THE EFFECT OF GOVERNANCE CHARACTERISTICS ON INFORMATION CONTENT OF DISCRETIONARY ACCRUALS: A COMPARATIVE STUDY BETWEEN FRANCE AND THE USA

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Abstract

The aim of this paper is to examine the relationship between strong governance structure and the information content of discretionary accruals in countries, which present differences in their legal system (USA and France). To approach the concept of corporate governance which recovers several dimensions: the board of directors, its committees, and ownership structure we used the method of Data Envelopment Analysis (DEA). The findings indicate that the association between stock return and discretionary accruals is greater for firms having a good corporate governance structure independently of the context of study. Further, discretionary accruals of firms having good corporate governance have a greater association with future profitability future only for American context.

Key words: discretionary accruals, information content, corporate governance, governance index.

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1.Introduction

Corporate governance deals with the mechanisms that ensure that investors in corporations get a fair return on their investments (Shleifer and Vishny, 1997). One of the important functions of corporate governance is to ensure the quality of the financial reporting. The issue of corporate governance has become more important due to the highly publicized financial reporting frauds at Enron, Worldcom, Adelphia and Parmalat, in particular, and a very high level of earnings restatements (Core, Holthausen, & Larcker, 1999; Loomis, 1999; Palmrose & Scholz 2004). Prior research has investigated the role of governance mechanisms in reducing fraudulent financial reporting (Beasley, 1996; Dechow et al., 1996; Jiambalvo, 1996). These studies have established a negative relationship between effective governance mechanisms and financial reporting decisions that are in violation of Generally Accepted Accounting Principles (GAAP). However, a relatively new area of research is the association between corporate governance and earnings management. Peasnell et al. (2000) document that earnings management is negatively associated with the independence of the board of directors, other studies have found an association between poor corporate governance and greater earnings management, implying lower quality (Bédard, et al. (2004); Xie et al., 2001; Klein, 2002a). Overall, empirical research has documented a direct link between governance mechanisms and the reliability of financial reporting.

The literature review allows us to determine that prior studies examine the individual impact of every corporate governance mechanism on the level of discretionary accruals like the board of directors, its composition, the managers' compensation, the ownership structure, the shareholders activism and takeovers mechanisms. Moreover, in a fundamental paper, La Porta et al.(2000) argue that the country's legal system (Common low or Civil low) is a fundamentally important corporate governance mechanism. In particular, the stock market development should be positively correlated with shareholder right.

Extending on extant literature, the purpose of this paper is to test the effect of corporate governance quality on the information content (pricing) of discretionary accruals in countries with different legal systems. This study is based on the signaling perspective, as Holthausen (1990) and Healy and Palepu (1993), this perspective assumes that managers with superior insider information can improve the value relevance of earnings by communicating their private information about the future profitability of the firm via discretionary accounting choices. A credible signal would reduce information asymmetry and result in more efficient



contracting (Dechow, 1994; Subramanyam, 1996; Watts & Zimmerman, 1986).To appreciate the information content (pricing) of discretionary accruals we use an association study.

Our sample consists of 894 firm-year observations for the years 1998 through 2003. For our main test, we decompose net income into cash flows from operations, nondiscretionary accruals, and discretionary accruals and regress stock returns on the three components, a dummy variable that captures the governance structure, and the interaction of governance structure with discretionary accruals.

To approach the concept of corporate governance that covers several measurements: the board of directors, its committees and ownership structure, we developed a corporate governance efficiency score employing the methodology of data envelopment analysis (DEA). The basic idea of DEA is to determine a production possibility frontier. This approach is a non-parametric application of the linear programming techniques estimates the border of efficiency, by a convex polyhedron enveloping the set of the observations; the efficient firms are on the border. As a nonparametric technique, DEA does not require an explicit specification of the underlying input-output relationship. It permits to determine efficiency scores of corporate governance and to classify the firms according to the efficiency of their corporate governance structure.

Overall, in the American context consistent with evidence reported in Subramanyam (1996) and Dechow (1994), we find that the association between discretionary accruals and stock return is stronger for firms with more efficient corporate governance. We also find evidence that the association between discretionary accruals and future profitability is greater for firms having more efficient corporate governance structure. This is consistent for firms with strong corporate governance quality being able to improve the ability of discretionary to predict future profitability. However, in the French context the results indicate that the pricing of discretionary accruals for firms with strong corporate governance can be explained by the stock market's functional fixation on earnings.

The remainder of the paper is organized as follows. Section 2 reviews related research. Section 3 present the sample selection and variable definitions. Section 4 presents Result analysis. Section 5 summarizes and concludes.

2. Review of related research

Several studies tend to show, with different approaches, that corporate governance improves financial reporting quality. We present possible approaches considered by researchers to approximate the quality of financial information: •Fraudulent financial information;

- earnings management;
- informativeness of earnings.

