

Internal Control Quality and Dividend Policy in French Setting: Does Managerial Ownership Concentration Matter?

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Abstract

Purpose: The paper examines the association between internal control quality (ICQ) and dividend policy in the French setting. It also investigates how managerial ownership concentration moderates this relationship.

Design/methodology/approach: We measure ICQ by using the framework developed by Michelin, et al. (2015).

Findings: Based on a sample of 760 firm-year observations over the period of 2011-2014, we find that ICQ is positively and significantly associated with dividend policy indicating that better controls increase dividend payout ratio. In addition, managerial ownership concentration moderates the association between ICQ and dividend policy since this association becomes non-significant under high percentage of managerial ownership.

Originality/value: Our study adds to the internal control literature by focusing on a developed civil law market. With respect to investors, our results also provide substantive evidence that ICQ plays an important role in increasing dividend payout ratio.

Keywords: ICQ, Dividend policy, Managerial ownership concentration, France

1. Introduction

Dividend payout and internal control are two of the most researched areas in financial economics literature. However, limited evidence has been reported with respect to the effect of ICQ on dividend payout. Besides, the study provides evidence from France, which has not been researched yet.

Chalmers, Hay, and Khlif (2019) noted in their literature review dealing with internal control that future empirical enquiries should explore on the economic consequences of ICQ on dividend policy in developed and emerging economies.

Accordingly, the main objective of this study is to investigate the impact of the quality of internal control on dividend payout ratio in France and to analyze the impact of ownership concentration on the same relationship for a sample of 190 French firms over the period of 2011-2014 in French setting.

Since ICQ leads generally to higher operational performance (Etengu and Amony, 2016; Kinyua, 2016; Njeri, 2014), and to higher earnings quality (Bédard, 2006 and Marinovic, 2013), this will translate into higher liquidity and profitability ratios leading to higher dividend pay-out ratios. Given the fact that management owners receive high compensation levels, we expect that this factor may affect dividend policy since these types of owners. For instance, beyond a certain limit of managerial ownership, the entrenchment effect emerges (Jensen and Ruback, 1983). Khlif et al. (2017, p. 380) suggest that “*when the proportion of insider ownership becomes greater, the monitoring capacity of outsiders is reduced*”. Under these circumstances, managers will entrench themselves and adopt strategies (e.g., increase managerial compensations) that maximize their wealth at the expense of other shareholders by being more reluctant in distributing dividends.

Our analysis incorporates several key measures to capture underlying constructs. First, to measure dividend policy, dividend payout ratio is used to examine it by taking dividend per share and divide it by earnings per share (Fraser and Ormiston, 2016). We try to measure ICQ by using the framework developed by Michelon, et al. (2015). Which consists of checklist including seven components (Internal environment, Objective setting and risk appetite-tolerance, Risk identification, Risk assessment, Action planning, Implementation of action plans and Communication and monitoring).

Based on a sample of 190 French non-financial firms over the period spanning from 2011 to 2014, we document a significant positive association between dividend policy and ICQ. When testing for the moderating effect of managerial ownership concentration on this association, we provide evidence that the positive association becomes insignificant. This finding implies that ICQ is an important element of dividend policy since it gives rise to the quality of positive earnings among investors and thus increases the dividend payout ratio.

This study contributes to accounting literature as follows. First, this paper explores the association between ICQ and dividend policy. Second, our study adds to the internal control literature by focusing on a developed market characterized by legal system dominated by civil law. Finally, our results provide substantive evidence that ICQ plays an important role in increasing dividend payout ratio. In addition, we provide empirical evidence that managerial ownership concentration moderates the association between ICQ and dividend policy in France.

The remainder of the paper is organized as follows. Section 2 reviews the previous literature and elaborates the hypotheses. Section 3 presents the research methodology. Section 4

explains the sample selection. Section 5 discusses the research findings. The final section summarizes the paper and provides some questions for further research.

2. Hypothesis Development

In this section, we develop theoretical basis for the association between ICQ and the dividend policy. We then try to justify how managerial ownership concentration may influence this relationship.

2.1 *ICQ and Dividend Policy*

Internal control represents a cornerstone for the improvement of transparency and annual reports credibility. The necessity to establish effective internal control system has received serious attention as an integral component of efficient management system.

According to Khlif et al., (2019), higher ICQ may play a critical role in enhancing corporate transparency and decreasing the level of uncertainty and information asymmetry among investors. ICQ leads generally to higher operational performance (Etengu and Amony, 2016; Kinyua, 2016; Njeri, 2014), and to higher earnings quality (Bédard, 2006 and Marinovic, 2013).

