VOLUNTARY DISCLOSURE AND FREE CASH FLOW IN FAMILY FRENCH FIRMS

Meriem Jouirou^{*}, Faten Lakhal^{**}

* Corresponding author, Department of Management Sciences, Higher Institute of Management of Sousse, Sousse University, Tunisia Contact details: Department of Management Sciences, Higher Institute of Management of Sousse, Sousse University, Road Abdelaziz El Bèhi, Sousse, Tunisia

** Leonardo de Vinci University, Research Center, Paris, France



How to cite this paper: Jouirou, M., & Lakhal, F. (2020). Voluntary disclosure and free cash flow in family French firms [Special issue]. Corporate Ownership & Control, 17(4), 391-398. http://doi.org/10.22495/cocv17i4siart15

Copyright © 2020 The Authors

This work is licensed under a Creative Commons Attribution 4.0 International License (CC BY 4.0). https://creativecommons.org/licenses/by/ 4.0/

ISSN Online: 1810-3057 ISSN Print: 1727-9232

Received: 30.05.2020 **Accepted:** 28.08.2020

JEL Classification: D22, G32 DOI: 10.22495/cocv17i4siart15 This research investigates the governance role of voluntary disclosures especially in reducing agency problems measured by the level of free cash flow (FCF). In addition, it also shows the moderating effect of family ownership and governance mechanisms on this relation. Our research was conducted on a sample of 138 listed French firms between 2009 and 2013. To avoid the endogeneity problem caused by the voluntary disclosure variable we used the 2SLS regression method. The results show, on the one hand, that transparency provided by voluntary disclosures reduces the level of FCF and by the way agency problems. But family owners tend to accumulate FCF. On the other hand, the governance role of voluntary disclosure turns to be ineffective in family firms. This suggests a high risk of expropriation of minority shareholders by family ones. In addition, we demonstrate that governance mechanisms, especially board independence, gender diversity and audit committee independence, contribute to the strengthening of the governance role of voluntary disclosure.

Abstract

Keywords: Voluntary Disclosure, Free Cash Flow, Family Ownership, Board Characteristics

Authors' individual contribution: Conceptualization – M.J. and F.L.; Methodology – M.J. and F.L.; Software – M.J. and F.L.; Validation – M.J. and F.L.; Formal Analysis – M.J. and F.L.; Investigation – M.J. and F.L.; Resources – M.J. and F.L.; Data Curation – M.J. and F.L.; Writing – M.J. and F.L.; Supervision – M.J. and F.L.

Declaration of conflicting interests: The Authors declare that there is no conflict of interest.

Acknowledgements: The Authors are grateful to the anonymous referees of the journal for their extremely useful suggestions to improve the quality of the paper.

1. INTRODUCTION

All firms' activities generate cash. This cash can be accumulated for several reasons (Bates, Kahle, & transaction 2009): the motive, Stulz. the precautionary motive, the tax motive, and the agency motive. But since the last two decades, we assist in massive detention of cash: 1.64 trillion dollars for American firms and 380 million dollars for their French counterparts (Moody's Corporation, 2014). This massive detention of cash can be explained neither by transaction or precautionary motives nor by financial stability reasons. It should be noted that the continuous accumulation of such liquidity in the

hands of managers is not without risk. In fact, in an agency situation, this excess of cash can be overinvested by managers in unnecessary projects or in negative net present value ones. It can be also diverted by managers to serve their own benefit or retained in the company and not distributed to shareholders. To counter these attitudes, several studies expose many solutions especially for large firms which generate lots of cash: good governance, the use of debt, sustained dividend distribution and investors' protection laws (Jensen, 1986; Dittmar, Mahrt-Smith, & Servaes, 2003; Kusnadi, 2005; Al-Najjar & Clark, 2017; Ozakan & Ozakan, 2004; Ben Moussa & Chichti, 2011).



In this study, we focus on an additional and new way to limit agency problems related to the cash excess in French companies: it is voluntary disclosure. Indeed, transparency is a goal sought by all global economies as regard to its benefits on the firm and on the financial market in general. Accounting information has essentially two functions. The pricing function is considered when accounting information impacts share prices, investment's risk estimation and strategies' formulation. But when accounting information alleviates governance structures and facilitates managers' control to push them to act in the interest of shareholders, we are considering the governing function of accounting information (Bushman & Smith, 2001). So, it is important to identify the impact of voluntary disclosures in reducing FCF considered as a proxy of the intensity of agency conflicts in the firm. It is also important to investigate the moderating effect of family ownership and governance mechanisms, essentially board independence, duality, gender diversity and audit committee independence, on this relation. Our sample is composed of 138 French listed firms. The period of the study is between 2009 and 2013. Empirical results highlight a negative association between voluntary disclosure and levels of FCF. This supports the idea that voluntary information reduces the informational gap between manager and shareholders minority and (or maiority shareholders) which reduce agency conflicts in the firm. Results show also that family ownership has a positive impact on FCF. So, family members tend to accumulate cash to expropriate minority shareholders. Also, our results show that family ownership is an obstacle to the governing function of voluntary disclosure. The results relative to the moderating effect of governance mechanisms on FCF highlight that board independence, gender diversity and audit committee independence alleviate the governance function of voluntary disclosure by empowering the negative effect of these disclosures on the FCF.

