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Abstract

Corruption is a plague with serious economic and social consequences and has a greater impact than people perceive. The impacts on business are severe but often underestimated.

The aim of this paper is to analyze the influence of public governance environment on the strategical opportunistic use of related party transactions in family firms. Considering corruption as a good indicator of conditions that boost unethical behavior, the study investigates whether high standard of public governance quality at a regional level, as well as low corruption, help to reduce specific types of opportunistic transactions.

Based on a regression analysis on European listed family firms in Italy, France and Germany, we find that high public governance quality at the regional level reduces companies opportunistic transactions.

The study addresses a gap in the literature, firstly because it empirically shows a link between the quality of the context and some unethical business strategies, confirming that a negative context leaves room for opportunistic behaviors and that high standards in the public governance quality discourage firms' opportunistic behaviors through specific transactions and, secondly, because it focuses on family firms suggesting that a strong family power that controls strategy and decision-making process, if operate in a bad public quality context, may be involved in opportunistic behaviors.

KEYWORDS

Public Governance quality; Corruption; Unethical Business Strategy; Sustainable business; Family firm; Related Party Transaction.

1. Introduction

Previous literature has established that good governance is a proxy of quality in business and that it reduces risk. Regulators and policy-makers also strongly recognize that a good governance system helps business development, fundamental circumstance for socio-economic growth.

In different fields of research, researchers have identified benefits deriving from high standards of governance, which inside companies and institutions generally entails board independence, practices and policies consistent with high quality governance, financial expertise and so on (Carcello & Neal, 2003). This study focus on high quality governance in the institutions, and therefore on good public governance quality. As in the Editorial of Paterson et al. (2019), it seems that academics and practitioners, in a loud voice, feel the urge to disseminate knowledge to enable a more sustainable, accountable and less corrupt public sector. The need to fight corruption and unethical behaviors is felt by several parties and it is an extremely current topic considering also that the Covid-19 pandemic would seriously increase risks of corruption, bribery, and fraud in the public and private sector (UNODC - United Nations Office on Drugs and Crime, 2020). Effective company guidelines and preventive and enforcement strategies against corruption that embraces both the public and private sectors are sensitive questions (Manacorda et al., 2014).

Prior researches explore the impact of the quality of context taking into account consequences on different issues (Girella et al., 2019; Marchini et al., 2019; Martins et al., 2017). However, despite this extensive literature, many of them concentrate on the influence that a corrupted environment may have on business performance or business characteristics or, even, on the attractiveness (or not) of this bad context. Low literature focuses on how low public governance quality could have implications on business choices in terms of unethical firm behaviors or strategies, showing a gap on this topic. This study may fill this gap, aiming to investigate the impact that the level of corruption and the quality of local public governance, have on business strategies and opportunistic behaviors in family firms.

Using the framework of anomie theory, this paper examines the impact that the quality of the public governance (used as a proxy of the quality of the context) could have on the firms' choice to engage in opportunistic behaviors implemented through Related Parties Transactions (RPT) (Kim & Yi, 2006; Markham, 2015; Pizzo, 2013). The contextual variable is represented by country-level public governance quality, which is more specifically refined as regional-level governance quality, a closer indicator of the context in which the company is located.

Family-owned firms are chosen on the basis of two main reasons: the first one regards their particular ownership structure, in which the founding-families represent a unique (o main) class of shareholders. A general accepted definition of family firm identifies them in this way: family business is a business owned, managed and governed by one or more generations of family and/or family members, and in which values, visions and missions laid down by their founders are strictly maintained (Anderson & Reeb, 2003; Erdem & Gül Başer, 2010). The second one concerns the huge diffusion they have in the European Union where, according to the European Commission data, the 85 % of all European companies are family businesses and they account for 60 % of jobs in the private sector, showing the potential relevant extent of the issue. In terms of the incidence of family firms, the European context is similar between the main economies: Italy, France, Germany, Spain, and the UK, show a percentage of family firms that swings from 80 percent to 90 percent (Adrian, 2015).

The contribution of the study is appreciable for the academic debate but also for practitioners and policymakers, turning on the light on some manipulable operations and the context in which they are implemented.

