# Impact of dividend policy on earnings management and the moderating effect of the board of directors and the audit committees: The French case

Olfa Ben Salah 1,a and Anis Jarbouib

#### **Abstract**

**Research Question:** To what extent can governance mechanisms (audit committee and board of directors) affect the relationship between dividend policy and earnings management?

**Motivation:** The majority of the literature has showed that dividend policy can influence earnings management. However, the empirical results did not lead to the same results. Our study seeks to fill this gap by examining whether this impact can vary by taking into account certain moderating variables such as: the size of the board of directors, the number of board meetings, the independence and expertise of the members of the audit committees.

*Idea:* This study examines the moderating effect of certain variables related to the effectiveness of the board of directors and the audit committee on the impact of the dividend policy on earnings management.

*Data:* The authors selected French non-financial companies listed on the CAC All Tradable index during the 2008-2015 period.

**Tools:** To test study's hypotheses, the authors applied linear regression with a panel data using the datastream database. Generalized least squares method is used to estimate the models.

*Findings:* The results of this study show that the effect of the dividend policy on earnings management is more favorable in the case of companies where the board of directors is large.

**Contribution:** This study shows that dividend policy constitutes an objective of earnings management especially in the companies with boards made up of a large number of directors.

<sup>&</sup>lt;sup>a</sup> Faculty of Economics and Management of Sfax, University of Sfax, Tunisia

<sup>&</sup>lt;sup>b</sup> Higher Institute Of Business Administration of Sfax, University of Sfax, Tunisia

<sup>&</sup>lt;sup>1</sup> Corresponding author: Olfa Ben Salah can be contacted at: bensalaholfa@yahoo.fr

Investors and academics have an interest in better understanding the concepts: dividend policy and earnings management because the debates relating to these two variables have always been the subject of controversy. Thus, they can refer to corporate dividend policy as a mechanism for assessing the authenticity of corporate financial reports.

**Keywords:** Earnings management, dividend policy, board of directors, audit committees, moderating effect.

JEL codes: M41, M42

# 1. Introduction

Topics of dividend policy and earnings management have attracted considerable attention in the fields of accounting and financing (Jabbouri, 2016; Dewasiri *et al.*, 2019; Veganzones *et al.*, 2023). According to previous literature, Schipper (1989) and Healy and Wahlen (1999) state that firm managers engage in earnings management through the choice of accounting methods and the structuring of transactions. Moreover, companies can use multiple strategies of earnings management to manage their earnings. Dechow and Skinner (2000) put forward the idea that earnings management does not constitute fraud and is carried out in compliance with accounting principles. However, the financial situation does not accurately reflect the actual situation of the company (Ben Amar *et al.*, 2018).

It should be noted that we can distinguish between two perspectives of earnings management: the opportunistic perspective and the informational or signaling perspective. According to the opportunist perspective, managers have an interest in engaging in earnings management in order to maximize his wealth, to the detriment of the other stakeholders in the company (Schipper, 1989, Gavana *et al.*, 2022). Previous research suggests that managers engage in opportunistic earnings management for different reasons. For example, Halaoua *et al.* (2017) focused on earnings management through thresholds. Indeed, managers manipulate their earnings to reach or exceed the following result threshold: a certain level of dividends (Daniel *et al.*, 2008). Gül *et al.* (2009) put forward the idea that the informational perspective supposes that managers engage in earnings management to signal the future prospects of the firm. More specifically, Tucker and Zarowin (2006) point out that firms smooth earnings to provide investors with private information.

He *et al.* (2017), Smith and Pennathur (2017), Ben Amar *et al.* (2018), Ben Salah and Jarboui (2022), Handoyo and Kusumaningrum (2022) and Hussain and Akbar (2022) showed that dividend policy can influence earnings management. However, the empirical results did not lead to the same results. Therefore, we extend previous work by examining whether this impact can vary by taking into account certain

moderating variables such as: the size of the board of directors, the number of board meetings, the independence and expertise of the members of the audit committees.

Our research contributes to the finance and accounting literature in a number of ways. First, to our knowledge, little research has examined the impact of dividend policy on earnings management in France. Previous studies examining this impact have not yielded relevant results (Lee et al., 2015). Thus, several empirical models have been constructed in the light of the assumption that the two concepts "dividend" and "earnings management" are closely related. Our main conclusion is that the size of the board of directors negatively moderates the impact of the dividend policy on earnings management. Then, our research is carried out by addressing a sample of French companies. The use of such an institutional context is motivated by the fact that France is characterized by a model of corporate governance centered on stakeholders. LaPorta et al. (2000) and Ben Othman and Zeghal (2006) specified that this mode of governance is characterized by: a high degree of concentration of ownership, companies under family control, the presence of family members within the general management, weak protection of minority investors, the long-term "Bank-Company" relationship, a high dividend distribution rate and a significant scale of earnings management.

The remainder of the paper is organized as follows. The next section is focused on the literature review and hypotheses development. Section 3 discusses the methodology. Section 4 reports the empirical results. Section 5 concludes the paper.

# 2. Literature review and hypotheses development

#### 2.1 Literature review

Healy and Wahlen (1999) clarified that the incentives for earnings management are linked to capital markets, contracts and regulation. Additionally, Bowen *et al.* (1995) stipulate that the management of accounting data makes it possible to modify the perception of the various stakeholders of the reputation of the company, that is to say the capacity of the company to respect the implicit and explicit contracts and in particular implicit contracts.