2.1.Consequences of a poor quality of financial statements

Beasley (1996) examined the relationship between board of directors and the likelihood of financial statement fraud. He finds that boards of no fraud firms are more likely to have a greater proportion of outside (non-employee) directors than fraudulent firms. Dechow et al.(1996) and Jiambalvo (1996) have investigated the role of governance mechanisms in reducing fraudulent financial reporting. These studies have established a negative governance relationship between effective mechanisms and financial reporting decisions that are in breach of GAAP. Abbot et al. (2002) confirmed the results of prior research and found that corporate governance had reduced fraud in financial reporting.

2.2. The association between corporate governance and earnings management

Peasnell et al. (2000), document showed that earnings management was negatively associated with the independence of the board of directors. They found empirical support for their prediction on a sample of UK firms. Klein (2002) examined the link between the independence of the board and audit committee and the magnitude of abnormal accruals. She founds that firms with a majority of independent board/audit committee members had a lower level of discretionary accruals. Klein's study demonstrated the importance of examining the quality of earnings and not just the incidence of earnings overstatement fraud. Bédard et al. (2004) predicted that Audit committee independence was also likely to be associated with a reduction in earnings management. Bédard et al. (2004) found an association between earnings management and board independence for a sample of US firms.

Davidson, Goodwin-Stewart *et al.* and Kent (2005), found a negative association between board and AC independence and earnings management in Australia. Overall, empirical research has found an association between poor corporate governance and greater earnings management, implying lower quality.



2.3. Earnings informativeness and corporate governance

Warfield, Wild and Wild (1995) found that managerial ownership was positively associated with earnings' explanatory power for returns. For East Asian corporations, Fan and Wong (2002) reported that earnings were less informative in the presence of concentrated ownership, pyramidal ownership structures, and cross-holdings. Similarly, Francis, Schipper and Vincent (2002) found evidence suggesting that a separation of voting rights and cash flow rights in US firms with dual class stock was associated with lower earnings informativeness. Finally, several papers have examined the link between ERCs(earnings response coefficients) and corporate governance by focusing on the board or audit committee (Wild (1994, 1996) and Vafeas (2000)). The papers written by Wild indicated that earnings were more informative for firms that voluntarily established audit committees during the 1966-1980 periods. Vafeas studies 350 large firms during the 1990-1994 periods and founds that earnings informativeness is unrelated to board independence but increased as board size decreases. Wild (1996) investigated the association of formation of an audit committee and quality of earnings. He founds that stock price increase was significantly greater in the presence of audit committees (relative to absence of audit committees).

3. Sample selection and variable definitions3.1. Sample selection

The study explores a first sample of 149 French companies listed on SBF 250 and a second constituted by 149 large Americans firms (belonging to Fortune 500) for a period of 6 years from 1998 to 2003. French firms belonged to eleven different sectors.

Similarly, the sample of American firms presented a variety sector (companies have been divided into 11 sectors of activity). Indeed, 14.76% of them belonged to the high technology sector and electronic engineering. The cosmetics, health and pharmaceuticals, and metals, chemicals, manufacturing and energy (11.41%) are the most present sectors in the sample. However, the building and construction materials sectors, as well as computers, multimedia, telecommunications and the internet sector are the less present in the final sample.

The accounting data were collected from COMPUSTAT and those related to governance variables were collected from the Proxy Statements and annual reports. The stock data was extracted from the site <u>www.yahoofinances.com</u>.

3.2. Accruals measurement

We use the cross-sectional version of the modified-Jones (1991) model to compute discretionary accruals. Under this model, the level of discretionary accruals for a particular firm is calculated as the difference between the firm's total accruals and its non-discretionary accruals (*NDAC*). As a first step, we estimate the cross-sectional modified Jones (1991) model shown below:

$$TAC_{it}/A_{it-1} = \alpha_i \left[1/A_{it-1} \right] + \beta_{1i} \left[\Delta REV_{it} - \Delta REC_{it} \right] / A_{it-1} + \beta_{2i} \left[PPE_{it}/A_{it-1} \right] + \varepsilon_{it}$$
(1)

Where:

 TAC_{it} = total accruals for firm *i* in year *t*, ΔREV_{it} = change in revenue for firm *i* between year *t* – 1 and *t*, PPE_{it} = gross property, plant and equipment for firm *i* in year *t*, Ait-1 = total assets for firm *i* at the end of the previous year, ΔREC_{it} = the change in receivables for firm *i* between year *t* – 1 and *t*.

The coefficient estimates from Eq. (1) are then used to estimate the firm-specific normal accruals for our sample firms. The abnormal accruals are estimated as the difference between the total accruals and the fitted normal accruals.