The study consists of eight sections. After the Introduction, Section 2 reviews the literature and Section 3 describes the theoretical framework and the research hypothesis. Section 4 defines the research method and Section 5 describes the sample and data collection. Section 6 shows descriptive statistics and correlation matrix and Section 7 presents the results. Finally, in Section 8 we summarize our findings, possible further steps and also outline limitations.

2. Literature review

Governance of corporation and institutions is widely defined as the system by which businesses and organizations are controlled and directed. Corporate governance is about safeguarding stakeholders' rights in the corporate and institutional world. The importance of governance quality is undeniable, just like having a sustainable business model (Cardoni & Lombardi, 2020; Di Pietra & Melis, 2016; Lozano, 2018). Different fields of research have established that a good governance system is a proxy of quality in business and reduces risks.

Moreover, considering firms, previous studies also establish a positive link between board independence, practices consistent with high quality corporate governance, financial expertise and other audit committee characteristics and the effectiveness of monitoring financial reporting and corporate responsibility (Carcello & Neal, 2003). Some authors also investigate which firms' sustainable corporate governance model could help to prevent corruption behaviors (Cardoni & Lombardi, 2020; Lombardi et al., 2019, 2020). More recently, governance quality and firm-level risk of corruption have also been related to social and environmental performance and social and governance disclosure characteristics (Husted & Sousa-Filho, 2019; Lopatta et al., 2017).

Translating these concepts into the public domain, La Porta et al., (1998) write: "*the differences in legal protections of investors might help explain why firms are financed and owned so differently in different countries*". Moreover, public governance means "*the overall public institutions and policies created by governments as a framework for economic, legal, and social relations*" (Globerman & Shapiro, 2003), and involves, for example: political stability and absence of violence, effective government, good regulations and control of corruption. A good public governance system requires, at least, an effective legal system, stable and transparent institutions and government policies that make easy to do business (Slangen & van Tulder, 2009).

As is noted, corruption is an important proxy of scarce public governance quality. Many definitions of corruption have been used (Judge et al., 2011), we refer to public corruption that involves the abuse of public power for personal gain (Aguilera & Vadera, 2008; Collins et al., 2009;

Luiz & Stewart, 2014). The impact of bribery is relevant and generalized, corruption is detrimental to economic growth (Mauro, 1995; Mo, 2001) and reduces investments, innovation and performance (Yang, 2017).

Recently, researchers discuss about how public governance and institutions are able to influence behaviors and the organizations (Charron et al., 2014; Rodríguez-Pose, 2013). Illicit actions in a corrupt environment can damage corporate governance and reputation, impede efforts to develop corporate integrity and legitimacy, and jeopardize actions to improve corporate citizenship and social responsibility (Luo, 2011). Moreover, regulations and public structure influence and forge firms mechanisms (Baldini et al., 2018; Ioannou & Serafeim, 2012).

Other research focus on the attractiveness (or not) of this context, for example, according to Henisz, (2000) when setting up or moving overseas, management takes many issues into consideration in deciding on the destination, basing their decisions on an overall formal environment assessment and political risk. Also according to López-Duarte & Vidal-Suárez, (2010) and Tuman & Emmer (1999) the attractiveness of a country, in terms of foreign direct investments and firms' willingness to enter, is affected by its governance quality. Political instability and corruption, as well as unclear rules or incoherent policies, are signals of low governance quality and discourage companies to establish their activity in those context; while, good governance increases foreign firms' to operate there (Gani, 2007). Marchini et al. (2019) show that corrupted countries are less attractive due to their incapacity to detect opportunistic behaviors. Other recent researches have also investigated the effect of corruption on foreign investments and firm exports (Borja, 2017; Rady, 2018). As confirmed by Filatotchev et al. (2007) and Slangen & Van Tulder (2009), when firms have to decide about foreign transactions, the quality of the public institutions plays a crucial role.

Furthermore, Gillanders & Neselevska, (2018) show that get in touch with corruption behaviors reduces confidence in all the economic context and Liu et al. (2019) find that high corruption has a negative effect on entrepreneurship. The intensity of bribery and anti-corruption

policies also impact on firms' financial performance, profitability and growth (Badawi & Al Qudah, 2019; Van Vu et al., 2018).