#### 2.1.1 Incentives based on positive theory

Positive theory is an important theoretical stream aimed at explaining earnings management. This theory proposes three hypotheses, namely: the remuneration hypothesis, the debt hypothesis and the size hypothesis.

Berle and Means (1932) studied the consequences of the dissociation between ownership and decision-making functions in large American joint-stock companies: "managerial companies". Jensen and Meckling (1976: 308) extended this analysis

and considered an agency relationship as being: "a contract according to which one, or several persons (the principal) engage another person (the agent), to perform services on its behalf, which implies the delegation to the agent of a power of decision". Developments from agency theory allow us to conclude that the presence of information asymmetry between the principal and the agent can encourage managers to manage in order to maximize their well-being. Thus, and in order to limit the opportunistic behavior of managers, the agency theory specifies that the compensation contract must be based on performance in order to motivate them. But, the existence of such a profit-sharing contract will encourage managers to choose accounting practices that increase earnings.

Developments in agency theory have also highlighted the conflict of interest between shareholders and creditors. In order to guard against transfers of wealth made in favor of shareholders, loan contracts make it possible to protect creditors against some decisions relating to investment and financing operations taken by managers. It should be noted that the said contracts are based on restrictive clauses (covenants) which call on accounting figures and financial ratios. The research conducted by Smith and Warner (1979) specifies certain categories of restrictive covenants such as those which limit the distribution of dividends. It should be noted that failure to comply with these restrictive clauses entails renegotiation costs and the obligation to reimburse. Watts and Zimmerman (1986) assume, therefore, that these covenants motivate managers to commit to upward earnings management.

Another incentive to manage earnings is to control political costs. Referring to the regulation theory (Posner, 1974), political costs are determinants of choices and accounting policies of companies. Because of their high performance, large companies are more sensitive to political pressures than small ones. The amount of tax paid to the state is an essential component of political costs and the researchers point out that large firms bear higher taxes and, therefore, higher political costs. Thus, the managers of the firms have an interest in reducing the accounting result to escape from the interventions of the State.

#### 2.1.2 Incentives based on capital market theories

The main role of financial accounting is to provide useful information to the capital market. The publication of earnings, for example, constitutes privileged information made available to investors and has direct consequences on stock market prices. Thus, these theories advance the idea that accounting information constitutes a signal to participants in the capital markets. Investors can take this signal into account to assess the future performance of the company and, therefore, its value in the market. In fact, for several years, the signaling theory (Akerlof, 1970) has explained the role of published accounting figures at the market level. More specifically, in the event of a situation of informational asymmetry between managers and investors, accounting figures can serve as a means of signaling to the various partners in the capital markets.

#### 2.1.3 Implicit contracts

Bowen *et al.* (1995) point out that the implicit contracts between a firm and the stakeholders have no legal position to enforce the terms of negotiations. Baker *et al.* (1997) suggest that the terms of negotiations that a company is able to negotiate with its partners depend on the reputation of the company to respect its commitments. Mard (2004) points out that earnings management can support a policy of paying high dividends. He adds that in France, the implicit contract that binds the company and its shareholders in terms of the payment of dividends constitutes a reason to manage earnings. In fact, a company with a high dividend policy must have a minimum earning.

## 2.2 Hypotheses development

The asymmetry of information between shareholder and manager is relatively insignificant in the French context, since the shareholders are the main managers. Thus, it is likely that the main problem for managers is to limit agency costs between majority and minority shareholders in order to improve their reputations (Ducassy & Guyot, 2017). Note that it is important to focus on the substitution model since our hypotheses are tested on a sample of French companies. In fact, the objective is to limit the agency conflicts that arise between majority shareholders and minority shareholders. The substitution model assumes that good corporate governance will be negatively associated with the dividend distribution policy.

According to Jensen and Meckling (1976), the board of directors has a dual role, namely: a steering role and a control role. Greco (2011) considers that the problem of divergence of interests that exists between managers and shareholders is weak in the case where the members of the board of directors meet on a regular basis. The author suggests that the frequency of board meetings can serve to minimize the agency problem as the transfer of information to managers and shareholders becomes transparent, thereby enhancing the quality of the work process. Thus, regular board meetings reduce agency costs and have a direct effect on dividend policy (Lipton & Lorsch, 1992). In addition, Vafeas (1999) point out that frequent meetings of board members can be considered a good governance mechanism since they have a positive impact on the quality of decisions taken by the board. advice. Referring to the substitution model, companies with a good governance mechanism have no interest in paying a high amount of dividends.