Table 1 reports the differences in discretionary accruals, non-discretionary accruals, total accruals

and cash flows between French and American contexts. I test the difference in average and median values between French and American context for each component. The results indicate that, for both contexts, discretionary accruals and total accruals are negative. Anova test indicate that the difference in mean is significant for discretionary accruals, non-discretionary accruals, total accruals and cash flows.



4.Result analysis 4.1. Measuring efficiency

The proposed Governance index is an efficient score, which reflects, for every firm, the distance that separate it from the efficiency frontier. We assume that each firm, mindful of its corporate governance structure, uses several inputs to generate outputs improving its performance. In this study, we assume that the board of director, the board committee (audit, remuneration and nomination), ownership structure, and the reputation of auditor characterize a firm's governance structure (Table 3 summarizes the descriptive statistics of corporate governance variables). We assume that corporate performance has three dimensions: investment, firm growth, and profitability. After calculating the efficient score, we obtain the following results:

For French context, Table 4 shows that for first years of study, companies are very efficient¹. Indeed, until 2001, the average scores of corporate governance exceed 0.70^2 . It is also noted that the number of efficient firms have decreased over time. In 1998, 55 firms were classified as efficient (score = 1) while in 2003 the number decreases to 32firms. The declining of corporate governance quality is difficult to explain. One possible explanation is that companies had implemented the Viénot reports recommendations (1995 and 1999) to improve corporate governance quality until 2001, but since 2002 additional improvements of corporate governance structure have been more expensive than their marginal advantage, which would discourage companies to implement them. However, on average French firms is characterized by efficient corporate governance structure.

However, for American context we can notice a net increase of the efficiency index during the same period. This increase had occurred between 1998 and 2003 and can be explained by spectacular falls of American large firms. Indeed, most of these bankruptcies were attributed to governance systems weaknesses and precisely to a dangerous management strategy, for manager benefice and often fraudulent like in Enron and WorldCom. Concerning the number of efficient firms, we noted that it had also increased during this period. Indeed, during 1994, we had 69 firms efficient while in 2003 the number increased considerably to 95

¹ An efficient firm has a combination of corporate governance practices that can maximize performance and therefore allows the minimization of the agency costs. ² A firm that is located on the border has an efficiency

rating of 1.

firms. According to these results, we can argue that companies are increasingly aware of the role of governance quality nowadays and therefore they try to improve it.

In addition, the difference between French and American companies in terms of overall average scores efficiencies are not significant (F =1, 854 and p = 0, 174).

4.2 Corporate governance quality and the pricing of discretionary accruals

Subramanyam (1996) found that the stock market had attached value to discretionary accruals. His findings were consistent with the notion that discretionary accruals, which reflected managers' private, inside information, improved the ability of earnings to reflect economic value of firm. I build upon Subramanyam's model that decomposes earnings into three components operating cash flows, nondiscretionary accruals, and discretionary accruals, by including corporate governance quality:



$RET_{it} = B_0 + B_1 CF_{it} + B_2 NDAC_{it} + B_3 DAC_{it} + B4 CG_{it} + B5 DAC_{it} * CG_{it} + \varepsilon_{it}$ (2)

We define the following variables. First, *RET*, the dependent variable, is the stock return calculated over a twelve-month period ending three months after the fiscal year end for year *t*. The independent variables are as follows: *CF* is cash flows from operations divided by total assets at the beginning of the year; *NDAC* is nondiscretionary accruals; *DAC* is discretionary accruals; *NDAC* and *DAC* are determined using the cross sectional modified Jones model (1995). CG³ equals 1 if the efficiency index calculated with DEA is 1 and 0 other. To compare the information content of discretionary accruals between countries, which present differences in their legal system (USA and French), we use the Vuong⁴ Z-Statistic.

The estimates of model (2) are shown in Table 5. The coefficients of CF, NDAC represent the information content of cash flows and nondiscretionary accruals are significant and positive in both contexts. This result is consistent with Dechow (1994) and Subramanyam (1996) findings indicating that the two components of result have information content. It should be noted that the difference between the coefficients CF, NDAC is a non-significant, indicating superiority for the American context. Thus, observing B5>0 is consistent with the nation that corporate governance quality influences the pricing of discretionary accruals and the association between discretionary accruals and stock return is greater for firms having a good corporate governance structure. Overall, the results indicate that while discretionary accruals of firms having a good corporate governance structure is associated with stock return, the magnitude of association is greater for firms having a good corporate governance structure for both contexts. In depending on these results, we retain the conviction of the superiority of discretionary accruals of firms, which have a good corporate governance mechanism in both contexts.

