FREE CASH FLOW, LEVERAGE AND AUDIT FEES

Sandra Alves, GOVCOPP, School of Accountancy and Administration, University of Aveiro

ABSTRACT

This study examines the relationship between free cash flow (FCF) and audit fees using the FCF theory of Jensen (1986). Additionally, we examine whether the level of leverage moderates the relationship between FCF and audit fees. This study uses OLS regression model to examine the effect of FCF on audit fees and to test whether leverage levels moderate that relationship for samples of Portuguese and Spanish listed companies for the period 2010-2018. Consistent with the FCF hypothesis of Jensen (1986), this study suggests that firms with high FCF pay more audit fees. Further, the results also suggest that the positive impact of FCF on audit fees progressively reduces at higher levels of leverage. This study contributes to the literature by examining how FCF affects the audit pricing and by shedding light on the mediating effect of leverage on the relationship between FCF and audit fees.

Keywords: Free Cash Flow, Audit Fees, Leverage and Agency Theory.

INTRODUCTION

FCF is cash flow in excess of that required to fund all of a firm's projects that have positive net present values when discounted at the relevant cost of capital (Jensen 1986, 1989). Ideally, managers of firms with FCF are expected to invest excessive cash in profitable investment in order to generate high returns to shareholders. However, the decisions of managers may not always be in the interests of shareholders. Really, Jensen (1986, 1989) suggests that managers of high FCF firms are more likely involved in non-value-maximizing activities. This non-value maximizing behavior includes overinvestment due to investment in projects with negative net present value, excessive consumption of perquisites, misappropriation of assets, and salary enhancement, which result in increased agency costs (Amihud & Lev, 1981; Jensen, 1986; Jensen & Meckling, 1976; Christie & Zimmerman, 1994; Rediker & Seth, 1995; Cai, 2013; Chen et al., 2016; Wang, 2010). The non-value maximizing behavior eventually increase inherent risks and will result in higher audit fees. Accordingly, auditors of high FCF firms are likely to assess higher levels of inherent risk that leads to higher audit effort and resulting higher fees (Gul & Tsui, 1998).

Previous studies suggest that the companies with high FCF pay higher audit fees (Griffin et al., 2010; Gul & Tsui, 1998, 2001). This higher audit fees due to higher FCF may however be mitigated through the use of effective governance structures, such as the leverage which will act to reduce the amount of FCF available to corporate managers. According to Jensen (1986), leverage is helpful for reducing FCF in the hands of company managers as well as reducing agency cost. The interest and principal payments reduce the cash available to management for non-optimal spending. When a firm employs debt financing, it undergoes the scrutiny of lenders and is often subject to lender-induced spending restriction (Jensen, 1986). Therefore, leverage reduces the agency costs of FCF by reducing the cash flow available for spending at the discretion of managers. Thus, the positive association between FCF and audit fees is expected to be weaker for firms with high leverage.

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Using a sample of non-financial listed Portuguese and Spanish firms-year from 2010 to 2018, this study aims to test whether audit fees is higher for firms with more FCF. Additionally, this study examines how leverage influence the impact of FCF on audit fees.

The study makes some contributions to the existing literature. First, although many studies have examined the determinants of audit fees mainly in the US or UK contexts, the relationship between FCF and audit fees in Portugal and Spain has not been studied. Second, to our knowledge, this study is also the first to investigate the role of leverage on the association between FCF and audit fees in the Portuguese and Spanish contexts. Using data from Portuguese and Spanish listed firms, our paper fills these two gaps in the literature. Third, the findings of this study can provide useful information mainly for shareholders and auditors whether FCF affects audit fees. Finally, findings based on Portuguese and Spanish data also help build a more expansive international understanding of the relation between FCF, audit fees and leverage debate.

LITERATURE REVIEW AND TESTABLE HYPOTHESES

Free Cash Flow and Audit Fees

Firms with a large amount of FCF are normally affected with major agency problems (Lanhane & Mahakud, 2016; Wang, 2010). Jensen (1986, 1989) argues that managers of firms with high FCF are more likely to act opportunistically and engage in non-value maximizing activities. Thus, managers of firms with high FCF act opportunistically for personal gain, and tend to get involved in unprofitable projects, overinvestments, misuse the funds and earnings management. In fact, firms with high FCF tend to overinvest (Richardson, 2006; Shi, 2019; Yeo, 2018; Zhang et al., 2016), reduce disclosure quality (Cheung & Jiang, 2016), to exhibit poor future profitability (Chung et al., 2005) to act sub-optimally in acquisition (Lang et al., 1991) and engage in earnings management (Astami et al., 2017; Friska et al., 2019; Jones & Sharma, 2001; Raeisi & Vaez, 2016; Rusmin et al., 2014; Toumeh et al., 2020; Yendrawati & Asy'ari, 2017). This may result in a perceived high audit risk for auditors. High audit risk will inevitably lead to increased audit effort and to a higher audit fees.