On the one hand, internal controls are essential for an organization, since internal control weaknesses can result in higher informational risks for stockholders which increase the firm's cost of capital, higher intentional bias in reported earnings, erroneous internal management reports (Feng et al. 2009) and ineffective business operations which might harm the firm's ability to realize profits. Thus, internal controls weaknesses have the potential to impair the firm value and therefore the performance of the company.

On the other hand, internal control weaknesses may increase the risk of error or managerial opportunism. Financial statements may be misstated because of unintentional errors caused by deficient control activities (Doyle et al., 2007). Accordingly, firm's performance will be lower which translates into lower dividend payout ratio.

Given the fact that ICQ leads to higher profitability and more credible earnings, this will provide management with more incentives to distribute dividends. Thus, the following hypothesis is stated:

H1: There is a positive relationship between ICQ and dividend policy in the French setting.

2.2 *The Moderating Effect of Managerial Ownership Concentration on the Association Between ICQ and Dividend Policy*

Ownership concentration is an internal governance mechanism that may influence management decision concerning dividend policy. The higher degree of managerial ownership may increase the likelihood of expropriating minority shareholders. For instance, management owners have the ability to decide about their compensations and dividend policy. Since they are considered as risk adverse owners, they will try to reduce dividend payout ratios.

Dividend policy is decided by board of directors and approved by the annual general meeting of shareholders. Management owners generally increase their wealth through compensations and bonuses. This will reduce their need to perceive dividends. Accordingly, if the firm is characterized by higher managerial ownership, these managers will reduce the likelihood of distributing high levels of dividends as a way of expropriating minority investors. The analysis of Chen et al., (2005) confirms a negative relationship between the managerial ownership and dividend policy.

Based on these theoretical predictions, the following hypothesis is tested:

H2: under high percentage of managerial ownership, the association between internal control quality and dividend policy becomes insignificant.

3. Data Collection

Our sample consists of the traded companies listed on the French stock exchange over the period spanning from 2011 to 2014. Companies included in our sample operate in two main industries: commercial and industrial sectors. We exclude financial and insurance firms since they are classified as highly regulated industries and we exclude companies with negative profits. Our sampling process yields 760 firm-year observations over the period 2011-2014. Table 1 presents more details about our sample.

Table 1. Sample description

Sectors / Years	Number of enterprises in the sample
Year: 2011-2014	
Industrial	72
commercial	118
Total	190
Totals	760

4. Methodology

4.1 Model

To test the empirical validity of the hypotheses formulated above, we estimate a panel data model with balanced data. Panel data analysis is a sequence of pictures of the same observations but at different points in time. The regression model for this research is performed as follows:

$$\begin{aligned}
 DPR_{it} = & \beta_0 + \beta_1(ICQ_{it}) + \beta_2 (MOWC_{it}) + \beta_3 (PROF_{it}) + \beta_4 (RISK_{it}) \\
 & + \beta_5 (LnCash_{it}) + \beta_6 (TAX_{it}) + \beta_7 (RVAR_{it}) + \beta_8 (ATYPE_{it}) + \varepsilon_{it} \quad (1)
 \end{aligned}$$

Where:

Dependent variable

DPR = Dividend payout ratio: dividend per share/earnings per share for firm *i* in period *t*.

Test variables:

ICQ= Internal control quality;

MOWC= Managerial ownership concentration: Percentage of Shares Owned by the managers

Control variables

PROF= Profitability: earnings before interest and taxes/total assets for firm *i* in period *t*;

RISK= variability in profit for firm *i* in period *t*;

LnCash= log of net cash flow for firm *i* in period *t*;

TAX= corporate tax divided by net profit before tax for firm *i* in period *t*;

RVAR= revenue variability: growth in sales for firm *i* in period *t*;

ATYPE= external auditor's size (dummy variable; 1 for Big four firms and 0 otherwise).

The first model investigates the direct effect of ICQ on the dividend payout ratio (H1). In order to test how managerial ownership concentration may affect the relationship between ICQ and dividend policy (H2), we introduce an interaction variable between ICQ and managerial ownership concentration that equals 1 if it has a score superior to the median and 0 otherwise. Such an interaction variable will be equal to ICQ score if the firm is characterized by high managerial ownership concentration and 0 otherwise.

4.2 Dividend Policy

Dividend payout ratio is calculated as the amount of dividends paid out to shareholders divided by the net income of the company (Fraser and Ormiston, 2016). This indicator is widely used by previous studies to measure dividend policy (e.g. Józwiak, 2015; Amidu and Abor, 2006; Mancinelli and Ozkan, 2006).