Mehdi *et al.* (2017) note that the frequency of board meetings measures the intensity and effectiveness of control and discipline within the firm. This reduces agency costs and limits the need to pay large amounts of dividends. Elmagrhi *et al.* (2017) confirmed this statement and showed that the frequency of board meetings negatively influences dividend policy. Xie *et al.* (2003) suggest that the frequency

of meetings of board members is an important factor in restricting earnings management. Note that we specified that the dividend policy positively influences earnings management. It follows that the frequency of board meetings negatively affects the dividend policy, which in turn negatively influences earnings management. Thus, we believe that the impact of the dividend policy on earnings management will be more favorable in companies with audit committees that do not meet often. We then formulate the following hypothesis:

**H1:** The frequency of board meetings negatively moderates the impact of the dividend policy on earnings management.

Loderer and Peyer (2002) emphasize the importance of increasing the number of directors on the board. In fact, bringing together specialists in various domains helps to increase the value of companies. Referring to the substitution model, companies with a good governance mechanism have no interest in paying a high amount of dividends. Thus, we expect that the size of the board of directors is negatively related to the dividend policy. Note that we specified that the dividend policy positively influences earnings management. It follows that the size of the board of directors negatively affects the dividend policy which in turn negatively influences earnings management. Thus, we estimate that the impact of the dividend policy on earnings management will be more favorable in companies with small boards of directors. Thus, our hypothesis is formulated as follows:

**H2:** The size of the board of directors negatively moderates the impact of the dividend policy on earnings management.

Independent directors occupy an independent position and are often decision-makers for other companies or organizations, in order to preserve their professional reputation and in order not to compromise their chances of being directors in other companies (Fama & Jensen, 1983). They bring their expertise and objectivity, help to evaluate the company's projects and avoid the expropriation of the company's fortune by family members (Anderson & Reeb, 2004; Beasley, 1996). Fama and Jensen (1983) point out that outside directors have an incentive to monitor effectively, both to maintain and develop their reputation as independent directors and to signal to the market that they are acting in the best interests of shareholders. Given that good governance is often associated with the presence of independent directors on audit committees, we expect that companies with good governance structures will not tend to pay dividends.

There appears to be a lack of empirical evidence regarding the impact of audit committee independence on dividend distribution policy and, therefore, a fertile area for further research. Bedard *et al.* (2004) consider that the presence of independent directors within audit committees improves the effectiveness of the latter in controlling and limiting the opportunism and discretionary behavior of managers. Indeed, this work advances the idea that committees composed of external directors are independent and fulfill their control role in a sophisticated manner. It should also

be noted that the reports produced by some regulatory bodies (For example, Guide to good governance practices for Tunisian companies (Year, 2012), The high committee of corporate governance (France, 2013), etc.) recommended opening up boards of directors to external members. Bedard *et al.* (2004) emphasize that audit committees set up within boards of directors must be independent in order to protect the interests of shareholders.

The independence of the members of the audit committee is thus an important criterion having an effect on the reliability of the governance mechanisms. As a result, we expect the percentage of independent outside directors on the audit committee to enable the latter to better exercise its role of overseeing the governance process. Thus, the lack of presence of a significant proportion of independent directors on the audit committee is supposed to be detrimental to the effectiveness of management control. This shows that independent directors tend to better discipline the behavior of managers than dependent directors, to improve the quality of control and to weaken the possibility of conflict of interest between managers and shareholders. Within the framework of the French context, Mard (2004) showed that the dividend policy positively influences the management of the result. Based on these developments, it follows that the independence of audit committee members negatively affects the dividend policy, which in turn negatively influences earnings management. Thus, we believe that the impact of the dividend policy on earnings management will be more favorable in companies with audit committees made up of non-independent members. This leads to the following hypothesis:

*H3:* The independence of audit committee members negatively moderates the impact of the dividend policy on earnings management.

Researchers recommend that the majority of audit committee members be expert members (Ben Amar, 2014; Yang & Krishnan, 2005; Zalata *et al.*, 2018). As a result, the expertise of audit committee members is seen as an important corporate governance mechanism, reducing the need to pay larger dividends. Note that we specified that the dividend policy positively influences earnings management. It follows that the expertise of audit committee members negatively affects the dividend policy, which in turn negatively influences earnings management. Thus, we believe that the impact of the dividend policy on earnings management will be more favorable in companies with audit committees made up of non-expert members. Hence the following hypothesis:

**H4:** The expertise of audit committee members negatively moderates the impact of the dividend policy on earnings management.

# 3. Research methodology

In what follows, we will describe the sample, the tools and procedures applied for data collection and the empirical model.

### 3.1 Sample selection

Our initial sample consists of 311 companies listed on the CAC All Tradable index for the period 2008-2015. This index, which is not limited in number of stocks, reflects the evolution of all companies listed on Euronext Paris market that have an annual Free Float Velocity over 20% (Ajina et al., 2019). We opted for this segment because it is characterized by a certain stability of its composition. In addition, the population of listed companies has a relatively low mortality rate compared to unlisted companies (Hamdi et al., 2018). Finally, the CAC All Tradable index includes the largest French companies whose managers are committed to earnings management to mislead the company's stakeholders. Moreover, France is characterized by a stakeholder model of corporate governance taking into account the interests of several partners of the firm (Ben salah & Jarboui, 2022). This mode of governance can pave the way for earnings management and a very high dividend distribution rate (La Porta et al., 2000). We have eliminated financial companies because of the specificity of their accounting rules. We also excluded companies with missing data. The final sample is composed of only 280 companies. Table 1 presents the procedure for selecting our sample.