Moreover, a good country environment also impacts on disclosure choices, such as integrating reporting implementation (Girella et al., 2019). On the other hand, low governance quality increases the risk perception and reduce firms' confidence (Gani, 2007; Globberman & Shapiro, 2003). Companies located in good public governance quality context and effective investor protection regulations avoid high ownership concentration, showing greater minorities, and reveal separation between ownership and control (Crossland & Hambrick, 2007; Jaggi & Low, 2000; Johnson et al., 2000). It has also been shown a relationship between countries' institutional environment and corruption and respectively, firm governance practices and employment (Daniel et al., 2012; Judge et al., 2008; Sheng et al., 2019).

It is clear that the debate over the impact of the context is building on a growing body of findings summarized in Appendix A.

As a result, policy-makers emphasize “good public governance” as a necessary condition for efficient socio-economic development. This research, in line with the meaningful attention on the topic, focuses on country-level public governance quality, which is studied in more detail as regional level governance quality.

Considering that many extant studies focus on the impact that a poor-quality context has on business performances, business characteristics and business investments choices in terms of the attractiveness of the context in which they should go to invest, this research enriches the literature exploring the impact that public governance quality and corruption may have on business strategies and opportunistic behaviors engaged through specific firms operations. Certain management decisions and company choices are less subject to discretionary and are less manipulable, but transactions with related parties have more frequently been involved in financial scandals and are riskier (Kim & Yi, 2006; Markham, 2015; Pizzo, 2013; Sherman & Young, 2001).

This study investigates the impact that a good regional public governance quality has on opportunistic behaviors, revealed in RPT, by family-owned firms.

3. Theoretical Framework and Research Hypothesis

In order to investigate the relationship between contextual characteristics and opportunistic behaviors carried out through transactions with related parties, this research uses the framework of anomie theory according to Merton's view. Merton, (1938) theorized that anomie is a pressure to depart from established conventions and norms that occurs because of strain produced by an inconsistency between the culturally prescribed aspirations of a society and the socially structured avenues for accomplishing them. Merton, (1968) focused on the negative side of deviance, casting it in terms of socially disapproved behaviors such as stealing, extortion, or corruption to achieve culturally supported goals of wealth and status achievement. Consequently, according to Merton, when culturally accepted goals are blocked or difficult to attain by legitimate means, societies experience anomic strain and a resulting increased rate in the use of illegitimate means to achieve prescribed goals (Cullen et al., 2014).

Transposing this theory in our research, when achievement of valued outcomes through efficient and ethical business is blocked, say by corruption and low quality in the public governance, people may turn to negative alternative means for achieving valued outcomes implementing, therefore, opportunistic behaviors.

As shown before, the importance of taking into account contextual characteristics is well established in different fields of research (Baldini et al., 2018; Girella et al., 2019; Ioannou & Serafeim, 2012; Martin et al., 2007; Pascual-Ezama et al., 2015). Anomie theory in fact states that cultural and social drivers exert pressure on goal achievement and the decision-making process (Martin et al., 2007; Merton, 1968). Cullen et al. (2004) confirm that anomie theory is a good lens to investigate ethical firm behavior and firm decision-making process.

Previous studies show that unethical behavior is less frequent when a good environmental context is created. In other words, firms located in a favorable economic and social context have less probability of engaging in opportunistic behaviors.

For all these reasons and through the lens of anomie theory, we measure the level of local public governance quality, as our contextual variable, using the European Quality of Government Index (EQI). This index comes from a novel survey data on corruption and governance at regional level within the EU, conducted first in 2010 and again in 2013 and founded in 2010 by the EU Commission for Regional Development (Charron et al., 2016). On the other side, we proxy the opportunistic behaviors using some specific firms operations, which are Related Party Transactions (RPT). As confirmed in previous literature, RPT are often seen as opportunistic tools. Moreover, some prior researches also highlight that some RPT and/or some transactions with a specific related party are more opportunistic than others (Bertrand et al., 2002; Claessens et al., 2006; Faccio et al., 2001; Lemmon & Lins, 2003; Marchini et al., 2018b, 2018a).