4.3 ICQ

Disclosure scores are based on content analysis to check whether an item is included or not in the annual reports. Michelon, Bozzolan and Beretta (2015) propose a framework that captures the variety and complexity of the content disclosed through the narratives on internal control system. Their internal control checklist includes seven internal control components defined by the COSO framework (2004) including: (i) Internal environment; (ii) Objective setting and definition of risk appetite/tolerance; (iii) Risk identification; (iv) Risk assessment; (v) Action planning; (vi) Implementation of action plans and (vii) Communication and monitoring.

The type of firm's objectives classification (*O_score*) is derived from the COSO Framework: (i) efficiency of operations; (ii) reliability of financial reporting; (iii) compliance with the law; (iv)

safeguarding of assets. The second dimension of the ICS disclosure framework considers also the types of actor (A_score) involved in internal control procedures. The actors interacting with internal control systems are : (i) Board of Directors; (ii) Audit Committee; (iii) Internal Control Supervisor; (iv) Internal Auditor; (v) Senior Management (CEO, CFO); (iv) Risk Committee - Risk Manager. The third dimension of the internal control checklist developed by Michelin et al. (2015) the type of control procedures and mechanisms implemented inside the company: (i) audit committee's working mechanisms; (ii) internal control guidelines and procedures; (iii) accountability definition; (iv) ethical codes - codes of conduct; (v) planning and budgeting; and (vi) risk reporting.

Following Michelin, et al. (2015), we collect data about internal control efficiency as follows. First, we define the main coding units dealing with the three components of ICQ. Second, if a sentence or a paragraph in the annual reports indicates an information about ICQ, we assign a value of 1 and 0 otherwise.

Finally, we compute our internal control disclosure index by making the summation of the total points obtained for the three components of internal control including the disclosure score of information on objectives (O_score), the disclosure score of information on actors (A_score) and the disclosure score of information on implementation mechanisms and procedures (M_score).

4.4 Control Variables

In our analysis, we include control variables that have been found in the literature to be correlated with the dividend payout ratio. For instance, profitability ratio has been shown to be positively associated with dividend payout ratio (Amidu and Abor, 2006; Kun Li and Chung-Hua, 2012). In addition, corporate risk, as measured by earning variability, may affect dividend policy (Pruitt and Gitman, 1991).

5. Results

5.1 Descriptive Statistics

Table 2 summarizes the descriptive statistics of variables included in the analysis. Dividend payout ratio variable has a mean of 22.200 percent and ranges from 0 to 88.900 percent. On average, firms disclose 0.447 items of information on quality of internal control. This variable has a standard deviation of 0.212 and ranges from 0.039 to 1. Managerial ownership has an average of 0.458 with a minimum of 0.096 and a maximum of 0.746. Profitability ratio has a mean of 52 percent and ranges from -1 to 0.700. The average of companies is risk 0.130. The log of cash flow has a mean of 5.310 and varies from 0.120 to 17. Corporate tax rate, measured as the corporate tax expenses divided by net profit before tax, has a mean of 27.3 percent and ranges from 0 to 96 percent. Finally, 81.700 % percent of firms in our sample are audited by Big 4 audit firms. This means that 153 sample companies were audited by big four audit firms and just 37 companies were audited by non-big four audit firms.

Table 2. Descriptive statistics of the studied variables

Variables	Mean	Std. deviation	Minimum	Maximum
DPR	0.222	0.217	0.001	0.889
ICQ	0.447	0.212	0.039	1
MCONC	0.458	0.223	0.096	0.746
PROF	0.520	0.139	-1.062	0.730
Risk	0.013	0.295	-0.047	2.419
Ln cash	5.310	5.065	0.120	17.148
Tax	0.273	0.167	0	0.960
RVAR	0.222	1.955	-1	46.633
ATYPE	0.817	0.387	0	1

Notes: This table shows the minimum, maximum, mean and standard deviation of every variable including control variables. DPR is the dividend payout ratio; ICQ is the internal control quality; MCONC is Managerial ownership concentration: Percentage of Shares Owned by the managers; PROF is earnings before interest and taxes/total assets; Risk is variability in profit; Ln cash is log of net cash flow; Tax is corporate tax divided by net profit before tax and ATYPE is dummy equaling 1 if the auditor is PricewaterhouseCoopers, Ernst and Young, KPMG or Deloitte.