**Table 1. Sample selection** 

	No. of firms
French firms listed on the CAC All Tradable index	311
Financial firms	-29
Firms with missing data	-2
Total	280

#### 3.2 Variables measurement

### 3.2.1 Dependent variable: Earnings management

It is measured by the modified Jones model (Dechow et al., 1995).

$$TA_{it} = \alpha_0 + \alpha_1 \left( \frac{\Delta SALES_{it} - \Delta REC_{it}}{A_{it-1}} \right) + \alpha_2 \left( \frac{PPE_{it}}{A_{it-1}} \right) + \varepsilon_{it}$$
where  $TA$  is total accordance. A is total accordance at the beginning of year  $\Delta SALES$  is

where TA is total accruals. A is total assets at the beginning of year.  $\Delta SALES$  is changes in sales.  $\Delta REC$  is the change in net receivables. PPE represents the amount of property, plant and equipment. The residual  $\varepsilon_{it}$  from the regression is the measure of discretionary accruals.

#### 3.3.2 Independent variables

Several categories of explanatory variables can be used to test their effects on the earnings management.

#### Dividend policy

It is measured using the ratio of total cash dividends divided by total sales for the period (Hwang *et al.*, 2013; Jabbouri, 2016).

$$DPO = \frac{Total Cash Dividend}{Total Sales Revenues}$$

The frequency of board meetings (NBREC)

Mehdi *et al.* (2017) and Elmagrhi *et al.* (2017) have shown that the frequency of board meetings negatively influences dividend policy. The frequency of audit committee meetings (NBREC) is measured by the number of meetings held by the audit committee (Bédard *et al.*, 2004, Yang & Krishnan, 2005).

NBREC = The number of meetings held by the audit committee

Board Size (TACA)

Mehdi *et al.* (2017) showed that board size of directors positively influences dividend policy. We measure board size (TACA) by the number of directors on the board (Mehdi *et al.*, 2017; Ben Salah & Jarboui, 2022).

TACA = The number of directors on the board

*The independence of audit committee members (ACIND)* 

Empirical validation of the impact of external directors on the dividend distribution policy requires further exploration. In fact, few researchers have tested this hypothesis (Elmagrhi *et al.*, 2017). Al-Najjar and Hussainey (2009) have shown that the presence of outside directors has a negative influence on the dividend policy. Consistent with the work of Beasley (1996), we measure the independence of Audit Committee members (ACIND) by the percentage of outside directors on this committee.

ACIND = Proportion of independent directors on the audit committee

The expertise of audit committee members (ACEXP)

We measure the expertise of audit committee members (ACEXP) by the percentage of expert members on the audit committee (Ben Salah & Jarboui, 2022).

ACEXP = Proportion of audit committee members with accounting financial expertise

#### 3.2.3 Control variables

We considered firm size, financial leverage, return on assets, market-to-book ratio, sale growth of firm, risk of a firm and cash flows from operations as control variables. This choice can be justified by works that found these variables to be essential control variables when studying the determinants of earnings management.

### 3.3 Empirical models

To test our hypotheses, we estimate the following empirical models:

$$DA_{it} = \beta_0 + \beta_1 DPO_{it} + \beta_2 NBREC_{it} + \beta_3 NBRECDPO_{it} \beta_4 SIZE_{it} + \beta_5 DEBT_{it} + \beta_6 ROA_{it} + \beta_7 BM_{it} + \beta_8 GROW_{it} + \beta_9 RSQ_{it} + \beta_{10} CFO_{it} + \sum x_i Industry_{it} + \sum y_i Year_{it} + \varepsilon_{it}$$
(2)

$$\begin{aligned} DA_{it} &= \beta_0 + \beta_1 \, DPO_{it} + \beta_2 TACA_{it} + \beta_3 TACADPO_{it} \, \beta_4 \, SIZE_{it} + \beta_5 \, DEBT_{it} + \beta_6 ROA_{it} \\ &+ \beta_7 \, BM_{it} + \beta_8 GROW_{it} + \beta_9 \, RSQ_{it} + \beta_{10} \, CFO_{it} \\ &+ \sum x_i Industry_{it} + \sum y_i Year_{it} + \varepsilon_{it} \end{aligned} \tag{3}$$

$$DA_{it} = \beta_0 + \beta_1 DPO_{it} + \beta_2 ACIND_{it} + \beta_3 ACINDDPO_{it} \quad \beta_4 SIZE_{it} + \beta_5 DEBT_{it} + \beta_6 ROA_{it} + \beta_7 BM_{it} + \beta_8 GROW_{it} + \beta_9 RSQ_{it} + \beta_{10} CFO_{it} + \sum x_i Industry_{it} + \sum y_i Year_{it} + \varepsilon_{it}$$

$$(4)$$

$$\begin{aligned} DA_{it} &= \beta_{0} + \beta_{1} DPO_{it} + \beta_{2} ACEXP_{it} + \beta_{3} ACEXPDPO_{it} \ \beta_{4} SIZE_{it} + \beta_{5} DEBT_{it} + \beta_{6} ROA_{it} \\ &+ \beta_{7} BM_{it} + \beta_{8} GROW_{it} + \beta_{9} RSQ_{it} + \beta_{10} CFO_{it} \\ &+ \sum x_{i} Industry_{it} + \sum y_{i} Year_{it} + \varepsilon_{it} \end{aligned} \tag{5}$$

Where:

DA = earnings management, measured using discretionary accruals

*DPO* = dividend policy of firm, measured as: total cash dividend divided by total sales revenues of the period;

SIZE = firm size, measured as the nature logarithm of total assets;