Therefore, our hypothesis is that regional-level public governance quality and corruption influence the firms' choices to engage in opportunistic behaviors through RPT. Please see Figure 1 for the research overview.

Relying on anomie theory (Merton, 1968), we consider the quality of local public governance regarding corruption, as well as governance in general, as a cultural and social driver, and we assume that a high level of quality in a Region is a disincentive for opportunistic behavior. Thus, our directional hypothesis is that the regional-level government quality influences the firm-level *abnormal RPT* and the firm-level *probability to have a transaction with a specific related party*.

H1: Regional corruption and low quality governance in public administrations has a positive relation with the level of opportunistic (abnormal) RPT.

H2: Regional corruption and low quality governance in public administrations has a positive relation with the probability of transactions with a specific related party.

4. Methodology

As previous studies (Alexander et al., 2020; Annoni & Charron, 2019; Charron et al., 2015, 2019, 2021; Fazekas & Czibik, 2021), we rely on corruption and public governance quality data from "The Quality of Government EU Regional Dataset - version Sep16" (Charron et al., 2016). These data are disaggregated by Nomenclature of territorial units for statistics (NUTS) 1 for Germany and for NUTS 2 for Italy and France.

Therefore, our contextual variable, the level of local public governance quality, is measured using the EQI. This index is built on 16 survey questions, aggregated from the individual level to the regional level and then combined into a single index for each region. The questions are mainly framed around the central concepts of quality, impartiality, and corruption and ask about respondents' experience and perceptions. The 16 survey questions were aggregated into a single measure to produce the regional estimates, using the procedures described in the OECD's Handbook on Constructing Composite Indicators (Di Nardo et al., 2008). The mean score for each of the 16 questions was calculated for each region. Aggregated regional scores were then normalized and investigated whether there was significant sub-group clustering in the data by performing a factor analysis (principal component). Three main groups, clustered around the survey's principle concepts of impartiality, corruption and quality, were detected. These were labeled 'pillars' and the individual regional scores were then aggregated into their respective pillars. The final regional index was the result of aggregating the scores for the three pillars for each region (Charron et al., 2016) (see Appendix B for detailed). Looking at RPT, we analyze them considering breaking down these operations according to the type of transaction and type of parties involved, as usually presented in the financial statement. We hand collect RPT data from the companies' financial statements. In detail, we collect data on the amount, the related parties involved and the type of transaction. In line with the literature (Yeh et al., 2012), we investigate RPT sales, borrowing or lending and we exclude firms without these RPT.

After identified our both variables, we merge the EQI variables (or corruption index) with the RPT variables using the information on the headquarter of the parent firm. So, in other words, if the company X undertakes a specific RPT sales (known through its financial statement), we cross and combine the headquarter of the firm X with the EQI of the same region in which the company is located (the firm X we refer to is represented by the listed parent family firm).

Then, rely on the STATA software, we test H1 using a proxy of opportunistic RPT, and we test H2 using a measure of transactions with differentiated related parties.

As a proxy of opportunistic RPT for H1, we adopt Jian & Wong, (2010) approach and we estimate the normal and the abnormal level, as commonly used in the literature (Yeh et al., 2012). The level of RPT can sometimes be natural for firms in a large business group and does not necessarily relate to wealth exploitation. However, a firm with an “abnormal” amount of RPTs is more likely to be engaging in wealth exploiting activities. Based on a model used in prior literature, we use RPT Sales and Borrowing/Lending separately. RPT could be considered either normal or abnormal level. With an ordinary least square regression we remove any normal RPT that are associated with industry and firm features such as size, leverage, and growth. The residual term is our measure of abnormal RPT. As a first stage regression, we run a year-by-year and country-by-country regression, with sales revenue, lending and borrowing as dependent variables. For example, for RPT sales, we run $5\text{years} \times 3\text{countries} = 15$ regressions. We save the 15×3 ($b_1 + b_2 + b_3$) regression coefficients plus 15×1 constants and add all the dummies coefficients for the industry fixed effects. We multiply all coefficients resulting from the first stage with the amount of the variables for each observation. We then subtract this result from the RPT sales raw and find the residual. We repeat this approach for RPT borrowing and RPT lending. We call the residual *RPT sales/borrow/lending abnormal*.