The paper is organized into five sections. Section 1 presents the introduction. The literature review on voluntary disclosure, FCF and governance mechanism is developed in Section 2. This section presents also the hypothesis development. Section 3 is devoted to data and research design presentation. This section is followed by Section 4 with the exposure of the principal results and their discussion. Principal conclusions are presented in Section 5.

2. LITERATURE REVIEW

2.1. Voluntary disclosure and FCF

FCF is defined by Jensen (1986) as "cash flow in excess of that required to fund all projects that have positive net present values when discounted at the relevant cost of capital" (p. 2). So, according to FCF hypothesis the presence of such cash flows is risky for the firms essentially those in bad investment horizons. Indeed, these FCF will be the source of intensive agency conflicts in the firm, especially in an information asymmetry context. Overinvestment is the first harmful decision that can be undertaken by a manager. In the presence of FCF, managers will use this excess of cash to invest it in order to promote their reputation and to be more entrenched

in the firm (Coeurderoy & Koulayom, 2007; Kusnadi, 2005; Couderc, 2006). It is called empire building. Richardson (2006) highlights that 20% of the FCF will be wasted by managers and 40% will be retained in the firm. These attitudes will alter the performance of the firm. Zhang Cao, Dickinson, and Kutan (2016) affirm that when FCF is abundant, the return on investment will be fewer than the cost of capital which is detrimental to shareholders' interests. The literature proposed many solutions to the problems caused by the presence of FCF in the firm: the distribution of dividend (Xiao, 2010) and indebtedness (Ben Moussa & Chichti, 2011; Kadioglu & Yilmaz, 2017; Nekhili, Wali Siala, & Chebbi Nekhii, 2009)

Managers can overinvest or divert the wealth of shareholders to serve their own interests only when governance mechanisms are inefficient. So, the presence of a good governance structure will limit these opportunistic attitudes (Dittmar et al., 2003; Al-Najjar & Clark, 2017). In this study, we are interested in the governance role of voluntary disclosures in reducing FCF and by the way overinvestment and wealth misappropriation. The relation between voluntary disclosure and FCF is not documented in the literature. So, to prove theoretically the impact of these disclosures in reducing the agency costs of FCF, we can highlight the impact of voluntary disclosure in increasing investment efficiency and its controlling function.

Overinvestment is an investment in negative net present value projects. These decisions are possible only in an information asymmetry context. So, transparency can reduce this problem by helping managers in identifying good investment opportunities (Gomariz & Sánchez-Ballesta, 2013). Beyer and Guttman (2012) underline the presence of two investments' intervals to which they associate two voluntary disclosure attitudes. If managers refrain from disclosing voluntary information in the investment period, they are necessarily overinvesting. Globally, Francis, Huang, Khurana, and Pereira (2009) proved that the growth rate of an economy is conditioned by its level of transparency. In addition, residual transparency improves resource allocation. Recently, Firmansyah and Triastie (2020) have demonstrated that corporate social responsibility disclosures, which are voluntary ones, can enhance investment efficiency if governance thev are combined with other mechanisms.

On the other hand, transparency is a good controlling mechanism of managers' attitudes. Healy and Palepu (2001) highlight the monitoring effect of voluntary disclosure. It is the control exercised by shareholders and investors on managers' decisions to push them to act in the best interest of the firm. Several empirical studies have proved the effect of voluntary disclosure on the performance of the firm through its monitoring effect (Hope & Thomas, 2008; Bens & Monahan, 2004). So, we can formulate the following hypothesis:

H1: Voluntary disclosures reduce the level of FCF.

2.2. Governance mechanisms and FCF

The impact of good governance mechanisms on the level of FCF is largely debated in the literature but is far from consensus. Studies undertaken in the US proved that good governance devices are a signal that managers are well controlled which ensures investors. So, managers can accumulate cash and will not be penalized by investors. This is due to the good protection of shareholders. In contrast, in France, investors are not as well protected as their American counterparts. So, the installation of governance mechanisms aims to control managers to reduce agency conflicts essentially overinvestment and empire building due to the presence of FCF.