*DEBT* = debt ratio, measured as long-term debt divided by total assets;

*ROA* = return on assets, measured as income before extraordinary items divided by total assets;

BM = market-to-book ratio, measured as the ratio of market value to book value;

GROW = sale growth of firm, measured as the annual growth rate of sale revenue;

RSQ = risk of a firm, measured as price of a share divided by earnings per share; and

*CFO* = cash flows from operations, measured as cash flows from operations divided by total assets;

NBREC = the frequency of board meetings, measured as the number of meetings held by the audit committee

TACA = Board Size, measured as the number of directors on the board;

ACIND = the independence of audit committee members, measured as proportion of independent directors on the audit committee; and

ACEXP = the expertise of audit committee members, measured as proportion of audit committee members with accounting financial expertise;

Industry is a dummy variable for industry membership based on nine industry groups in accordance with the ICB. To capture possible effects related to the year and the industry, year and industry dummies are incorporated.

# 4. Empirical results

# 4.1 Descriptive statistical analysis

The descriptive statistics of all the variables introduced at the level of the different empirical models are presented in Table 2. The means of DPO and DA are 0.013 and -0.051, respectively. As shown in Table 2, the mean value of the ACIND variable is 0.729. This result shows that the average value of independent directors in the audit committee is 72.9%. The ACEXP variable indicates that more than half of audit committees are made up of expert members. The average number of meetings held by the boards of directors is 7. The boards of directors are on average composed of 13 members.

**Table 2. Descriptive statistics** 

Variable	Mean	Median	SD	Observations
DA	-0.051	-0.054	0.01	2121
DPO	0.013	0.002	0.05	2121
SIZE	13.361	13.221	2.48	2121
DEBT	0.224	0.207	0.171	2121
ROA	-0.394	3.59	18.860	2108
BM	2.676	1.320	33.730	1943
GROW	0.147	0.039	1.23	2121
RSQ	10.789	9.951	21.018	2121
CFO	0.295	0.059	0.17	2121
ACIND	0.729	0.666	0.218	695
ACEXP	0.587	0.724	0.276	696
NBRE CA	7.6	7	2.95	798
TACA	13.057	13	3.928	833

# 4.2 Correlations analysis

As shown in Table 3, all the correlation coefficients are smaller than 0.75 which is the limit drawn by Kennedy (1985) and Neter *et al.* (1990). In addition, the variance inflation factor values all have a value below 10, the limit suggested by Myers (1990), so the correlation between the explanatory variables introduced in the different empirical models can be considered acceptable.

**Table 3. Pearson correlations** 

Variable	DPO	SIZE	DEBT	ROA	RSQ	GROW	BM	CFO	ACIND	ACEXP	NBRE CA	TACA
DPO	1	0.118**	-0.043	0.178*	-0.018	-0.005	0,001	0.161**	-0.012	0.068	-0.019	L
SIZE		-	0.234**	0.341*	0.115**	-0.071	-0,023	0.382**	-0.069	0.162**	0.215**	0.343**
DEBT			1	0.03	-0.025	-0.006	0,037	0.008	-0.047	0.003	0.164**	-0.04
ROA				Т	0.152*	-0.083*	-0.042*	0.746*	-0.147*	-0.024	0.043	-0.064*
RSQ					1	-0.036	-0,013	0.139**	0.021	0.018	0.038	-0.03
GROW						1	0,004	-0.028	0.034	-0.037	-0.004	-0.073
BM							-	-0.040*	-0.005	0.029	-0.014	0.15*
CFO								-	-0.054	-0.098	0.028	0.042
ACIND									1	990.0	-0.108	-0.185
ACEXP										1	0.049	0.154**
NBRE CA											1	9/0.0
TACA												1
Notes: *Significance at 10%; **significance at 5%	ficance at 1	.0%; **signif	icance at 5%	rY								

### **Accounting and Management Information Systems**

**Table 4. Tolerance and VIF values** 

Variables	Tolerance	VIF
DPO	0.934	1.07
SIZE	0.755	1.32
DEBT	0.901	1.11
ROA	0.417	2.39
RSQ	0.951	1.05
GROW	0.980	1.02
BM	0.972	1.03
CFO	0.437	2.29
ACIND	0.970	1.03
ACEXP	0.960	1.04
NBRE CA	0.934	1.07
TACA	0.865	1.16

# 4.3 Empirical tests and findings

Based on table 5, we can point out that our panel data contains a heteroscedasticity problem. Thus, when estimating empirical models we use in Stata the variants of the xtgls function which estimates the models by MCG. In what follows, we present the estimation results of our empirical models in Table 6.