As a second stage regression, we run panel regressions on 2 dependent variables for RPT sales (Raw and Residual), 2 dependent variables for RPT borrowing (Raw and Residual), and 2 dependent variables for RPT lending (Raw and Residual), for a total of 6 regressions. All these regressions are robust for heteroscedasticity. Following the literature we investigate the effect of *EQI Index*

(*Corruption Index*) on both the dependent variables (Raw and Residual). We thus have as dependent variables the results of the first stage (residual), which represents the opportunistic view of RPT, as well as RPT raw which represents the full amount of RPT (opportunistic and efficient).

First stage regressions (year-by-year and country-by-country) – H1:

$$RPT\ sales/borrow/lending\ raw = b_0 + b_1\ Size + b_2\ Leverage + b_3\ Sales\ growth + industry\ fixed\ effect + e$$

Second stage regression – H1:

$$RPT\ sales/borrow/lending\ abnormal\ (residual\ from\ the\ first\ stage) = b_0 + b_1\ EQI\ Index\ (Corruption\ Index) + b_2\ Size + b_3\ Leverage + b_4\ Sales\ growth + country\ and\ industry\ fixed\ effect + e$$

In order to obtain a measure of transactions with differentiated related parties for H2, we use a logistic regression investigating the probability of a transaction with an associate, joint venture, others, ultimate parents, unconsolidated subsidiaries and individual. In other words, we change the dependent dummy variable in each of the 6 regressions. We investigate the effect of *EQI Index* (*Corruption Index*) on different types of parties.

Regression – H2:

$$Prob\ (RP) = f(b_0 + b_1\ EQI\ Index\ (Corruption\ Index) + b_2\ Size + b_3\ Leverage + b_4\ Sales\ growth + country\ and\ industry\ fixed\ effect)$$

For all the models, we control for firm size (Size), given that certain constructs, e.g., information environment, capital market pressure, and financial resources, predict a negative association between size and earnings manipulation (Dechow et al., 2010). We control for Leverage because a higher total debt to asset ratio indicates a higher possibility of debt covenant violation, which creates an incentive to increase reported earnings through earnings manipulation (e.g., Dechow et al., 2010; Francis & Wang, 2008; Francis & Yu, 2009). Finally, we control for Sales Growth.

5. Sample and Data collection

5.1. Sample

The quality of the context could differently impact on companies' behaviors according to some of their characteristics, like for example, firms under control of a family. Family businesses, as a type of business, are widespread and their small shareholder base may facilitate opportunistic behaviors more than in the public companies which are subject to greater market controls. Family firms tend to appoint family members on the board, reducing monitoring activities (Anderson & Reeb, 2003) and private information tends to be held within the family, reducing the flow of information to outsiders (Ajinkya et al., 2005).

Relational-based approaches among board members, the managerial team, and representatives of owners tend to overcome the more objective form of evaluation that occurs through market mechanisms (Cascino et al., 2010).

In this kind of firms, family represents a unique class of shareholders that holds poorly diversified portfolios, are long-term investors (multiple generations), often control senior management positions” (Anderson & Reeb, 2003) and is unable to hire valuable external managers who do not necessarily belong to the controlling family (Gomez-Mejia et al., 2001). Outside shareholders in fact weaken the level of "familiarity" making the firm's strategy out of control from the family. Moreover, pyramidal ownership structures and cross holding (Peng & Jiang, 2010) are often used by the family to control firms using a chain of ownership relations and to control strategy and decision-making process (Berrone et al., 2010; Gómez-Mejía et al., 2007).

Those companies also represent the majority of companies in the European Union and, therefore, are the greatest contributors to the socio-economic growth of that area.

According to all of these, we are interested in family businesses in order to investigate behaviors of companies in which the decision power is in the hand of a small shareholders base belonging to the same family.

5.2. Data Collection

Data collection begin with the full population of listed firms in Italy, France and Germany (1,323 firms, Table 1). We start by selecting firms with a voting threshold of at least 25%, and then using surnames and recognized repeated names, ascertain whether these shares are owned by a family member (see Appendix C for detailed). To capture family firms with less than 25% voting thresholds, we compute manually the ultimate voting rights (see Appendix D for an example). We then exclude firms where the controlling family did not remain the largest shareholder for at least half of the period analyzed, and firms with non-family CEO (212 firms, Table 1) (Ansari et al., 2014).