The R^2 for American context (10%) is larger in regressions relative to that for French context (7%). Table 6 reports the results of Vuong's test of nonnested models. The Z-statistic is significant, this finding indicates while discretionary accruals of firms having a good corporate governance mechanism is associated with stock return for both context, the magnitude of the association is greater for American firms compared to French context.

4.3. Corporate governance quality and the association between future profitability and current discretionary accrual

Next, I will examine whether governance quality will enhance the association between current discretionary accrual and future profitability. I estimate the model:



⁴ Vuong has provided a likelihood ratio test for model selection to test the null hypothesis that the two models are equally close to explaining the 'true data generating processes against the alternative that one model is closer. For detailed discussion on vuong test, see Dechow(1994), Appendx2pp.37-40.

 $NI_{it+1} = B_0 + B_1 CF_{it} + B_2 NDAC_{it} + B_3 DAC_{it} + B4 CG_{it} + B5 DAC_{it} * CG_{it} + \varepsilon_{it}$

(3)

Where NI_{t+1} is net income before extra ordinary items and discontinued operations for year t+1 deflated by total assets at the beginning of year t. other variables are the same as previously defined. I also estimate the model where the dependent variable is NI_{t+2} . Similarly, I estimate the model with CF_{t+1} or CF_{t+2} as the dependent variable.

For the American context, consistent with Subramanyam (1996), I find that all three current components of earnings are associated with future level of earnings and cash flows from operations. Second, once again, the magnitude of association is greater for firms having a good corporate governance structure. This is consistent with good corporate governance structure, which could improve the ability of discretionary accruals and, consequently, improve future level of profitability. These findings are consistent with the information value of discretionary accruals i.e. managers using discretionary accruals to communicate their private knowledge about future profitability. In brief, in American context market participant assign a high value to discretionary accruals for firms having a good corporate governance structure because of their greater association with future level of profitability. However, Xie (2001) found that discretionary accruals were not associated with future profitability because he used a different sample and a different time period⁵.

For the French sample, the results indicate that the association between discretionary accruals and future earning (for one year and two years ahead) and cash flow (two-year ahead) is statically insignificant. This is consistent with good corporate governance structure having no significant effect on the ability of discretionary accruals to improve the prediction of future level of profitability.

These results indicate for American context that discretionary accruals may serve to signal management's private credible information on firm values. However, for French context the results indicate that the pricing of discretionary accruals of firms with strong corporate governance can be explained by the stock market functionally fixated on earnings. These results seem to indicate that the information content is the highest in common law countries (USA), where investor protection is greatest the lowest in French civil law countries, where investor protection is the weakest. These results confirm LaPorta *et al.* (1998) hypothesize that the legal system is a fundamentally important corporate governance mechanism.

4.4. Additional tests

In order to validate our results, we conduct several additional tests. First, to alleviate concerns that our results are driven by our accrual specification, as Wei Jiang et al.'s (2008), we consider an alternative measure of abnormal accruals based on Dechow et al.'s (2003) forward-looking model:



⁵The sample consists of 7,506 firms and 56,692 firm-year observations from 1971 to 1992.

 $TAC_{i} / A_{ij} = [\alpha [1/A_{i t-1}] + \beta_{1j} [\Delta(1+k) (REV_{it} / A_{i t-1} - REC_{i} / A_{i t-1})] + \beta_{2j} [PPE_{i} / A_{i t-1}] + \beta_{3}Lag_{it}TA + \beta_{4}GR_{sales_{it}} + \varepsilon_{it}$

Where:

k the slope coefficient from a regression of ΔREV_{it} on ΔREC_{it} ; LagTA: firm is total accruals from year t-1, scaled by year t-2 total assets; GR_Sales: the change in sales from the current year to next scaled by current sales.

model The forward-looking makes three adjustments to the modified Jones model. First, rather than assuming all credit sales are discretionary; the model estimates the "expected" portion of the increase in credit sales, as represented by the slope coefficient k from the regression of ΔREV on ΔREC_{ii} . Hence, the models subtract the full amount of the change and adds back the expected change (which is k multiplied by the change in sales). Second, some proportion of total accruals is assumed predictable based on last year's total accruals. Thus, the lagged value of total accruals (TA_{it-1}) is included to capture the predictable component. Third, the modified Jones model classifies increases in inventory in anticipation of higher sales as earnings management. Dechow et al. (2003) argued that such an increase in inventory balance was a rational one and, hence, included a measure of future sales growth. (GR_Sales), to correct for such misclassifications. Thus, the forward-looking model uses future period data to estimate current period accruals. Dechow et al. (2003) provided empirical evidence that their model had higher explanatory power. When we reestimate all of our regressions using the forward-looking measure, the results are consistent to those reported using the modified Jones model measure.