Therefore, Jensen's FCF problem is likely to influence audit fees. Auditors are likely to assess firms with high FCF and "non-value-maximizing managers" as having high levels of inherent risk. Such risk assessment is likely to influence their planning of audit efforts as well as the audit fees. Griffin et al. (2010) and Gul & Tsui (1998, 2001) find that high FCF firms have higher audit fees. In the same sense, Gleason et al. (2017) and Salehi et al. (2020) document that auditors perceive excess cash holdings as a risk factor, and thus, they are likely to put more effort to cover audit risk, which ultimately results in higher audit fees.

Accordingly, we expected that high FCF will increase audit risk and, by extension, lead to an addiction in audit effort and hence in increased audit fees. Hence, under Jensen's (1986) FCF hypothesis it is expected that firms with high FCF pay more audit fees:

H1: The level of FCF will be positively associated with audit fees.

The Role of Leverage in the Relationship between Free Cash Flow and Audit Fees

Agency theory suggests that leverage can act as a self-disciplining internal governance mechanism to mitigate the agency conflict of manager-shareholders (Grossman & Hat, 1982; Jensen, 1976, 1986). Leverage limits management's engagement in self-dealing activities (Ghorbani & Salehi, 2021; Jensen, 1986; Stulz, 1990; Harvey et al., 2004). The

presence of leverage causes the management to pay out cash flow as interest and repayments, which reduce the cash available to management for non-optimal spending. Therefore, leverage is expected to minimize agency costs of FCF by reducing the cash flow available for spending at the discretion of managers (Jensen, 1986). Indeed, previous studies support the role of leverage as a mechanism which reduces the overinvestment problem by decreasing the FCF under managerial discretionary control (Ahn et al., 2006; Ding et al., 2020; D'Mello & Miranda, 2010; Fernandez, 2011; Firth et al., 2008; Harvey et al., 2004; Park & Jang, 2013; Trong & Nguyen, 2021; Yeo, 2018).

Since debt mitigates the amount of FCF, it reduces the amount of liquid resources under managers' control, increases the monitoring activity by financial markets and commits future cash flows to debt-related payments. Thus, in the presence of high FCF, leverage can help inhibit the overinvestment problem and better monitoring tasks from outside parties (Jensen, 1986; Al-Najjar & Kilincarslan, 2019; Cho et al., 2019; Yeo, 2018). So, leverage may mitigate the impact of FCF problem on audit fees.

As referred previously, auditors are likely to charge higher fees in response to the higher audit risk associated with the agency problems in firms with high FCF. Leverage can alleviate the agency problems of FCF by requiring payments and acting as a monitoring mechanism. Consequently, leverage can mitigate the non-value-maximizing activities conducted by managers of firms with high FCF. Thus, the positive high FCF/audit fees association is expected to be weaker for firms with high leverage than for firms with low leverage. Griffin et al. (2010) and Gul & Tsui (1998) find that leverage interacts with high FCF firms to reduce audit fees.

So, in the presence of high FCF, we expect that, when leverage is high, auditors will charge lower audit fees than when leverage is low. This leads to our second hypothesis:

H2: Leverage moderates the relationship between FCF and audit fees.

SAMPLE AND RESEARCH DESIGN

Sample Selection

Our sample includes all the non-financial listed firms of Euronext Lisbon and the Madrid Stock Exchange for the period 2010-2018. The data used in this paper come from the following sources. The Amadeus, a database managed by Bureau Van Dijk and Informa D&B, S.A., the Portuguese Securities Market Supervisory Authority [Comissão de Mercado de Valores Mobiliários (CMVM)] and the Spanish Securities Market Supervisory Authority [Comisión Nacional del Mercado de Valores (CNVM)], which provide the accounting information from annual accounts.