The sample covers the time 2010-2014. This period is particularly interesting also for its link with one of the most relevant scandals in the European public governance; during these years, in fact, a corruption scandal overwhelmed the European Parliament and its members.

We collect data from the consolidated financial reporting from Bureau Van Dyck. We exclude observations with missing data, which yields a final sample of 481 firm-year observations. Using the RPT as a unit of analysis, this results in a sample of 2,488 firm-year-RPT observations.

[insert here Table 1]

Looking at the sample distribution by industries and countries of RTP sales, borrowing and lending, untabulated results show that in some industries-countries some type of transactions are not present. For example, in Germany there is no RPT lending. Looking at Italy, the amount of RPT sales is higher than RPT borrowing and lending for all the industries considered except firms under SIC Code numbers 3 and 6. In Industry 3 and 6, the amount of RPT lending is the highest. In France we have mixed evidence. Unlike Italy, the highest amount of RPT is accounted for borrow and lending. In Germany, the highest amount of RPT is accounted for sales and borrowing, again varying across industries.

Looking at the type of transaction, the highest amount for each operation is in France. The amount of RPT sales and the amount of RPT borrowing are the highest in the industry "Wholesale

Trade and Retail Trade" (36,400 and 33,000 Thousand/Euro respectively); while the highest amount of RPT lending is in the "Services" industry (28,600 Thousand/Euro).

Looking at the sample distribution by countries NUTS-years with a focus on EQI Index and corruption, we underline that, as explained in Appendix B, higher values of EQI Index and Corruption mean better quality, because the sign represents better (or worse) performance than the national average. Considering all the periods analyzed, untabulated results show that in Italy governance quality is the highest in Piemonte in 2010-2011, while corruption is the lowest in Emilia Romagna in 2010-2011. Secondly, in France governance quality is the highest in Bretagne in 2010, while corruption is the lowest in Aquitaine in 2011. Lastly, in Germany governance quality is the highest in Saarland in 2010-2011, while corruption is the lowest in Baden-Wurtemberg in 2010-2011.

6. Descriptive Statistics and Correlation matrix

Table 2 shows descriptive statistics for dependent variables in Panel A, for corruption data in Panel B and for control variables in Panel C.

RPT sales, borrow and lending raw in panel A represent respectively 1.2%, 1.8% and 0.9% of total sales on average with a small standard deviation, which is similar among all firms in our sample. Within this raw percentage, the abnormal part considered opportunistic represents respectively 0.1%, 0.005%, 0.002% of total sales.

Yeh et al. (2012) report that the amounts raw in euro of RPT sales, borrow and lending are significantly lower in Europe than China (respectively 6 million versus 89 million, 10 million versus 30 million, 3 million versus 30 million). Table 2 Panel C also shows significant differences in the firms' structure. European companies have a mean total asset of 1.5 million euro, while Chinese firms show higher total asset (mean 540 million in Yeh et al., 2012).

Finally, looking at the type of parties in panel A, RP Unconsolidated subsidiaries is the most frequent, and 36.9% of the sample have a transaction with this related party. The least frequent is RP individual (4.7%).

Panel B shows that the average EQI Index (Corruption Index) is 0.165 (0.103) points in the three countries analyzed. This value is above 0, although the standard deviation is high and the first quartile shows a negative score (-0.513; -0.187) which shows that the situation varies between regions.

Panel C shows mean size, leverage and sales growth. Firms in our sample are on average fairly well capitalized (equity represents 40.6% of total assets) and not in a growing phase (sales growth mean of -0.9% compared to the previous year).

[insert here Table 2]

Table 3 shows the Pearson correlation matrix, showing that there is no problem of multicollinearity. The highest correlation between independent variables within the same regression is 0.085 between the Size and Corruption index signaling no multicollinearity.