5.2 Univariate Analysis

Table 3 reports bivariate statistical correlations between all variables. The analysis shows that dividend payout ratio is positively associated with ICQ with a Pearson coefficient accounting for (0.249; $p < 0.01$). This result provides a preliminary support for H1 predicting that ICQ is positively and significantly associated with dividend policy in the French setting. With respect to control variables, profitability is positively associated with dividend payout ratio with a Pearson coefficient accounting for (0.240; $p < 0.01$) implying that highly profitable firms tend to declare and pay high dividend.

5.3 Multivariate Analysis

Results of multivariate analysis are reported in table 4. In model 1, our finding provides evidence that ICQ is positively and significantly associated with dividend payout ratio ($t = 6.530$; $p = 0.000$) which provides support to hypothesis H1. This result suggests that firms with

strong ICQ will tend to use high dividend payout ratio. The coefficient of ICQ (0.247) indicates that if the score of internal control increased by 1 unit, the dividend payout ratio increased by 0.247 units. ICQ plays a significant role on dividend payout ratio.

With respect to control variables, neither Risk, nor log cash has a significant effect on dividend policy. Similarly, revenue variability and audit type does not exert a negative and significant effect on DPR. With regard to the remaining control variables, only corporate tax and profitability are positively and significantly associated with dividend policy.

The results indicate a statistically significant and positive relationship between profitability and the dividend payout ratio ($t = 5.970$; $p = 0.000$). This result suggests that, highly profitable firms tend to declare and pay high dividend. Thus, they would have exhibited high payout ratios. A firm's profitability is considered an essential factor in influencing dividend payment. The results also appear to be consistent with the findings of other empirical studies (e.g. Amidu and Abor, 2006).

The results of this study show a positive relationship between corporate tax and dividend payout ratios ($t = 1.960$; $p = 0.051$), indicating that, higher effective tax rate is associated with increase in dividend payout ratios. This position seems to be consistent with existing literature (e.g. Ali, Khan and Ahmed, 2017).

In an attempt to capture the weight of dividend payout ratio in explaining ICQ, we exclude this variable from the model 2 since it represents the most important predictor of dividend policy and we regress the remaining variables on our dependent variable. The Fisher value accounts for 5.67 (p -value = 0.000). The adjusted R-Square witnesses a significant decrease, moving from 12.06 per cent to 5.8 per cent (about 50 percent) implying that the quality of internal control plays an important role in explaining dividend policy. Accordingly, ICQ represents one of the important factors to determine dividend policy in French's setting.

Table 3. Univariate analysis for continuous variables: correlation matrix

Variables	DPR	ICQ	CONC	PROF	RISK	Ln cash	Tax	RVAR	ATYPR
DPR	1.000								
ICQ	0.249***	1.000							
MCONC	0.031	0.190	1.000						
PROF	0.240***	0.064	0.051	1.000					
RISK	0.045	0.026	0.013	0.293***	1.000				
Ln cash	0.079	0.049	-0.003	0.138**	0.079	1.000			
Tax	0.083	-0.066	-0.012	0.139**	0.016	0.017	1.000		
RVAR	-0.015	-0.006	0.021	-0.039	0.046	0.036	0.046	1.000	
ATYPR	0.045	0.278***	-0.034	-0.082	0.003	-0.064	-0.064	-0.007	1.000

Notes: DPR is the dividend payout ratio; ICQ is the internal control quality; MCONC is Managerial ownership concentration: Percentage of Shares Owned by the managers; PROF is

earnings before interest and taxes/total assets; Risk is variability in profit; Ln cash is log of net cash flow; Tax is corporate tax divided by net profit before tax and ATYPE is dummy equaling 1 if the auditor is PricewaterhouseCoopers, Ernst and Young, KPMG or Deloitte.

*Significant at 10 percent; **significant at 5 percent; ***significant at 1 percent.

5.4 The Moderating Role of Ownership Concentration

To test for the moderating effect of managerial ownership concentration on the relationship between ICQ and dividend policy in the French setting (hypothesis H2), we introduce an interaction variable between ICQ and managerial ownership concentration that equals 1 if the latter has a score superior to the median and 0 otherwise. Such an interaction variable (ICQ*MOWC) will be equal to ICQ score if the firm enjoys a high managerial ownership concentration and 0 otherwise.

As shown in the full model of Table 4, the relationship between dividend payout and ICQ*MOWC is not significant ($t=1.230$; $p=0.260$). In comparison with the results of the first regression, under high percentage of managerial ownership concentration, the association between ICQ and dividend policy becomes insignificant. This result suggests that, if the firm is characterized by higher managerial ownership, these managers will reduce the likelihood of distributing high levels of dividends as a way of expropriating minority investors. Consequently, this result supports the hypothesis H2.