Table 1 details how the selection criteria resulted in a final total unbalanced panel of 934 firm-year observations over the 2010 to 2018 period.

| Table 1 | | | | | | | | | | |
|------------------------------------------------------|----------|-------|-------|--|--|--|--|--|--|--|
| SAMPLE SELECTION CRITERIA DURING THE YEARS 2010-2018 | | | | | | | | | | |
| Sample selection Number of firm years | | | | | | | | | | |
| | Portugal | Total | | | | | | | | |
| Non-financial firms listed | 483 | 1.000 | 1.483 | | | | | | | |
| (-) Football club companies | -36 | - | -36 | | | | | | | |
| (-) Firms with missing data | -135 | -378 | -513 | | | | | | | |
| Number of firm-year observations in the final sample | 312 | 622 | 934 | | | | | | | |

Research Design

Measuring audit fees

Consistent with recent studies on audit fees (e.g. Barroso et al., 2018; Ghafran & O'Sullivan, 2017; Stanley, 2011), our dependent variable is the natural log of audit fees (*Audit_Fee*). This variable considers the total fee paid by the company for audit services during the year.

Measuring free cash flow

Following prior studies (Astami et al., 2017; Bhundia, 2012; Cheung & Jiang, 2016; Toumeh et al., 2020), this study uses the model of Lehn & Poulsen (1989) to measure the amount of free cash flow (*Free_Cash*). Thus, *Free_Cash* is measured by operating income before depreciation minus expenses such as tax expense, interest expense and dividend (Lehn & Poulsen, 1989).

Control variables

Based on earlier research on audit fees, we also include some control variables to isolate other factors that may influence the audit fees. Audit risk, *Aud_Risk*, is included to control for the potential correlation between audit risk and audit fees, with positive expected coefficient (Chan et al., 1993; Gandía & Huguet, 2019; Habib et al., 2018; Stanley, 2011). We include Big4, *Big4*, to control for the big audit firm effect on audit fees. Prior research documents that Big audit firms charge high audit fees (Fleischer & Goettsche, 2012; Francis, 2004; Gandía & Huguet, 2019; Mohammadi et al., 2018; Shailer et al., 2004; Simunic, 1980; Tee et al., 2017). We also include firm size, *Size*, because larger firms are normally more complex and difficult to control, which require more audit effort, resulting in higher audit fees (Al-Najjar, 2018; Chen et al., 2005; Gandía & Huguet, 2019; Mohammadi et al., 2018; Palmrose, 1986; Simunic, 1980).

Regression Model

To test the hypothesis 1, the impact of FCF on audit fees, it is estimated the following OLS regression:

$$Audit_Fee_{it} = \lambda_0 + \lambda_1 (Free_Cash_{it}) + \lambda_2 (Aud_Risk_{it}) + \lambda_3 (Big4_{it}) + \lambda_4 (Size_{it}) + \varepsilon_{it}$$
(1)

Where:

- *Audit_Fees*_{it} = is the natural log of audit fees paid by the firm for audit services during the year;
- $Free_Cash_{it}$ = is measured by operating income before depreciation minus expenses such as tax expense, interest expense and dividend divided by market value of equity of firm i for period t;

 Aud_Risk_{it} = is the sum of inventories and accounts receivables divided by total assets for firm i for period t;

 $Big4_{it}$ = value of 1 if firm is audited by a Big 4 audit firm and 0 otherwise; $Size_{it}$ = logarithm of total assets of firm i for period t.

To test hypothesis 2, the effect of the level of leverage on the relationship between FCF and audit fees, it is expanded equation (1) by including the leverage level and an

interaction term between Free_Cash and Leverage level:

$$Audit_Fee_{it} = \lambda_0 + \lambda_1 (Free_Cash_{it}) + \lambda_2 (Aud_Risk_{it}) + \lambda_3 (Big4_{it}) + \lambda_4 (Size_{it}) + \lambda_5 (Leverage_{it}) + \lambda_6 (Free_Cash_{it}*Leverage_{it}) + \varepsilon_{it}$$
(2)

Where:

 $Leverage_{it}$ = ratio between the book value of long-term debt and the total assets; $Free_Cash_{it}*Leverage_{it}$ = Interaction variable of FCF and leverage

RESULTS AND DISCUSSION

Descriptive Statistics and Correlations

Table 2 presents the sample descriptive statistics for the variables used in this research.