[insert here Table 3]

7. Results

Our analysis yields interesting findings, confirming the direction of our first hypothesis. Looking at RPT sales, the quality of public governance has a negative relationship with RPT sales, whether these are efficient or opportunistic (coefficient = -0.021; p-value= 0.003). This means that, in general, higher regional corporate governance quality reduces RPT sales. Focusing on public corruption, we find that it has a negative relationship with abnormal RPT sales, signaling that lower regional corruption levels help to reduce abnormal RPT sales, proxy of firms' opportunist behavior (coefficient = -0.008; p-value= 0.096).

There are similar results for RPT lending. The quality of public governance has a negative relationship with abnormal RPT lending (coefficient = -0.009; p-value= 0.100), signaling that high standards in regional government help to reduce abnormal RPT lending, proxy of firms' opportunistic behavior.

The results on RPT borrowing are insignificant and are not reported in the tables.

Findings relating to the second hypothesis are summarized as follows.

A higher level of public governance quality is negatively related to RPT with associate firms (coefficient= -0.787; p-value= 0.008), meaning that greater regional governance quality reduces the firm-level probability of RPT with the associate companies compared to other types of related parties. A higher level of public governance quality is negatively related to RPT with joint venture (coefficient= -1.750; p-value= <0.001), meaning that greater regional governance quality reduces the firm-level probability of RPT with the joint venture compared to other types of related parties. There is a similar interpretation for RPT with ultimate parents (coefficient= -1.086; p-value= 0.005).

Lastly, we run further regressions (untabulated) to compare these three types of related parties. Because the first analysis showed that the Corruption Index had low significance we use only the EQI Index. Using a subsample that includes only transactions with associate firms and joint ventures, we show that greater public governance quality reduces the probability of RPT with a joint venture. Using a subsample that includes only transactions with joint ventures and ultimate parents, we show that greater public governance quality reduces the probability of RPT with ultimate parents. Thirdly, using a subsample that includes only transactions with associate firms and ultimate parents, we show that greater public governance quality reduces the probability of RPT with ultimate parents. It thus appears that context governance quality has the greatest efficacy in reducing RPT with ultimate parents.

[insert here Table 4,5 and 6]

Summarizing, regarding the type of RPT, our results show that low corruption and good public governance quality, reduce, respectively, opportunistic behaviors made through RPT sales and RPT lending. As for the type of related parties involved in the transaction, high governance standards decrease the probability of RPT with a joint venture and with ultimate parents, and are more efficacious on the latter type.

These findings, thus confirm that a negative context leaves room for opportunistic behaviors (Gani, 2007; Globerman & Shapiro, 2003). In line with the Anomie Theory, when achievement of valued outcomes through efficient and ethical business is blocked, people may turn to negative alternative means for achieving valued outcomes implementing, therefore, opportunistic behaviors.

In other words, in less contestable firms, such as family firms in which the family-owners are often involved in the management, the monitoring activities are mitigated and the strategy and decision-making process are in the hand of the family, the quality of the context plays a crucial role. It seems that family firms operating in a bad public quality context, are involved in opportunistic behaviors.

8. Conclusion, limitations and future research

Previous literature confirms that the quality of governments and institutions can influence behaviors, choices and process (Charron et al., 2014; Rodríguez-Pose, 2013) and also that regulations and public structure influence firms mechanisms (Baldini et al., 2018; Ioannou & Serafeim, 2012).

Some prior researches show the impact that a good (or bad) public governance quality and high (or low) level of corruption, have on the attractiveness of the context (Henisz, 2000; Kobrin et al., 1980; López-Duarte & Vidal-Suárez, 2010; Marchini et al., 2019; Tuman & Emmer, 1999). Other literature show findings regarding the relationship between the intensity of bribery and firms' financial performance (Badawi & Al Qudah, 2019; Van Vu et al., 2018). Finally, still others, find results on the impact that the institutional environment and corruption have on firm governance practices and employment (Daniel et al., 2012; Judge et al., 2008; Sheng et al., 2019) It seem to be confirmed that a good environmental context protects all stakeholders, is more attractive for a healthy business and improve firms' growth and performances.