Second, I reestimate model (1) by interacting corporate governance quality with both nondiscretionary accruals and operating cash flows in addition to discretionary accruals and the results are in table 11. As previously, discretionary accruals are more subjective and reflect a higher degree of managerial judgment relative to nondiscretionary accruals. other In words, nondiscretionary accruals offer fewer "degrees of freedom" compared to discretionary accruals to engage in earnings management for private gain in order to communicate inside information to outsiders. Similarly, cash flows are easier to observe and control relative to measure,

discretionary accruals. Thus, the comparative advantage of good corporate governance structure should be more evident in the pricing of discretionary accruals relative to the pricing of nondiscretionary accruals and cash flows. If the methodology used to separate accruals into and nondiscretionary discretionary accruals accruals is reasonable, then one would expect that the coefficient for |DAC*CG|> the coefficient for NDAC*CGI and ICF*CGI. Results in table 9 are consistent with these predictions. As summary, these findings suggest that corporate governance quality conditions only discretionary accruals.

5. Summary and conclusions

One notable feature of accruals is that accruals let managers communicate their inside information and thereby improve the ability of earnings to reflect underlying ecinomic value. However opportunistic management of accruals, if left undetected, can seriously undermine the informativeness of Good corporate governance reported accrual. quality can enhance the credibility of accruals. The objective of the study is to examine the relationship between governance quality and the information content of discretionary accruals in country with different legal system. The main contributions of the study rely on the methodological front while measuring efficient governance structure with DEA. As such, this study highlights the potential of applying tools and methods developed in the operational research field to analyze untraditional sets of problems.

The findings indicate, for American context, that the association between stock return and discretionary accruals is greater for firms having good corporate governance mechanisms. Further, discretionary accruals of firms having good corporate governance mechanisms have a greater association with future profitability. For French context, the results indicate that the pricing of discretionary accruals of firms with strong corporate governance can be explained by the stock market functionally fixates on earnings. These findings are consistent with LaPorta, et al. (1998) hypothesize that the legal system is a fundamentally important corporate governance mechanism. In particular, they argue that the extent to which a country's laws protect investors rights and the extent to which those laws are enforced are the most basic determinants of the ways in which corporate finance and corporate governance evolve in that country.

References

- Bédard J., Chtourou S., Courteau L. 2004, The effects of audit committee expertise, independence, and activity on aggressive earnings management, *Auditing, A Journal of Practice and Theory*, vol. 23 n° 2, pp.13-36.
- 2. Beasley, M. S. 1996, An empirical analysis of the relation between the board of director, composition and financial statement fraud, *The Accounting Review* 71, pp. 443–465.
- Biao Xie, Wallace N. Davidson, Peter JDaDalt. 2002, Earnings management and corporate governance: the role of the board and the audit committee, Southern Illinois University, Working paper www.ssrn.com.
- 4. Blue Ribbon Committee. 1999, Report and recommendations of the blue ribbon committee on improving the effectiveness of corporate audit committees, NYSE and National Association of Securities Dealers .
- 5. Cohen, Dey, and Lys, 2008, "Real and Accrualbased Earnings Management in the pre and post-Sarbanes Oxley Periods". *The Accounting Review*, May 2008, 82(3): 757-787.
- 6. Davidson R., J. Goodwin-Stewart, P. Kent 2005, Internal governance structures and earnings management , *Accounting and Finance* pp. 241-267.
- Dechow P., 1994, Accounting earnings and cash-flows as measures of firm performance, *Journal of Accounting and Economics*, vol. 18, n°1, pp. 3-42.
- Dechow P., Sloan R., Sweeney A. 1995, Detecting earnings management, *the Accounting Review*, Vol. 70, N°2, April, pp. 193-225.
- Drobetz,W., Schillhofer, A., Zimmermann, H. 2004, Corporate governance and expected stock returns: evidence from germany, *European Financial Management*, vol 10, and pp.267– 293.
- Godard L., Schatt A. 2005a, Caractéristiques et fonctionnement des conseils d'administration : un état des lieux, *Revue Française de Gestion*, vol. 31, n° 158, pp. 69-87.
- Godard L., Schatt A. 2005b, Les déterminants de la qualité des conseils d'administration français, *Gestion 2000*, vol. 4, n° juillet- août, pp. 81-100.
- Holthausen R.W., Larcker D., Sloan R. 1995, Annual bonus schemes and the manipulation of earnings, *Journal of accounting and economics*, volume 19, n° 1, pp. 29-74.
- 13. Hong Xie .2001, The mispricing of abnormal accruals, *The accounting review*, vol 76,N°3.pp 357-373.
- Jones, J. 1991, Earnings management during import relief investigations, *Journal of Accounting Research*, volume 29, pp.193-228.