| Table 2 | | | | | | | | | |
|-------------------------------------------------|-------------|---------------|---------|--------|--|--|--|--|--|
| SUMMARY OF DESCRIPTIVE STATISTICS | | | | | | | | | |
| | Mean | Median | Min. | Max. | | | | | |
| Panel A – Portugal: Number of observations: 312 | | | | | | | | | |
| Audit_Fee (th EUR) | 640 | 263 | 0.492 | 8.325 | | | | | |
| Free_Cash | 0.103 | 0.071 | -5.987 | 3.015 | | | | | |
| Leverage | 0.471 | 0.462 | 0.001 | 2.517 | | | | | |
| Aud_Risk | 0.049 | 0.003 | 0 | 0.609 | | | | | |
| Big4 | 0.721 | 1 | 0 | 1 | | | | | |
| Size (th EUR) | 1.322 | 144 | 0.3 | 16.345 | | | | | |
| Panel B – Spair | n: Number o | f observation | ns: 622 | | | | | | |
| Audit_Fee (th EUR) | 1.535 | 256 | 0.4 | 30.809 | | | | | |
| Free_Cash | 0.164 | 0.086 | -7.254 | 4.122 | | | | | |
| Leverage | 0.6 | 0.606 | 0.003 | 3.721 | | | | | |
| Aud_Risk | 0.188 | 0.16 | 0 | 0.698 | | | | | |
| Big4 | 0.811 | 1 | 0 | 1 | | | | | |
| Size (th EUR) | 4.969 | 514 | 0.306 | 95.167 | | | | | |

Regarding Portugal, Panel A in Table 2 shows that the mean of audit fee (*Audit_Fee*) is about EUR 640 million with a minimum of EUR 492 thousand and a maximum of EUR 8.325 million. While *Free_Cash*, ranges between about -5.987 and 3.015, the mean and median are about 0.103 and 0.071. *Leverage* variable represents on average 0.471 of the total assets of the company (with a median of 0.462). The mean (median) *audit risk* is 4.9% (0.3%), with a minimum of 0.0% and a maximum of 60.9%. *Big 4* auditors are used by 72.1% of the sample firms. Panel A in Table 2 also shows that the mean of firm size (*Size*) is about EUR 1.322 million with a minimum of EUR 300 thousand and a maximum of EUR 16.345 million.

Regarding Spain, Panel B in Table 2 shows that the mean of audit fee (*Audit_Fee*) is about EUR 1.536 million with a minimum of EUR 400 thousand and a maximum of EUR 30.809 million. The mean (median) for free cash flow (*Free_Cash*) is 0.164 (0.086), with a minimum of -7.254 and a maximum of 4.122. *Leverage* variable represents on average 0.6 of the total assets of the company (with a median of 0.606). The mean (median) *audit risk* is 18.8% (16%), with a minimum of 0.0% and a maximum of 69.8%. *Big 4* auditors are used by 81.1% of the sample firms. Panel B in Table 2 also shows that the mean of firm size (*Size*) is about EUR 4.969 million with a minimum of EUR 306 thousand and a maximum of EUR 95.167 million

Regression Results

Table 3 presents the results from OLS regression for the equation 1 (hypothesis 1) and Table 4 presents the results for the equation 2 (hypothesis 2).

| Table 3 OLS REGRESSION RESULTS | | | | | | | | | | |
|--------------------------------------|----------------------|----------|---------------|----------|--------------|----------|--|--|--|--|
| | Port | ugal | Spa | in | Total sample | | | | | |
| Dependent variable | Audi | t_Fee | Audit | _Fee | Audit_Fee | | | | | |
| Independent | Coefficient t-values | | Coefficient | t-values | Coefficient | t-values | | | | |
| Constant | 0.015 | 0.632 | 0.007 | 1.012 | 0.150 | 0.733 | | | | |
| Free_Cash | 0.015 | 2.196** | 0.165 | 2.109*** | 0.100 | 3.067*** | | | | |
| Aud_Risk | 0.193 1.093 | | 0.392 2.453** | | 0.486 | 3.565*** | | | | |
| Big4 | 0.289 1.812* | | 0.193 2.012** | | 0.235 | 2.209*** | | | | |
| Size | 0.435 | 3.744*** | 0.565 | 3.978*** | 0.786 | 5.171*** | | | | |
| Observations | 312 | | 622 | | 934 | | | | | |
| R-squared | 29.24% | | 45.3 | 1% | 55.30% | | | | | |
| F-statistic | 22.28 | 81*** | 35.919 |)*** | 49.165*** | | | | | |