2.2.1. Family ownership

The French context is characterized by the predominance of family firms. These firms suffer from specific agency conflicts (Type II). This conflict is between majority and minority shareholders (Basly, 2006). Family members, due to their participation in the management process can easily divert wealth from minority shareholders. Ali, Chen, and Radhakrishnan (2007) argue that family members dominate the firm thanks to their cash flow rights and their large representation on the board. So, they will pursue their own interests by engaging in related party contracts and the squeezing of minority shareholders.

Selective altruism, nepotism and the capture of management positions are specific agency conflicts that characterize family firms. On the other hand, family firms are generally funded by family members. These members have long term investment horizons. So, they will tend to accumulate cash to reinvest it rather than distributing it to shareholders (Basly, 2006).

So, we can formulate the following hypothesis:

H2a: Family ownership increases the levels of FCF.

In addition, we are also interested in studying the moderating effect of family ownership on the relation between voluntary disclosures and FCF. Hirigoyen (2008) affirms that agency conflicts in family firms are essentially caused by information asymmetry. So, we think that family ownership constitutes an obstacle to the governing role of voluntary disclosure

H2b: Family ownership compromise the role of voluntary disclosure in reducing FCF.

2.2.2. Board independence

The presence of independent directors on the board is a guarantee of the good functioning of the board. Due to their independence, skills and professional experience, independent directors will properly control managers' actions in order to align the interests of the majority and minority shareholders (Haniffa & Cooke, 2002; Chen, 2008). Lee and Lee (2009) proved that the presence of independent directors minimize the level of cash and mitigate managerial entrenchment due to excess of cash.

H3a: Board independence decreases the levels of FCF.

In addition, several studies demonstrate the complementarity between governing devices, we think that the presence of independent directors will enhance the governing effect of voluntary disclosure. So, we can formulate the following hypothesis.

H3b: Board independence improve the role of voluntary disclosures in reducing the levels of FCF.

2.2.3. Duality

Good governance codes in France encourage the separation of top functions in the firm. Indeed, a CEO has considerable power in the firm essentially in strategies formulation (Gill & Shah, 2012). It will be easy for him/her to accumulate FCF to protect himself/herself and the managerial team against management errors. It is one of the entrenchment strategies undertaken by managers (Lee & Lee, 2009). Drobetz and Grüninger (2007) demonstrate that firms with a dualistic structure hold 30% more cash than non-dualistic ones.

H4a: Duality increases the levels of FCF.

H4b: Duality compromises the role of voluntary disclosure in reducing FCF.

2.2.4. Gender diversity

Female board members are recognised to be more careful due to their risk aversion (Arrondel, Masson, & Verger, 2004). They are also characterised by specific leadership attitudes (Adams & Ferrera, 2009). So, gender diversity on the board enhances its controlling function. In addition, women have a more ethical behaviour (Ford & Richardson, 1994). Then, they will resist any type of managerial decisions that aims to expropriate minority shareholders. In addition, Al-Rahahleh (2017) and Trinh, Cao, Dinh, and Nguyen (2020) demonstrated that the presence of women on the board of directors has a positive impact on corporate dividend policy. So, by enhancing dividend policy, gender diversity participates in reducing the FCF in the firm and by the way agency costs arising from the detention of such liquidity.

H5a: Gender diversity decreases the levels of FCF. H5b: Gender diversity improves the role of voluntary disclosures in reducing the levels of FCF.

2.2.5. The independence of the audit committee

The principal function of the audit committee is the control of the quality of the accounting information produced by the firm. In addition, it guarantees the settlement of strong internal control mechanisms. Aldamen, Duncan, Kelly, McNamara, and Nagel (2011) demonstrate that this governing device is employed in strong agency conflict situations. The good analysis of accounting information provided by this type of committee to the board members helps them in enhancing controls and in formulating efficient strategies (Cai, Hillier, Tian, & Wu, 2015).

H6a: The independence of the audit committee decreases the levels of FCF.

H6b: The independence of the audit committee improves the role of voluntary disclosures in reducing the levels of FCF.

3. DATA AND RESEARCH DESIGN

Our sample is composed of French listed firms between 2009 and 2013. Financial companies are excluded from the sample because they require specific reporting obligations. We also exclude companies with incomplete data essentially those relative to voluntary disclosure. Our final sample is composed of 139 firms relative to different activity sectors.

VIRTUS 393

The dependent variable: FCF is extracted from Thomson Database. This database uses the formula of Lehn and Poulsen (1989) (FCF = INC --TAX - INTEXP - PFDDIV - COMDIV). We consider the logarithm of FCF. This function is only possible for the positive value of FCF. By adopting the Log function, we discard the negative value of FCF. These values are essentially caused by negative firm's results. So, the objective of the study is to investigate the role of voluntary disclosure in reducing agency conflicts caused by excess cash which are essentially overinvestment and minority expropriation. These two risks are possible when FCF is positive.