6. Summary and Conclusions

In this paper, we investigate the association between ICQ and dividend policy in the French setting. We also explore whether managerial ownership concentration moderates the documented positive association between ICQ and dividend policy. Based on a sample of 760 company-year observations over the period of 2011-2014, we document a significant positive empirical association between ICQ and dividend payout ratio.

ICQ contributes significantly to the increasing of dividend payout ratio. It represents a key determinant of dividend policy. This relationship becomes insignificant under high percentage of managerial ownership.

Overall, our study contributes to the growing literature concerning the impact of ICQ on the economic consequence linked to investors through dividend policy in several ways. First, our findings help researchers who try to find guidance from the relevant literature, to increase a broad understanding of the effects of internal control and factors on corporate dividend policy. Second, the findings of this study have also implications to investors who prefer steady growth of dividends every year and are reluctant to invest to companies that apply a constant dividend policy. For investors, dividends serve as an important indicator of the strength and future prosperity of the business.

This study may suffer from some weaknesses dealing, especially, with way used to collect data concerning internal control quality. Chalmers et al. (2019) suggest the use of disclosure index to proxy for ICQ may introduce a bias linked to authors' judgements during the coding process.

Future empirical enquiries may investigate the relationship between ICQ and the cost of debt, the audit report lag and the cost of equity capital in such context, while exploring other moderating variables dealing with board and audit committee attributes. Survey methodology among internal auditors can be used to proxy for ICQ in the future investigations of internal control topics.

Table 4. Multiple regression analysis

Variables	Model 1: Overall sample	Model 2: Excluding internal control quality	Model 3: Managerial ownership concentration
Constant	0.078(-2.370)**	0.132 (4.020)***	0.163(4.58)***
ICQ*MOWC	-	-	0.092(1.230)
ICQ	0.247 (6.530)***	-	-
MOWC	-0.024 (-0.700)	0.021 (0.620)	-0.068(-1.920)
PROF	0.344(5.970)***	0.376(6.360)***	0.363(6.130)***
RISK	-0.002(-0.760)	0.002(-0.750)	-0.002(-0.750)
Ln cash	0.002(1.070)	0.002(1.420)	0.002(1.360)
Tax	0.087(1.960)*	0.070(1.520)	0.072(1.550)
RVAR	-0.001(-0.200)	-0.001(-0.220)	-0.001(-0.240)
ATYPE	0.002(0.080)	0.041(2.070)**	0.032(1.560)
2011	-0.013(0.590)	-0.018(-0.810)	-0.017(-0.770)
2013	-0.012(-0.550)	-0.064(-0.300)	-0.008(-0.370)
2014	-0.002(-0.100)	-0.006(0.290)	0.005(0.210)
N of observation	760	760	760
ADJ_R-Square	0.120	0.058	0.063
F (p-value)	9.32*** (0.000)	5.67*** (0.000)	5.64*** (0.000)
Max VIF	1.52	1.52	2.42

Notes: DPR is the dividend payout ratio; ICQ is the internal control quality; MCONC is Managerial ownership concentration: Percentage of Shares Owned by the managers; PROF is earnings before interest and taxes/total assets; Risk is variability in profit; Ln cash is log of net cash flow; Tax is corporate tax divided by net profit before tax and ATYPE is dummy equaling 1 if the auditor is PricewaterhouseCoopers, Ernst and Young, KPMG or Deloitte.

*Significant at 10 percent; **significant at 5 percent; ***significant at 1 percent

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Appendix

Appendix 1. Internal control system disclosure framework

	OBJECTIVES (O)	ACTORS (A)	IMPLEMENTATION MECHANISMS (M)	
	<ol style="list-style-type: none"> 1. Efficiency of operations 2. Reliability of Financial reporting 3. Compliance with the law 4. Safeguarding of assets 	<ol style="list-style-type: none"> 1. Board of Directors 2. Audit Committee 3. Internal Control Supervisor 4. Internal Auditor 5. Senior Management (CEO, CFO, Controller, etc.) 6. Risk Committee – Risk Manager 	<ol style="list-style-type: none"> 1. Audit Committee’s Working Mechanisms 2. Internal Control Guidelines and Procedures 3. Accountability definition 4. Ethical Codes – Codes of Conduct 5. Planning and budgeting 6. Risk Reporting 	
0. Internal environment				
1. Objective Setting and Risk Appetite-Tolerance				
2. Risk identification				
3. Risk Assessment				
4. Action Planning				
5. Implementation of action plans				
6. Communication and Monitoring				
Total	O_score	A_score	M-score	TICSD

Inspired from Michelon, Bozzolan and Beretta article (2014)

Source: Journal of Applied Accounting Research P.145.

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