**Table 5: Breusch-Pagan test results** 

	Model 2	Model 3	Model 4	Model 5
F	17457.02	1409.97	525.09	830.90
Prob > F	0.000	0.000	0.000	0.000
Heteroscedasticity	Presence	Presence	Presence	Presence

**Table 6: Regressions results** 

Variables	Model 2	el 2	Mod	Model 3	Mod	Model 4	Model 5	
	Coefficient	z-statistic	Coefficient	z-statistic	Coefficient	z-statistic	Coefficient	z-statistic
Intercept	-0.065***	-16.19	-0.065***	-25.51	-0.064***	-11.38	-0.067***	-14.60
DPO	0.049	1.62	-0.026	-1.13	0.034**	2.03	0.032	0.58
ACEXP	-0.000	-0.36						
ACEXPDPO	-0.005	-1.30						
NBREC			**000.0	3.19				
NBRECDPO			0.003	1.28				
TACA					-0.000	-0.46		
TACADPO					-0.002*	-1.82		
ACIND							0.000	0.99
ACINDDPO							-0.000	-0.55
SIZE	*000.0	2.70	**000.0	2.53	0.000.	2.32	*000.0	1.65
DEBT	0.015***	6.58	0.018***	8.40	0.003	1.37	0.014***	6.68
ROA	-0.000**	-2.20	*000.0	1.83	0.000	0.633	*000.0-	-0.20
RSQ	-0.000	-0.46	000.0	0.27	0.000	0.40	-0.000	-0.07

Variables	Model 2	el 2	Mod	Model 3	Model 4	lel 4	Model 5	
	Coefficient	z-statistic	Coefficient	Coefficient z-statistic	Coefficient	Coefficient z-statistic	Coefficient	z-statistic
GROW	0.007***	7.45	0.000	1.60	0.005***	11.06	0.007***	8.15
BM	0.000***	3.82	***0000.0	4.72	0.000***	0.93	0.000**	3.19
CFO	0.024***	3.53	0.003	0.97	-0.003	-0.82	0.016**	2.36
Ludusty	YES		YES		YES		YES	
Year	YES		YES		YES		YES	
No. of observations		647		669		749		642
Wald chi square		245.88***		279.14***		220.95***		281.90***
Prob> chi square		0.000		0.000		0.000		0.000
***Significance at 1%								
** Significance at 5%								
*Significance at 10%								

The study of the interaction effect of the TACADPO variable on the DA variable shows that this effect is negative and significant (H2 is supported). This suggests that the effect of the dividend policy on earnings management is more favorable in the case of companies where the board of directors is large. Such a result can be explained by the lack of consensus about the size of the board of directors. In fact, some researchers recommend opening up boards of directors to a large number of directors. Loderer and Peyer (2002) point out that a board of directors composed of a large number of directors could bring together specialists from various functional areas and thus contribute to increasing the value of companies. As already mentioned and referring to the surrogate model, good corporate governance will be negatively associated with the dividend distribution policy. Thus, firms give up distributing dividends to shareholders and have no interest in managing their results upwards.

All the other moderating variables related to corporate governance do not seem to moderate the impact of the dividend policy on earnings management. Indeed, the coefficients associated with the ACINDDPO variables; ACEXPDPO and NBRECDPO and are statistically insignificant (H1, H3 and H4 are therefore not supported). We can thus conclude that in the French context, these governance variables do not constitute a means of efficiency of the board of directors and thus reduce the accounting discretion practiced by the managers.

Table 6 displays a positive and statistically significant coefficient at a threshold of 1% for the variable (SIZE) for all the empirical models. We can thus note that large companies are committed to upward earnings management to signal their reputation to the various stakeholders in the company. Generally, the coefficient associated with the variable DEBT is positive and statistically significant at a threshold of 1%. This result allows us to conclude that managers who need to obtain loans from banks have an interest in managing the result upwards and this with the aim of presenting a better image of the company and obtaining loans in the best possible conditions (Mard, 2004). Note also that the estimation of the various empirical models shows that the variable (GROW) has a positive and significant effect at the 1% level. This result corroborates the work of Gul et al. (2009) who found that firms with strong future earnings growth manage earnings upwards more than other firms with less expected earnings growth. In accordance with previous work (Aygun et al., 2014; Neifar et al., 2016), the coefficient associated with the variable (ROA) is positive and statistically significant at a threshold of 1%. The Book to Market (BM) ratio positively influences earnings management in the French context. This result corroborates those found by Cohen and Zarowin (2010).

### 5. Conclusion

The objective of this study is to examine whether the impact of the dividend policy varies significantly with the characteristics related to the board of directors and the audit committee such as: the size of the board of directors, the number of meeting of

the board of directors, the independence and expertise of the members of the audit committees. The empirical results allowed us to conclude that the size of the board of directors negatively moderates the impact of the dividend policy on earnings management. Indeed, some researchers (Loderer & Peyer, 2002; Xie *et al.*, 2003; Uwuigbe *et al.*, 2015) recommend opening up boards of directors to a large number of directors because a board formed by a large number of directors could bring together specialists from various functional fields and thus contribute to increasing the value of the companies. The results are similar to the findings of Ben salah and Jarboui (2022), who claimed that the effect of earnings management on dividend policy varies significantly with the moderating effect of governance mechanisms.

Our results have important implications for investors, standard bodies and academics. Indeed, this study shows that dividend policy constitutes an objective of earnings management especially in the companies with boards made up of a large number of directors. Investors and academics have an interest in better understanding the concepts: dividend policy and earnings management because the debates relating to these two variables have always been the subject of controversy. Thus, they can refer to corporate dividend policy as a mechanism for assessing the authenticity of corporate financial reports.

Our study is subject to certain limitations. Remember that the measurement of the dividend policy still remains a real problem to be solved. Thus, a careful examination of certain measures of the dividend policy is essential for future research work. In addition, the measurement of earnings management using discretionary accruals is certainly questionable. Thus, researchers need to focus on more sophisticated models to detect earnings management.