The independent variable: voluntary disclosure is measured by a disclosure index thanks to a self-constructed list specific to the French context. To avoid endogeneity problems we use the 2SLS method.

The first step was to estimate the fitted value of voluntary disclosure using this model.

$$DISV = \alpha_0 + \alpha_1 Famown_{it} + \alpha_2 Boardind_{it} + \alpha_3 Dual_{it} + \alpha_4 Divert_{it} + \alpha_5 Comind_{it} + \alpha_6 Size_{it} + \alpha_7 LEV_{it} + \alpha_8 ROE_{it} + \varepsilon_{it}$$
(1)

We then use this fitted value (*Divfit*) as an independent variable in FCF models.

Other independent variables are measured as follow: *Famown*: % of shares held by the founding family, *Boardind*: number of independent directors/total number of directors, *Dual*: 1 if CEO is in the same time chairman of the board and 0 otherwise, *Divert*: number of women on the board/total number of directors on the board, *Comind*: number of independent director in the audit committee/total number of director in the audit committee. Control variables: *Size*: logarithm of total assets, *LEV*: total debt/total asset, *ROE*: net profit/total equity.

The global model is as follows:

 $FCF = \alpha_{0} + \alpha_{1}Divfit_{it} + \alpha_{2}Famown_{it} + \alpha_{3}Boardind_{it} + \alpha_{4}Dual_{it} + \alpha_{5}Divert_{it} + \alpha_{6}Comind_{it} + \alpha_{7}Divfit_{it} * Famown_{it} + \alpha_{8}Divfit_{it} * Boardind_{it} + \alpha_{9}Divfit_{it} * Dual_{it} + \alpha_{10}Divfit_{it} * Divert_{it} + \alpha_{11}Divfit_{it} * Comind_{it} + \alpha_{12}Size_{it} + \alpha_{13}LEV_{it} + \alpha_{14}ROA_{it} + \varepsilon_{it}$ (2)

4. EMPIRICAL RESULTS

4.1. Descriptive statistics and correlation analysis

Table 1 reports the results of the descriptive statistics of the dependent and independent

euros. It is between 119949,930 million euros and -22,239 million euros. It constitutes 12.06% of the total assets. It constitutes a huge amount of liquidity and signals serious agency problems in these firms.

variables. The mean value of FCF is 43,895 million

Variables	obs	Minimum	Maximum	Mean	Standard deviation
FCF (m. euro)	690	-22,239	119949,930	43,895	12,789
Famown	690	0	0,9364	0,2182	0,2730
Boardind	690	0	1	0,3635	0,2363
Dual	690	0	1	0,5652	0,4960
Divert	690	0	0,75	0,1337	0,1432
Comind	678	0	1	0,4333	0,3458
Control variables					
Size	690	3,7781	11,3774	8,6514	1,0598
LEV	690	0	0,6942	0,2094	0,1544
ROA	690	-33,629	22,92	-0,9817	17,9211

Table 1. Descriptive statistics

Note: FCF is the level of free cash flow extracted from the database, Famown: % of shares held by the founding family, Boardind: number of independent directors/total number of directors, Dual: 1 if CEO is in the same time chairman of the board and 0 otherwise, Divert: number of women on the board/total number of directors on the board, Comind: number of independent director in the audit committee/total number of director in the audit committee. Control variables: Size: logarithm of total assets, LEV: total debt/total asset, ROA: net profit/total assets.

4.2. Bivariate analysis

The correlation matrix, presented in Table A.1, shows the presence of significant correlations between some of our independent variables. The correlation coefficients between these variables are between 0.02 and 0.7. They are below the threshold of 0.8 announced by Gujarati (2004). To better assess the multicollinearity problem, we compute the variance inflation factor test (VIF). To assert the absence of multicollinearity between the variables of the model, the value of VIF must be less than 10 (Neter, Wasserman, & Kutner, 1989). The results shown in Table A.1 demonstrate that mean VIF is 1.83 which is well below 10. So, we can confirm that no serious multicollinearity problems exist. Thus,

the results of the regression analysis can be interpreted with a higher degree of confidence.