*** Significant at the 1-percent level; ** Significant at the 5-percent level; * Significant at the 10-percent level.

| Table 4 OLS REGRESSION RESULTS | | | | | | | | | | |
|-----------------------------------|----------------|----------|-------------|-----------|--------------|-----------|--|--|--|--|
| | Por | tugal | Sp | ain | Total sample | | | | | |
| Dependent variable | Aud | it_Fee | Audi | t_Fee | Audit_Fee | | | | | |
| Independent variables | Coefficient | t-values | Coefficient | t-values | Coefficient | t-values | | | | |
| Constant | 0.036 | 0.572 | 0.035 | 1.511 | 0.050 | 0.541 | | | | |
| Free_Cash | 0.081 | 2.833** | 0.102 | 3.037*** | 0.255 | 3.691*** | | | | |
| Aud_Risk | 0.087 | 0.453 | 0.240 | 2.776*** | 0.272 | 3.075*** | | | | |
| Big4 | 0.298 1.890* | | 0.344 | 2.408** | 0.346 | 2.354** | | | | |
| Size | 0.572 3.197*** | | 0.656 | 3.572*** | 0.706 | 3.960*** | | | | |
| Leverage | 0.477 | 1.773* | 0.287 | 2.089** | 0.366 | 2.209** | | | | |
| Free_Cash*Leverage | -0.563 | -2.582** | -0.219 | -3.488*** | -0.391 | -3.094*** | | | | |
| Observations | 3 | 12 | 62 | 22 | 934 | | | | | |
| R-squared | 38.52% | | 55.7 | 70% | 74.32% | | | | | |
| F-statistic | 31.7 | 55*** | 47.06 | 53*** | 58.971*** | | | | | |

*** Significant at the 1-percent level; ** Significant at the 5-percent level; * Significant at the 10-percent level

Tables 3 and 4 present the results from OLS regression for the equations 1 and 2. To both Portugal and Spain, the results show that FCF is positively related to audit fees. The findings support the hypothesis 1, which predicts a positive relationship between FCF and audit fees. Therefore, the results of this study support the Jensen's (1986) FCF hypothesis. Accordingly, audit fees are higher among companies with high FCF. The results are also consistent with the argument that auditors charge higher fees in response to then higher inherent risk associated with the non-value-maximizing activities of managers of high FCF firms.

One other explanation of the positive relationship between FCF and audit fees is that auditors may also charge higher audit fees in high FCF firms, because those clients can pay more (available excess cash). From the demand side, one alternative explanation of the positive relationship between FCF and audit fees is that shareholders may demand for higher quality audits to mitigate the agency problems of FCF (Griffin et al., 2010; Gul & Tsui, 1998, 2001).

As in other studies (Joshi & AL-Bastaki, 2000; Tee et al., 2017; Al-Najjar, 2018), the coefficient for Leverage is positive and significant, suggesting that high leverage pays more audit fees. This result is consistent with the premise that high levered firms can rise the likelihood of

financial distress, which increases audit risk. Thus, the higher the level of leverage, the more the audit risk and thus higher audit fees.

To Portugal, Spain and total sample, the coefficient on Free_Cash*Leverage is negative and statistically significant, suggesting that leverage affects the relationship between FCF and audit fees. Thus, the positive relationship between FCF and audit fees is attenuated when leverage is higher. This suggest that leverage acts more as a self-disciplining internal governance mechanism to mitigate the agency conflict of manager-shareholders in high FCF firms than in low FCF firms. Thus, auditors of high FCF/high leverage firms assessing lower levels of inherent risk and, therefore, supplying lower levels of audit effort (and lower audit fees) than auditors of high FCF/low leverage firms.

Overall, this study suggests that (1) FCF intensifies the agency problem (higher audit fees); and (2) in the presence of high FCF, leverage can act as a monitoring mechanism to alleviate the agency cost of FCF.

Regarding the control variables, audit risk, is positively and significantly associated with audit to Spain, suggesting that higher risk firms pay higher audit fees (Habib et al. 2018; Stanley, 2011). Big 4 is positively and significantly associated with audit fees, which is in line with the argument that Big audit firms charge high audit fees (Barroso et al., 2018; Francis, 2004; Mohammadi et al., 2018; Shailer et al., 2004). As in other studies (Fleischer & Goettsche, 2012; Ghafran & O'Sullivan, 2017; Joshi & AL-Bastaki, 2000; Mohammadi et al., 2018; Sellami & Cherif, 2020), to both Portugal and Spain, the results suggest that larger firms tend to pay greater audit fees.