- 15. Klein A. 2002, Audit committee, board of directors and earnings management, *Journal of accounting and economics*, volume33, pp.375-400.
- La porta, R, Lopez de Silianes, F. and Shleiver, A., Vishy, R.W, 1997, legal determinants of external finance, *Journal of Finance*, vol. 52, n°2, pp .1131-1150.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A. and Vishny, R. W. (1998) 'Law and finance', *Journal of Political Economy*, **106**, 1113–1155.
- La porta, R, Lopez de Silianes, F., Shleiver, A.and Vishy, R.W, 1999, Corporate ownership around the world, *Journal of Finance*, vol. 54, n°2, pp.471-517.
- La porta, R, Lopez de Silianes, F., Shleiver, A. and Vishy, R.W, 2000, investor protection and corporate governance, *Journal of Finance Economics*, vol58, n°1-2, pp.3-27.
- 20. Lehman, E., Warning, S. Weigand, J. 2002, efficient governance structures, corporate investment and profitability: a combined DEA and panel regression approach, *Working paper* <u>www.ssrn.com</u>.
- Peasnell K., Pope P., Young S 2000, Board composition and earnings engagement: do outside directors constrain abnormal accruals?, Working paper University of Lancaster, Lancaster, UK) www.ssrn.com.
- Peasnell K., Pope P., Young S. 2000, Detecting earnings management using crosssectional abnormal accruals models Accounting and Business Research, Vol. 30, Issue 4, pp. 313-326.
- 23. Rapport Bouton 2002, Pour un meilleur gouvernement des entreprises cotées, rapport groupe de travail conjoint AGREF /AFEP-MEDEF.
- 24. Rapport Viénot 1995, le conseil d'administration des sociétés cotées, AFFP-CNFP.
- 25. Rapport Viénot 1999, rapport du comité sur le gouvernement d'entreprise, AFEP-MEDAEF.
- 26. Subramanyam K.R. 1996, The Pricing of discretionary accruals, *Journal of accounting and economics*, volume 22, pp. 249-281.
- 27. Vafeas, N. 2000, Board structure and the informativeness of earnings, *Journal of Accounting and Public Policy*, 19, pp.139-160.
- 28. Vuong, Q.H., 1989, Likelihood ratio tests for model selection and non-nested hypothesis, *Econometrica* 57, 307-333.
- 29. Wei Jiang, Picheng et, Asokan Anandarajan, 2008, The association between corporate governance and earnings quality: Further evidence using the GOV-Score, *Advances in Accounting, incorporating Advances in International Accounting,* vol.24, pp. 191–201.
- 30. Xie B., Davidson W., DaHalt. 2002, Earnings management and corporate governance: the role of the board and the audit committee, *journal of corporate finance*, pp. 295-316.
- 31. Zang, A. (2007). Evidence of the tradeoff between real manipulation and accrual manipulation. Working paper, University of Rochester.



		Mean Median		Std.	Anov	Anova Test		
Wiean		Wiedli	Wiedian	Deviation	F	Sig		
AD	France	-0,101	-0,018	0,241				
	EU	-0,197	0,072	5,630	89,62	0,000		
AND	France	0,018	-0,026	0,201				
	EU	-0,183	-0,020	6,590	173,64	0,000		
CF	France	0,180	0,072	0,090				
	EU	0,191	0,097	0,979	0,02	0,899		
ACT	France	-0,136	0,097	0,090				
	EU	-0,076	-0,047	1,206	39,32	0,000		

Table 1. Descriptive statistics of	of earnings component
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Sample of 149 Americans and French firms from fortune 500 for a period 1998-2003;

Table 2. Description of variables

Directors and officers ownership	Percentage of capital owned by the directors and officers
Separate chair dummy Board size	Indicator variable with value of 1 if the same person holds the roles of chair and CEO Total number of directors
% Outside directors	Ratio of outside directors to total members of board
Board meetings Audit quality	Number of the board meeting Indicator variable with value of 1 if the auditor is a Big 4
Existence of an audit committee audit committee size	Indicator variable with value of 1 if the audit committee exists Size of the audit committee
% Outside directors	Ratio of outside directors to total members of audit committee
audit committee meetings Existence of nominating committee's	Number of the audit committee meeting Indicator variable with value of 1 if the nominating committee exists
nominating committee size % Outside directors nominating committee meetings	Size of the nominating committee Ratio of outside directors to total members of nominating committee Number of the nominating committee meeting
Existence of a remuneration committee	Indicator variable with value of 1 if remuneration committee exists
remuneration committee size	Size of remuneration committee
% Outside directors	Ratio of outside directors to total members of remuneration committee
remuneration committee meetings DAC	Number of the remuneration committee meeting discretionary accruals calculated from the modified-Jones Model
NDAC	non-discretionary accruals calculated from the modified- Jones model
CF	cash flows from operation
CG	Indicator variable with value of 1 if the governance index is 1(calculated with DEA method)
RET	Where Re is the stock return calculated over a twelvemonth period ending three months after the fiscal year end for year t