4.3. Results on the effect of voluntary disclosures on FCF

Results reported in Table A.2 demonstrate that voluntary disclosure has a negative and significant impact (1%) on FCF. These results prove that voluntary disclosures reduce the amounts of FCF available to managers. Consequently, by reducing FCF levels, voluntary disclosures contribute to minimizing the risks of the detention of such cash. These results are consistent with agency theory. By reducing an information gap between managers and shareholders, voluntary disclosures reduce agency



costs. In fact, agency costs arising from the massive detention of FCF are essentially overinvestment and shareholders expropriation. These entrenchment strategies are possible if managers set up an information asymmetry context. But, voluntary disclosures are an important mean of control of manager attitude. By the way, voluntary disclosure will impede managers from doing these entrenchment strategies. Finally, the manager will not tend to accumulate FCF in order to expropriate it. In addition, voluntary disclosures enhance investment efficiency. So, FCF will be necessary invested in good projects. In addition, our results support the idea that more transparent firms are more likely to collect external funds at reduced interest levels. So, managers of these firms do not need to accumulate FCF. Finally, transparency generated by voluntary disclosure helps the manager to rush the excess of cash toward good projects (with positive net present value).

4.4. Results of the effect of family ownership on FCF and its moderating effect

Results reported in Table A.2 relative to the Models 2 and 3 highlights a positive and significant relationship between family ownership and FCF. These results show that family members tend to accumulate cash in the firms and support agency theory, especially the expropriation hypothesis. Our results also support the idea of long-term horizons of family firms. They accumulate cash to reinvest it to extend firms for future generations. On the other hand, managers in family firms are always appointed from family members. These managers are supposed to stay in the firm for a long period. By the way, they aren't obsessed by rapid investments in order to preserve their posts. This type of manager has a long time to do investments (Basly, 2006). They will accumulate FCF for a long period to invest it when it is appropriate. In addition, the interaction term Divfit * Famown is negative but not significant. This means that family ownership is an obstacle for the governing function of voluntary disclosure. So voluntary disclosure only cannot solve agency conflicts in family firms. It should be associated with other governance mechanisms.

4.5. Results on the effect of board characteristics on FCF and their moderating effect

Table A.3 exposes the results of the effect of board characteristics on FCF levels. Gender diversity, board independence and audit committee independence are good governance devices. They reduce the levels of FCF which are sources of agency conflicts.

Interaction terms are also negative, significant, and more important. These results show that good governance mechanisms help voluntary disclosure in its governing function. They also show that voluntary disclosure, gender diversity, board independence and audit committee independence are complementary.

4.6. Robustness check

We conduct the robustness analysis to test the sensitivity of our results to changes in the measurement of variables or sensitivity to estimation methods. So, we change the measure of the dependent variable FCF. It is now measured by the level of FCF/total assets extracted from the database. It includes now the negative and positive values of FCF. The results of the regression are reported in Table A.4. Results remain unchanged proving that our results are robust.

5. CONCLUSION

The purpose of this study was to demonstrate the governance function of voluntary disclosure by reducing agency conflicts measured by FCF levels. Our results highlight that voluntary disclosure reduces the levels of FCF. This result supports the governance function of voluntary disclosures. In fact, voluntary disclosures are an efficient control mechanism of managers' attitude control. So, they limit FCF accumulation and their risk essentially overinvestment and shareholders' expropriation.

On the other hand, family firms tend to accumulate FCF which supports long term horizons of this type of firms. In addition, our results prove that family ownership is an obstacle for the control function of voluntary disclosure. This result supports the idea of agency conflicts between minority and majority shareholders (agency conflicts Type II) which is stressed by information asymmetry problems.

In addition, our results show that the presence of independent directors and women on the board in addition to the presence of an independent audit committee are good governance devices. Indeed, they reduce agency conflicts by reducing levels of FCF which can be overinvested or expropriated by managers. They also act which voluntary disclosure complementary.

Future studies can be undertaken in order to investigate the impact of voluntary disclosure on FCF in other contexts. Investor protection and shareholders activism should impact significantly this relation.

REFERENCES

- 1. Adams, R. B., & Ferreira, D. (2009). Women in the boardroom and their impact on governance and performance. *Journal of Financial Economics*, *94*(2), 291-309. https://doi.org/10.1016/j.jfineco.2008.10.007
- 2. Aldamen, H., Duncan, K., Kelly, S., McNamara, R., & Nagel, S. (2011). Audit committee characteristics and firm performance during the global financial crisis. *Accounting and Finance*, *52*(4), 971-1000. https://doi.org/10.1111/j.1467-629X.2011.00447.x
- 3. Ali, A., Chen, T.-Y., & Radhakrishnan, S. (2007). Corporate disclosure by family firms. *Journal of Accounting and Economics*, 44(1-2), 238-286. https://doi.org/10.1016/j.jacceco.2007.01.006
- 4. Al-Najjar, B., & Clark, E. (2017). Corporate governance and cash holdings in MENA: Evidence from internal and external governance practices. *Research in International Business and Finance*, *39*(A), 1-12. https://doi.org/10.1016/j.ribaf.2016.07.030