Further analysis

According to the results in the table 4, the coefficient for Leverage is positive and significant, suggesting that high leverage pays more audit fees. However, the coefficient on Free_Cash*Leverage is negative and statistically significant, suggesting that the positive relationship between FCF and audit fees progressively reduces at higher levels of leverage.

Thus, further analyses are performed to compare (1) the impact of leverage on audit fees for the low and high FCF groups and (2) the impact of FCF on audit fees for the low and high leverage groups. To compare the impact of leverage on audit fees for the low and high FCF groups, we divide the sample into two groups, according to whether their level of FCF is greater or less than the overall mean of FCF variable. Firms with high FCF are coded as "1" if its level of FCF is more than the overall mean of FCF variable, and "0" otherwise. Thus, we re-estimate the equation (1) for each of the sub-samples (high FCF and low FCF). Table 5 reports the results of the regression of equation (1) of the sample firms split between firms with high FCF and firms with low FCF.

To compare the impact of FCF on audit fees for the low and high leverage groups, we divide the sample into two groups, according to whether their level of leverage is greater or less than the overall mean of leverage variable. Firms with high leverage are coded as "1" if its level of leverage is more than the overall mean of leverage variable, and " \mathcal{O} " otherwise. Thus, we reestimate the equation (1) for each of the sub-samples (high leverage and low leverage). Table 6 reports the results of the regression of equation (1) of the sample firms split between firms with high leverage and firms with low leverage.

| Table 5 | | | | | | | | | | | | | | |
|----------------------------------------------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|--------------|-----------|--|--|
| REGRESSIONS RESULTS: HIGH FCF VERSUS LOW FCF | | | | | | | | | | | | | | |
| | Portugal | | | | | | Spain | | | | Total sample | | | |
| | | Audit | Fee | | Audit Fee | | | | Audit Fee | | | | | |
| Dependent variable | High | FCF | Low FCF | | High FCF | | Low FCF | | High FCF | | Low FCF | | | |
| Independent variables | Coefficient | t-values | Coefficient | t-values | | |
| Constnt | 0.041 | 0.218 | 0.051 | 0.394 | 0.064 | 0.468 | 0.080 | 0.502 | 0.097 | 0.672 | 0.079 | 0.498 | | |
| Leverage | -0.071 | -2.038*** | 0.109 | 1.890* | -0.105 | -2.823*** | 0.152 | 2.308** | -0.178 | -3.037*** | 0.189 | 2.592*** | | |
| Control Variables | Y | es | Yes | s | Y | Yes | | es | , | Yes | , | Yes | | |
| R-squared | 26.5 | 57% | 23.9 | 6% | 37.73% | | 31.46% | | 43.70% | | 39.81% | | | |
| F-statistic | 21.46 | 3*** | 18.982 | 18.982*** | | 31.601*** | | 28.879*** | | 38.063*** | | 33.031*** | | |

| Table 6 REGRESSIONS RESULTS: HIGH LEVERAGE VERSUS LOW LEVERAGE | | | | | | | | | | | | |
|--------------------------------------------------------------------------|-------------------------------|-------------------|--------------------------|------------------|----------------------------|--------------------|----------------------------|-------------------|----------------------------|--------------------|----------------------------|-------------------|
| | Portugal Spain Total sample | | | | | | | | | | | |
| | Audit Fee Audit Fee Audit Fee | | | | | | | | | | | |
| Dependent variable | High Le | verage | Low Leverage | | High Leverage | | Low Lev | /erage | High Leverage | | Low Leverage | |
| Independent variables | Coefficient | t-values | Coefficient | t-values | Coefficient | t-values | Coefficient | t-values | Coefficient | t-values | Coefficient | t-values |
| Constant Free_Cash | 0.019 -0.059 | 0.370 -1.927** | 0.011 0.086 | 0.241 1.510** | 0.022 -0.084 | 0.415 -2.011*** | 0.017 0.092 | 0.365 1.955*** | 0.024 -0.158 | 0.511 -2.626*** | 0.031 0.109 | 0.408 2.247*** |
| Control variables R-squared F-statistic | Ye: 28.72 25.728 | s 2% }*** | Yes 26.529 23.071* | % :** | Yes 32.02% 28.909*** | | Yes 29.92% 26.871*** | | Yes 37.66% 31.063*** | | Yes 35.09% 33.074*** | |