# References

- Ajina, A., Lakhal, F., & Ayed, S. (2019) "Does corporate social responsibility reduce earnings management? The moderating role of corporate governance and ownership", *Management International*, vol. 2, no. 2: 45-55.
- Akerlof G. (1970) "The market for lemons: quality uncertainty and the market mechanism", *Quaterly Journal of Economics*, vol. 84, no. 3: 488-500.
- Al-Najjar, B., & Hussainey, K. (2009) "The association between dividend payout and outside directorships", *Journal of Applied Accounting Research*, vol. 10, no. 1: 4-19.
- Anderson, R. C., Mansi, S. A., & Reeb, D. M. (2004) "Board characteristics, accounting report integrity, and the cost of debt", *Journal of Accounting and Economics*, vol. 37, no. 3: 315-342.
- Aygun, M., Ic, S., & Sayim, M. (2014) "The Effects of corporate ownership structure and board size on earnings management: Evidence from Turkey", *International Journal of Business and Management*, vol. 9, no. 12: 123-132.

- Baker G., Gibbon R. et Murphy J K. (1997) "Implicit contracts and the theory of the firm," Working paper series, NBER.
- Beasley, M. S. (1996) "An empirical analysis of the relation between the board of director composition and financial statement fraud", *Accounting Review*, vol. 71, no. 4: 443-465.
- Bédard, J., Chtourou, S. M., & Courteau, L. (2004) "The effect of audit committee expertise, independence, and activity on aggressive earnings management", *Auditing: A Journal of Practice & Theory*, vol. 23, no. 2: 13-35.
- Ben Amar, A. (2014) "The effect of audit committee financial experts on earnings management", *International Journal of Managerial and Financial Accounting*, vol. 6, no. 2: 156-166.
- Ben Amar, A., Ben Salah, O., & Jarboui, A. (2018) "Do discretionary accruals affect firms' corporate dividend policy? Evidence from France", *Journal of Financial Reporting and Accounting*, vol. 16, no. 2: 333-347.
- Ben Othman, H., & Zeghal, D. (2006) "A study of earnings-management motives in the Anglo-American and Euro-Continental accounting models: The Canadian and French cases", *The International Journal of Accounting*, vol. 41, no. 4: 406-435.
- Ben Salah, O. and Jarboui, A. (2022) "Dividend policy, earnings management and the moderating effect of corporate governance in the French context", *Journal of Financial Economic Policy*, vol. 14, no. 3: 356-380.
- Berle, A. A., & Means, G. C. (1932) *The modern corporation and private property*, New Brunswick. *NJ: Transaction*.
- Bowen, R., DuCharme, L., Shores, D. (1995) "Stakeholders implicit claims and accounting method choice", *Journal of Accounting and Economics*, vol. 20, no. 3: 255-295.
- Cohen, D. A., & Zarowin, P. (2010) "Accrual-based and real earnings management activities around seasoned equity offerings", *Journal of Accounting and Economics*, vol. 50, no. 1: 2-19.
- Dechow, P. & Skinner, D. (2000) "Earnings management. Reconciling the views of accounting academics, practitioners and regulators", *Accounting Horizons*, vol. 14, no. 2: 235-250.
- Dewasiri, N. J., Yatiwelle Koralalage, W. B., Abdul Azeez, A., Jayarathne, P. G. S. A., Kuruppuarachchi, D., & Weerasinghe, V. A. (2019) "Determinants of dividend policy: evidence from an emerging and developing market", *Managerial Finance*, vol. 45, no. 3: 413-429.
- Ducassy, I., & Guyot, A. (2017) "Complex ownership structures, corporate governance and firm performance: The French context", *Research in International Business and Finance*, vol. 39, no. A: 291-306.
- Elmagrhi, M. H., Ntim, C. G., Crossley, R. M., Malagila, J. K., Fosu, S., & Vu, T. V. (2017) "Corporate governance and dividend pay-out policy in UK listed SMEs: The effects of corporate board characteristics", *International Journal of Accounting & Information Management*", vol. 25, no. 4: 459-483.