VIRTUS

- 5. Al-Rahahleh, A. S. (2017). Corporate governance quality, board gender diversity and corporate dividend policy: Evidence from Jordan. *Australasian Accounting, Business and Finance Journal, 11*(2), 86-104. http://doi.org/10.14453/aabfj.v11i2.6
- 6. Arrondel, L., Masson, A., & Verger, D. (2004). Mesurer les préférences individuelles à l'égard du risque. *Economie et Statistique*, *374-375*, 53-85. https://doi.org/10.3406/estat.2004.7247
- 7. Basly, S. (2006). *Propriété, décision et stratégie de l'entreprise familiale: Une analyse théorique* (Colloque de l'Association Française de Finance, Poitiers, France). Retrieved from https://halshs.archives-ouvertes.fr/halshs-00192818/document
- 8. Bates, T. W., Kahle, K. M., & Stulz, R. M. (2009). Why do U.S. firms hold so much more cash than they used to? *The Journal of Finance, 64*(5), 1985-2021. https://doi.org/10.1111/j.1540-6261.2009.01492.x
- 9. Ben Moussa, F., & Chichti, J. (2011). Interactions between free cash flow, debt policy and structure of governance: 3SLS simultaneous model. *Journal of Management Research*, *3*(2), 1-34. https://doi.org/10.5296/jmr.v3i2.614
- 10. Bens, D. A., & Monahan, S. (2004). Disclosure quality and the excess value of diversification. *Journal of Accounting Research*, *42*(4), 691-730. https://doi.org/10.1111/j.1475-679X.2004.00154.x
- 11. Beyer, A., & Guttman, I. (2012). Voluntary disclosure, manipulation, and real effects. *Journal of Accounting Research*, *50*(5), 1141-1177. https://doi.org/10.1111/j.1475-679X.2012.00459.x
- 12. Bushman, R. M., & Smith, A. J. (2001). Financial accounting information and corporate governance. *Journal of Accounting and Economics*, *32*(1-3), 237–333. https://doi.org/10.1016/S0165-4101(01)00027-1
- 13. Cai, C. X., Hillier, D., Tian, G., & Wu, Q. (2015). Do audit committees reduce the agency costs of ownership structure? *Pacific-Basin Finance Journal*, *35*(A), 225-240. https://doi.org/10.1016/j.pacfin.2015.01.002
- 14. Chen, Y.-R. (2008). Corporate governance and cash holdings: Listed new economy versus old economy firms. *Corporate Governance*, *16*(5), 430-442. https://doi.org/10.1111/j.1467-8683.2008.00701.x
- Coeurderoy, R., & Koulayon, H. (2007). La trésorerie des entreprises françaises: Tentative d'explication par la démarche d'engagement crédible (Pôle de Recherche Affaires, Valeur et Responsabilité CEREBEM – CEntre de REcherche de Bordeaux Ecole de Management, No. 116-07). Retrieved from https://pdfs.semanticscholar.org/39d3/a877204b17c2eceee75036167337f79b423d.pdf
- 16. Couderc, N. (2006). La détention d'actifs liquides par les entreprises: Quelles explications? *Revue Économique*, *57*(3), 485-495. https://doi.org/10.3917/reco.573.0485
- 17. Dittmar, A., Mahrt-Smith, J., & Servaes, H. (2003). International corporate governance and corporate cash holdings. *The Journal of Financial and Quantitative Analysis*, *38*(1), 111-133. https://doi.org/10.2307/4126766
- Drobetz, W., & Grüninger, M. C. (2007). Corporate cash holdings: Evidence from Switzerland. *Financial Markets and Portfolio Management*, *21*, 293-324. https://doi.org/10.1007/s11408-007-0052-8
- 19. Firmansyah, A., & Triastie, G. A. (2020). The role of corporate governance in emerging market: Tax avoidance, corporate social responsibility disclosures, risk disclosures, and investment efficiency. *Journal of Governance and Regulation*, *9*(3), 8-26. https://doi.org/10.22495/jgrv9i3art1