The results do not differ from results presented previously in Table 4. The results presented in Table 5 suggest that, for the firms with high FCF, the coefficient of Leverage is negative and significant, whilst for firms with low FCF the coefficient is positive and significant. Results from table 6 suggest that, for the firms with high leverage, the coefficient of Free_Cash is negative and significant, whilst for firms with low leverage the coefficient is positive and significant. The findings, therefore, corroborate that, in the presence of high FCF, firms with high leverage appear to decrease the agency cost of FCF. Thus, in the presence of high FCF, a higher leverage may be beneficial to firm, because leverage reduces the FCF under managerial discretionary control.

The results also suggest that low FCF firms with high leverage have higher audit fees. High leverage firms, in the presence of low FCF, can increase financial distress and liquidity risks. Further, higher leverage may induce misstatements by managers to avoid violations of accounting-based debt covenants and, hence, increase audit fees. Firms with low FCF and high leverage may impose more risk because low FCF, by definition, indicates that it is likely that these high leverage firms are close to debt covenant violations (Gul & Tsui, 1998, 2001). Overall, this increases auditors' assessment of clients' audit risk and audit effort, thereby increasing audit fees.

Thus, this study suggests leverage moderates the increased audit fees only in firms with high FCF. As Jensen (1986) emphasizes, the control function of leverage is more important for high FCF firms rather than low FCF firms.

CONCLUSION

Our paper offers support for the view that high FCF may affect audit fees and that this impact may be contingent to the level of leverage of the firm. In particular, this study aims to evaluate the relationship between FCF and audit fees, based on the Jensen's (1986) FCF hypothesis. This research also examines whether the level of leverage moderate the relationship between FCF and audit fees. To the author's knowledge, the relationship between FCF and audit fees in Portugal and Spain has not been studied. This study is also the first to examine this mediating effect of leverage levels on the relationship between FCF and audit fees in the Portuguese and Spanish contexts.

Consistent with the FCF hypothesis of Jensen (1986), this study suggests that firms with high FCF pay more audit fees, supporting the notion that high FCF intensifies the agency problem. Therefore, auditors will charge higher fees to compensate for the additional work needed to ensure audit quality if they recognize the non-value-maximizing activities of managers of high FCF firms and perceive they as an audit risk factor. This study also shows that the level of leverage has a moderating negative effect on audit fees in the presence of high FCF. Therefore, this study suggests that in high FCF firms, higher leverage levels moderate the increased fees, consistent with the role of debt as a monitoring mechanism. However, we find that low FCF firms with high leverage have higher audit fees, suggesting that leverage seems not interact with low FCF firms to reduce audit fees. Therefore, auditors perceive low FCF/high leverage firms more difficult to audit and, therefore, charging higher

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fees.

The results of this study make the following contributions. First, this study contributes to the literature by examining how FCF affects audit pricing in the Portuguese and Spanish contexts. The results show that the agency problems of companies with high FCF induce auditors of listed firms in Portugal and Spain to charge higher audit fees to compensate for the additional risk and effort, which is consistent with the FCF hypothesis of Jensen (1986). Second, this study shows that leverage moderates the increased audit fees in firms with high FCF. Therefore, in high FCF firms leverage seems to serve as an external control mechanism to alleviate the agency cost of FCF.

Finally, the findings based on this study provide useful information to investors and corporate boards in evaluating/understanding the impact of FCF on audit fees and the mediating effect of leverage on this relationship. Results suggest that firms with high FCF pay more audit fees. In addition, results also suggest that leverage can reduce the agency cost of high FCF firms as reflected in audit fees. Therefore, investors and boards of directors are recommended to pay attention to high FCF and high leverage, because the additional auditing resources needed to compensate the inefficient use of FCF by managers represents a deadweight cost to investors/shareholders. While high levels of leverage, in presence of high FCF, may mitigate the cost of increased audit fees.

This study has also implications for auditors, which can consider the findings when determine the main factors affecting the audit fees. Indeed, auditors should consider the agency costs of high FCF with low leverage into auditors' assessment of audit risks. Auditors may also identify this situation (high FCF/low leverage firms) as a "*red flag*" factor.

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