- Fama, E. F., & Jensen, M. C. (1983) "Separation of ownership and control", *The Journal of law and Economics*, vol. 26, no. 2: 301-325.
- Gavana, G., Gottardo, P., & Moisello, A. M. (2022) "Related party transactions and earnings management in family firms: the moderating role of board characteristics", *Journal of Family Business* Management, ahead-of-print
- Gul, F. A., Fung, S. Y. K., & Jaggi, B. (2009) "Earnings quality: Some evidence on the role of auditor tenure and auditors' industry expertise", *Journal of Accounting and Economics*, vol. 47, no. 3: 265-287.
- Halaoua, S.. Hamdi, B. & Mejri, T. (2017) "Earnings management to exceed thresholds in continental and Anglo-Saxon accounting models: The British and French cases", *Research in International Business and Finance*, vol. 39, no. A: 513-529.
- Hamdi, B., Mejri, T. & Haloua, S. (2018) "Gestion des résultats, seuils comptables et gouvernance d'entreprise: le cas des sociétés françaises", *Finance Contrôle Stratégie*, Nos 21/3.
- Handoyo, S., & Kusumaningrum, I. T. (2022) "Does corporate governance and other factors influence earnings management? A study on Indonesia's banking sector", *Humanities and Social Sciences Letters*, vol. 10, no. 1: 11-26.
- He, W., Ng, L., Zaiats, N., & Zhang, B. (2017) "Dividend policy and earnings management across countries", *Journal of Corporate Finance*, vol. 42, 267-286.
- Healy, P. M., & Wahlen, J. M. (1999) "A review of the earnings management literature and its implications for standard setting, *Accounting Horizons*, vol. 13, no. 4: 365-383.
- Hussain, A., & Akbar, M. (2022) "Dividend policy and earnings management: Do agency problem and financing constraints matter?", *Borsa Istanbul Review*, vol. 22, no. 5: 839-853.
- Hwang, L. S., Kim, H., Park, K., & Park, R. S. (2013) "Corporate governance and payout policy: Evidence from Korean business groups", *Pacific-Basin Finance Journal*, vol. 24, 179-198.
- Jabbouri, I. (2016) "Determinants of corporate dividend policy in emerging markets: Evidence from MENA stock markets", *Research in International Business and Finance*, 37, 283-298.
- Jensen. M. C. & Meckling, W. H. (1976) "Theory of the firm: Managerial behavior. agency costs and ownership structure", *Journal of Financial Economics*, vol. 3, no. 4: 305-360.
- Kennedy, B. W., Johansson, K., & Hudson, G. F. S. (1985) "Heritabilities and genetic correlations for backfat and age at 90 kg in performance-tested pigs", *Journal of Animal Science*, vol. 61, no. 1: 78-82.
- La Porta, R., Lopez-de-Silanes, F., Shleifer. A., & Vishny, R. W. (2000) "Agency problems and dividend policies around the world", *The Journal of Finance*, vol. 55, no. 1: 1-33.
- Lee, E., Walker, M., & Zhu, J. Y. (2015) "Corporate dividend payout and earnings management: Evidence from Chinese regulatory changes", *Available at SSRN* 2561717.
- Lipton, M., & Lorsch, J. W. (1992) "A modest proposal for improved corporate governance", *The Business Lawyer*, 59-77.

- Loderer, C., & Peyer, U. (2002) "Board overlap, seat accumulation and share prices", European Financial Management, vol. 8, no. 2: 165-192.
- Mard, Y. (2004) "Les sociétés françaises cotées gèrent-elles leurs chiffres comptables afin d'éviter les pertes et les baisses de résultats?", *Comptabilité*, *Contrôle*, *Audit*, Tome 10, vol. 2, 73-99.
- Mehdi, M., Sahut, J. M., & Teulon, F. (2017) "Do corporate governance and ownership structure impact dividend policy in emerging market during financial crisis?", *Journal of Applied Accounting Research*, vol. 18, no. 3: 274-297.
- Myers, R. H., & Myers, R. H. (1990) "Classical and modern regression with applications (Vol. 2). Belmont, CA: Duxbury Press.
- Neifar, S., Halioui, K., & Ben Abdelaziz, F. (2016) "The motivations of earnings management and financial aggressiveness in American firms listed on the NASDAQ 100", *Journal of Applied Accounting Research*, vol. 17, no. 4: 397-420
- Posner, R.A. (1974) "Theories of economic regulation", *Bell journal of economics and management science*", volume 5, 335-358.
- Schipper, K. (1989) "Commentary on earnings management", *Accounting Horizons*, vol. 3, no. 4: 91-102.
- Smith, D. D., Pennathur, A. K., & Marciniak, M. R. (2017) "Why do CEOs agree to the discipline of dividends?", *International Review of Financial Analysis*, vol.52, 38-48.
- Smith, R. & Warner, J. (1979) "On financial contracting: an analysis of bond covenants", *Journal of Financial Economics*, vol. 7, 117-161.
- Tucker, J. W. & Zarowin, P. A. (2006) "Does income smoothing improve earnings informativeness?", *The Accounting Review*, vol. 81, no. 1: 251-270.
- Uwuigbe, U., Uwuigbe, O. R., & Okorie, B. (2015) "Assessment of the effects of firms' characteristics on earnings management of listed firms in Nigeria", *Asian Economic and Financial Review*, vol. 5, no. 2: 218-228.
- Vafeas, N. (1999) "Board meeting frequency and firm performance", *Journal of Financial Economics*, vol. 53, no. 1: 113-142.
- Veganzones, D., Séverin, E., & Chlibi, S. (2023) "Influence of earnings management on forecasting corporate failure", *International Journal of Forecasting*, vol. 39, no. 1: 123-143.
- Watts, R.L. & Zimmerman, J. (1986) *Positive Accounting Theory*, Prentice Hall, Englewood Cliffs.
- Xie, B., Davidson III, W. N., & DaDalt, P. J. (2003) "Earnings management and corporate governance: the role of the board and the audit committee", *Journal of Corporate Finance*, vol. 9, no. 3: 295-316.
- Yang, J. S. & Krishnan, J. (2005) "Audit committees and quarterly earnings management", *International Journal of Auditing*, vol. 9, no. 3: 201-219.
- Zalata, A. M., Tauringana, V., & Tingbani, I. (2018) "Audit committee financial expertise, gender, and earnings management: Does gender of the financial expert matter?", *International Review of Financial Analysis*, vol. 55, no. C: 170-183.