- 20. Ford, R.C. & Richardson, W.D. (1994). Ethical decision making: A review of the empirical literature. *Journal of Business Ethics*, *13*, 205-221. http://doi.org/10.1007/BF02074820
- Francis, J. R., Huang, S., Khurana, I. K., & Pereira, R. (2009). Does corporate transparency contribute to efficient resource allocation? *Journal of Accounting Research*, 47(4), 943-989. https://doi.org/10.1111/j.1475-679X.2009.00340.x
- 22. Gill, A., & Shah, C. (2012). Determinants of corporate cash holdings: Evidence from Canada. *International Journal of Economics and Finance*, 4(1), 70-79. https://doi.org/10.5539/ijef.v4n1p70
- 23. Gomariz, F. C., & Sánchez-Ballesta, J. P. (2013). Financial reporting quality, debt maturity and investment efficiency. *Journal of Banking and Finance*, *7*(13), 494-506. https://doi.org/10.1016/j.jbankfin.2013.07.013
- 24. Gujarati, D. N. (2004). Basic econometrics (4th ed.). New York, the USA: McGraw-Hill.
- 25. Haniffa, R. M., & Cooke, T. E. (2002). Culture, corporate governance and disclosure in Malaysian corporations. *ABACUS*, *38*(3), 317-349. https://doi.org/10.1111/1467-6281.00112
- 26. Healy, P. M., & Palepu, K. G. (2001). Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature. *Journal of Accounting and Economics*, *31*(1-3), 405–440. https://doi.org/10.1016/S0165-4101(01)00018-0
- 27. Hirigoyen, G. (2008). Biais comportementaux dans l'entreprise familiale: Antécédents et impacts. In *La gouvernance de l'entreprise* (Économie de l'entreprise série, pp. 1901-1930). Retrieved from http://www.ifge-online.org/docftp/geh_em-lyon.pdf
- 28. Hope, O.-K., & Thomas, W. B. (2008). Managerial empire building and firm disclosure. *Journal of Accounting Research*, *46*(3), 591-626. https://doi.org/10.1111/j.1475-679X.2008.00289.x
- 29. Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *The American Economic Review*, *76*(2), 323-329. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=99580
- 30. Kadioglu, E., & Yilmaz, E. A. (2017). Is the free cash flow hypothesis valid in Turkey? *Borsa Istanbul Review*, *17*(2), 111-116. https://doi.org/10.1016/j.bir.2016.12.001
- 31. Kusnadi, Y. (2005). *Corporate governance mechanisms and corporate cash holdings*. https://doi.org/10.2139/ssrn.675462
- 32. Lee, K.-W., & Lee, C.-F. (2009). Cash holdings, corporate governance structure and firm valuation. *Review of Pacific Basin Financial Markets and Policies*, *12*(3), 475-508. https://doi.org/10.1142/S021909150900171X
- 33. Lehn, K., & Poulsen, A. (1989). Free cash flow and stockholder gains in going private transactions. *The Journal of Finance*, *44*(3), 771-787. https://doi.org/10.1111/j.1540-6261.1989.tb04390.x
- 34. Moody's Corporation. (2014). *Moody's annual report 2014*. Retrieved from https://s21.q4cdn.com/431035000/files/doc_financials/annual/1500069041.pdf
- 35. Nekhili, M., Wali Siala, A., & Chebbi Nekhii, D. (2009). Free cash-flow, gouvernance et politique financière des entreprises françaises. *Finance Contrôle Stratégie*, *12*(1), 5-31. Retrieved from https://crego.u-bourgogne.fr/images/stories/rev/121031.pdf
- 36. Neter, J., Wasserman, W., & Kutner, M. H. (1989). *Applied linear regression models* (2nd ed.). Homewood, IL, the USA: Irwin.

