactions between the board composition and firms characteristics when studying their effect on firm performance. Second, the empirical results show that firm financial performance increases with board independence, duality leadership structure and gender diversity firm size, and decreases with leverage level among French listed firms during the study period. The paper established how firm performance measuring shed light on the impact of board of directors' composition, firm size and leverage. The findings of the study reveal that most out of the relationship expected are supported with a high level of significance.

The suggestion in previous literature that French companies had a greater concern with financial matters was reinforced in the sample studied in this research. Investigating the factors of board's effectiveness with multiple theoretical lenses may help develop more effective corporate governance models. In view that our study is a first step in many regards, its limitations should be noted for example, this study is based on CAC 40 firms. However, a large sample and more recent data are required.

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