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	-		Minimum		Maximum		variables quantita Moyenne		Ecart type		
	Ν	Fr	USA	Fr	USA	Fr	USA	Fr	USA	F	Sig
Directors and officers ownership	894	0	0 99	42	53,26	0,17	22,28	1,57	499, 00	00	89
Board size	894	0	0	95	75	48,25	0,06	22,34	0,51	472,67	00
% Outside directors	894	3	4	23	23	9,73	10,96	3,90	2,93	55,21	00
Board meetings	894	0	8	100	100	45,00	84,60	0,45	0,84	408,00	00
audit committee size	894	2	2	12	13	6,00	7,80	0,83	1,78	95,40	00
% Outside directors	894	0	0	5	7	3,30	4,85	0,75	2,18	40,00	00
audit committee meetings	894	0	0	100	100	85,51	95,00	1,30	2,35	44,00	00
nominating committee size	894	2	2	6	13	6,00	8,00	0,75	2,18	80,89	00
% Outside directors	894	0	0	5	7	3,20	4,85	0,75	2,18	40,00	00
nominating committee meetings	894	0	0	100	100	85,00	94,50	1,65	3,18	55,00	00
remuneration committee size	894	0	2	6	9	2,86	3,68	0,94	1,78	790,0 0	00
% Outside directors	894	0	0	5	9	3,50	5,05	0,55	1,18	39,00	00
remuneration committee meetings	894	0	0	100	100	85,00	95,00	1,65	3,18	55,00	00

Table 3. Descriptive statistics of corporate governance variables

Panel B descriptive statistics for qualitative variables								
				Frequency %				
	N —		0		1			
	IN —	Fr	USA	Fr	USA			
					94,			
Audit quality	894	33,6	6,0	66,3				
					0			
Existence of an audit committee	894	39,0	0,0	61,0	100,0			
Existence of nominating committee	894	46,7	42,0	53,3	58,0			
Existence of a remuneration committee	894	43,4	6,2	56,6	92,8			
Separate chair dummy	894	31,5	22	68,5	78			

Table 4. Governance indexes

		Number of efficient firms(index = 1)		of efficient ns	Anova Test		
	Fr	USA	Fr%	USA%	F	Sig	
1998	55	69	77,84	60,89			
1999	42	83	70,41	61,15			
2000	51	84	75,49	65,06			
2001	40	85	74,32	75,70			
2002	50	85	68,95	75,06			
2003	32	96	59,89	79,07			
Total	270	502	68,20	70,33	1,854	0,174	



		French		USA		
Variables ^a	Expected sign	Coeff. Estimate	p-value	Coeff. Estimate	p-value	
Intercept	?	0,020**	7,02	0,021**	5,02	
CF	+	0,235**	2,44	0,233**	2,70	
NDAC	+	0,038**	6,11	0,041**	6,11	
DAC	+	0,135*	2,07	0,232**	3,07	
CG	?	0,057**	8,33	0,071**	9,11	
DAC _T *CG	+	0,025 **	6,11	0,023**	8,30	
Number of observations		894		894		
Adjusted R ² %		7%		10%		
F		13,120		15,110		

Table 5. Regression of stock return on operating cash flows, nondiscretionary accruals, and discretionary
accruals conditioned on corporate governance quality ^a .

^aSample of 149 Americans and French firms from fortune 500 for a period 1998-2003. Variables are defined on table 2.

*,** Significant at the 5% and 1% level respectively

Table 6.	Vuong I	Likelihood	Ratio	Test
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	USA vs. French
Vuong's Z-statistic	2 ,46*
* Significant at the 5%	

* Significant at the 5%.

 Table 7. Regression of future earning on operating cash flows, nondiscretionary accruals, and discretionary accruals conditioned on corporate governance quality

		PANNEL A: one- year ahead earnings						
		France	USA					
Variables ^a	Expected sign	Coeff. Estimate		p-value	Coeff. Estimate		p-value	
Intercept	?	0,481	**	13,69	0,526	**	4,52	
CF	+	0,500	**	17,40	0,261	**	9,21	
NDAC	+	0,020		1,84	0,381	*	2,46	
DAC	+	0,628		1,35	0,304	**	3,75	
CG	?	0,568		1,39	0,326	*	2,38	
DAC _T *CG	+	0,102		0,67	0,167	**	4,05	
Number of observations			89	4	894			
Adjusted R ² %			359	%	36,7%			
F			63,2	240	65,000			
		PANNEL B.	: two- ye	ear ahead earnings				
		France			USA			
Variables ^a	Expected sign	Coeff. Estim	ate	p-value	Coeff. estimate		p-value	
Intercept	?	0,600		0,91	0,058	*	2,80	
CF	+	0,315	**	7,42	0,355	**	7,32	
NDAC	+	0,226		0,97	0,127		0,42	
DAC	+	0,137		0,10	0,975	*	2,35	
CG	?	0,137		1,18	0,735		1,39	