VIRTUS 396

- 37. Ozkan, A., & Ozkan, N. (2004). Corporate cash holdings: An empirical investigation of UK companies. Journal of Banking and Finance, 28(9), 2103-2134. https://doi.org/10.1016/j.jbankfin.2003.08.003
 38. Richardson, S. (2006). Over-investment of free cash flow. *Review of Accounting Studies*, 11, 159-189.
- https://doi.org/10.1007/s11142-006-9012-1
- 39. Trinh, V. Q., Cao, N. D., Dinh, L. H., & Nguyen, H. N. (2020). Boardroom gender diversity and dividend payout strategies: Effect of mergers deals. International Journal of Finance & Economics. Advance online publication. https://doi.org/10.1002/ijfe.2106
- 40. Xiao, M. (2010). Cash dividend, internal cash-flow and investment efficiency. Journal of Financial Research, 10, 1-20.
- 41. Zhang, D., Cao, H., Dickinson, D. G., & Kutan, A. M. (2016). Free cash-flow and overinvestment: Further evidence from Chinese energy firms. Energy Economics, 58, 116-124. https://doi.org/10.1016/j.eneco.2016.06.018

APPENDIX

Table A.1. Pearson correlation matrix

	Divfit	Famown	Boardind	Dual	Divert	Comind	Size	LEV	ROA
Divfit	1								
Famown	-0,4624*	1							
Boardind	0,6058*	-0,1569*	1						
Dual	-0,1846*	-0,0704	-0,2998*	1					
Divert	0,3107*	0,1008*	0,0572	-0,0288	1				
Comind	0,5769*	-0,2067*	0,5143*	-0,2024*	0,1115*	1			
Size	0,6503*	-0,2330*	0,3126*	-0,1041*	0,2204*	0,2488*	1		
LEV	0,3469*	-0,0569	0,1286	-0,1399*	-0,0121	0,0601	0,2824*	1	
ROA	-0,0314	-0,0629	0,863*	-0,493*	0,539*	-0,89*	0,234*	0,017	1
VIF	3,74	1,64	1,97	1,13	1,39	1,70	1,31	1,26	
Mean VIF					1,83				

Note: Divfit is the fitted value of voluntary disclosure, Famown: % of shares held by the founding family, Boardind: number of independent directors/total number of directors, Dual: 1 if CEO is in the same time chairman of the board and 0 otherwise, Divert: number of women on the board/total number of directors on the board, Comind: number of independent director in the audit committee/total number of director in the audit committee. Control variables: Size: logarithm of total assets, LEV: total debt/total asset, ROA: net profit/total assets.

Table A.2. Effect of voluntary	disclosure and	l family ownership	on FCF levels
rubie i mai Effect of Voluntary	anociooure une	rammy owneromp	

	Model 1		Model 2		Model 3	
	Coef.	Р	Coef.	Р	Coef.	Р
Divfit	-6,738	0,000***	-3,0125	0,002***	-2,848	0,005***
Famown			1,303	0,000***	1,585	0,086*
Divfit * Famown					-0,571	0,755
Size	0,626	0,000***	0,4218	0.000***	0,404	0,000***
LEV	0,259	0,378	-0,0957	0,746	0,034	0,905
ROA	-0,2236	0,383	-0,5964	0,113	-0,5988	0,112
Constante	-0,189	0,634	-0,577	0,134	-0,620	0,130
Wald chi2	69,01		127,81		127,95	
Prob > chi2	0,00		0,000		0,000	
Nbre D'obs.	637		637		637	

Note: Divfit is the fitted value of voluntary disclosure, Famown: % of shares held by the founding family, Size: logarithm of total assets, LEV: total debt/total asset, ROA: net profit/total assets.

Table A.3. Effect of voluntary disclosure and board characteristics on the levels of FCF

	Мос	del 4
Variables	Coef.	Р
Divfit	-2,402	0,089*
Boardind	-2,358	0,065*
Dual	0,812	0,147
Divert	-3,258	0,065*
Comind	-2,423	0,012**
Div * Boardind	-4,712	0,046**
Div * Dual	-1,802	0,069**
Div * Divert	-5,473	0,084*
Div* Comind	-3,592	0,038**
Size	0,34	0,003***
LEV	0,213	0,506
Constante	0,296	0,589
Wald chi2	4	2,59
Prob > chi2	0	,000
Nbre D'obs		637

Note: Divfit is the fitted value of voluntary disclosure, Boardind: number of independent directors/total number of directors, Dual: 1 if CEO is in the same time chairman of the board and 0 otherwise, Divert: number of women on the board/total number of directors on the board, Comind: number of independent director in the audit committee/total number of director in the audit committee. Control variables: Size: logarithm of total assets, LEV: total debt/total asset.

VIRTUS 397

Table A.4. Robustness check

	Мо	del 3	Model 4		
Variables	Coef.	Р	Coef.	Р	
Divfit	-0,8954	0,0211**	-2,005	0,045*	
Famown	1,0235	0,08*			
Divfit * Famown	-0,523	0,3685			
Boardind			-0,987	0,043*	
Dual			0,754	0,354	
Divert			-2,569	0,087*	
Comind			-0,265	0,023**	
Div * Boardind			-1,895	0,032**	
Div * Dual			-1,569	0,025**	
Div * Divert			-0,5698	0,0879*	
Div * Comind			-0,5984	0,078*	
Size	0,5369	0,000***	-1,589	0,034**	
LEV	0,009	0,869	0,569	0,075**	
Constante	-0,659	0,269	0,369	0,605	
Wald chi2	89	0,69	98,569		
Prob > chi2	0,000		0,000		
Nbre D'obs	6	637 637			

Note: Divfit is the fitted value of voluntary disclosure, Boardind: number of independent directors/total number of directors, Dual: 1 if CEO is in the same time chairman of the board and 0 otherwise, Divert: number of women on the board/total number of directors on the board, Comind: number of independent director in the audit committee/total number of director in the audit committee. Control variables: Size: logarithm of total assets, LEV: total debt/totalasset.

VIRTUS 398