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DAC _T *CG	+	0,239		0,30	0,735	*	3,08		
Number of observations	894					894			
Adjusted R ² %	8%				9,9%				
F		11,380			380 13,440				

^aSample of 149 Americans and French firms from fortune 500 for a period 1998-2003. Variables are defined on table 2.

*,** Significant at the 5% and 1% level respectively.

Table 8. Regression of future operating cash-flow on operating cash flows, nondiscretionary accruals, and discretionary accruals conditioned on corporate governance quality^a

		PANNEL A : one	- year ahead			
	France		USA			
Variables ^a	Expected sign	Coeff. Estimate	p-value	Coeff. estimate	p-value	
Intercept	?	0,079*	2,50	0,115**	7,23	
CF	+	0,359**	16,71	0,331**	8,68	
NDAC	+	0,372	0,38	0,041*	1,94	
DAC	+	0,188**	3,60	0,03**	8,00	
CG	?	0,838*	2,09	0,057*	3,01	
DAC _T *CG	+	0,585**	4,11	0,017**	3,54	
Number of observations	894		894		4	
Adjusted R ² %	29%		31,5%			
F	59,800		0	63,300		
		PANNEL B: two- y	ear ahead			
		France		USA		
Variables ^a	Expected sign	Coeff. Estimate	p-value	Coeff. estimate	p-value	
Intercept	?	0,086**	18,21	0,838**	7,34	
CF	+	0,294**	7,96	0,237**	8,43	
NDAC	+	0,071	0,71	0,955	0,59	
DAC	+	0,924	1,03	0,126**	5,43	
CG	?	0,203**	4,05	0,285*	2,05	
DAC _T *CG	+	0,190	0,13	0,554*	2,09	
Number of observations	894		894			

^aSample of 149 Americans and French firms from fortune 500 for a period 1998-2003. Variables are defined on table 2.

11,5%

15,188

13,9%

16,499

*,** Significant at the 5% and 1% level respectively.

Adjusted $R^2 \%$

F



Table 9. Vuong Likelihood Ratio Test				
	USA vs. French			
Z one- year ahead earnings	2 ,40*			
Z two- year ahead earnings	2,43*			
Z for one- year ahead cash flows	2 ,57*			
Z for two- year ahead cash flows	3,05*			

* Significant at the 5%

Table 10. Regression of stock return on operating cash flows, nondiscretionary accruals, and discretionary					
accruals conditioned on corporate governance quality ^a .					

	French			USA		
Variables ^a	Expected sign	Coeff. estimate	p-value	Coeff. estimate	p-value	
Intercept	?	0,056	0,87	0,123	0,75	
CF	+	0,882	1,65	0,532	0,95	
NDAC	+	0,103	1,32	0,084	0,85	
DAC	+	0,047*	2,32	0,597**	4,75	
CG	?	0,010	0,15	0,146	0,04	
DAC *CG	+	0,089*	2,97	0,105**	3,50	
Number of observations		894		894		
Adjusted $R^2 \%$		1,5%		3,4%		
F		2,182		3,38	3,385	

^{a a}Sample of 149 Americans and French firms from fortune 500 for a period 1998-2003. Variables are defined on table 2.

*,** Significant at the 5% and 1% level respectively.

	French			USA		
Variables ^a	Expected sign	Coeff. estimate	p-value	Coeff. estimate	p-value	
Intercept	?	0,063	0,18	0,025	1,38	
CF	+	0,883	2,48	0,353	0,23	
NDAC	+	0,200	0,45	0,015	0,24	
DAC	+	0,530*	0,03	0,659	0,90	
CG	?	0,276	0,40	0,583	0,53	
DAC *CG	+	0,970**	3,28	0,583**	3,05	
CF * CG	+	0,956	1,58	0,122	0,63	
NDAC* CG	+	0,125	0,34	0,347	0,06	
Number of observations		894		894		
Adjusted R ² %		1,5%		1,99	1,9%	
F		2,823		3,07	3,077	

Table 11. Regression of stock return on operating cash flows, nondiscretionary accruals, and discretionary accruals conditioned on corporate governance quality^a

^aSample of 149 Americans and French firms from fortune 500 for a period 1998-2003.

*,** Significant at the 5% and 1% level respectively.