Empirically testing a possible relationship between public governance quality and corruption and opportunistic behaviors engaged through RPT, this research fills a gap existing in the literature. Moreover, taking into account family-owned firms in France, Italy, and Germany (countries with a high percentage of these companies) allow to capture the peculiarities of their ownership structure that impacts on control mechanism and opportunistic behaviors.

Our results shed light on the fact that high standards in the public governance quality reduce and discourage the probability that firms will engage in opportunistic behaviors through specific transactions with related parties.

Our findings thus confirm that a negative context leaves room for opportunistic behaviors (Gani, 2007; Globerman & Shapiro, 2003). In particular, they suggest that family firms with a strong family power which allow to the family-owner to appoint family members on the board, reducing monitoring activities, the flow of information to outsiders and so, controlling strategy and decision-making process, if operate in a bad public quality context, are involved in opportunistic behaviors.

These findings will be of use for further research, policy-makers, and practitioners. First, it emphasizes the positive effects that a good context has on business behaviors as well as the spread of ethical conduct, other than the “inferno” that a corrupted environment could create on business operations. Second, the study sheds light on the need to pay particular attention to certain operations in terms of whether they are efficient or opportunistic. More manipulable transactions which have high level of discretionary, such as those with related parties often involved in financial scandal (Kim & Yi, 2006; Markham, 2015; Pizzo, 2013; Sherman & Young, 2001) need to be carefully monitored especially when undertaken in scarce quality context. Third, the study should encourage the introduction of anti-corruption measures with rigorous sanctioning, as well as an ethical and sustainable framework at both a local and transnational level.

Our research is not without limitations. We consider only certain EU countries, which although our results are meaningful, they are less generalizable. Given that RPT exist worldwide, the study should, however, inspire research in other countries. Moreover, we are aware of the difficulties in cross-country studies. In this research, we control for the country differences with our contextual variable. However, future research could develop country-oriented measures of public governance at the municipal level to perform single country study. The second limitation is that because the hand collection of RPT data and identification of the family control chain is time-consuming, our period of interest is only 5 years that are also a bit far from today. A further limitation is that the research

covers only larger companies and further analysis of non-listed companies would be useful to investigate private firms, which are subject to less regulation.

Future researches may be interested in studying dispersed ownership listed companies, in which a strong power of the family lacks or studying private firms. Could be also interesting to investigate different thresholds of the ownership in family hands and so, study the heterogeneity of family firms in different countries or areas. Furthermore, considering that corruption and bad quality governance, like the issues of RPT, are sensitive topics worldwide, further steps may consider extending our analysis.

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Table 1 – Sample selection

Description	N
Full population of listed firms in Italy, France and Germany (311 for Italy, 562 for France, 450 for Germany)	1,323
Less non-family firms or family firms with non-family CEO	-1,111
Number of family-firms with family CEO (31 for Italy, 111 for France, 70 for Germany)	212
Less number of firms with absence of RPT sales, borrowing or lending	-94
Final number of firms (28 for Italy, 52 for France, 38 for Germany)	118
Number of observations for the period 2010-2014	590
Less number of observations with missing data (for control variables)	-109
Final number of firm-year observations for the period 2010-2014 (unbalanced sample)	481
Final number of firm-year-RPT observations for the period 2010-2014 used in the regressions analysis (average of 5 RPT for each firm-year) divided as follow:	2,488
RPT sales	1,470
RPT borrowing	188
RPT lending	830

Table 2 - Descriptive Statistics

Panel A	N	Mean	Std. Dev.	Q1	Q2	Q3
RPT sales raw (%)	1,470	0.012	0.039	0.0001	0.001	0.005
RPT sales raw (Thousand/Euro)	1,470	5,891	26,400	29	194	1607
Abnormal RPT sales (residual) (%)	1,470	0.001	0.037	-0.011	-0.003	0.002
RPT borrowing raw (%)	188	0.018	0.037	0.0005	0.003	0.017
RPT borrowing raw (Thousand/Euro)	188	9,973	28,200	145	1,000	5,007
Abnormal RPT borrowing (residual) (%)	188	0.00005	0.041	-0.012	-0.002	0.003
RPT lending raw (%)	830	0.009	0.024	0.0001	0.001	0.004
RPT lending raw (Thousand/Euro)	830	2,941	8,190	31	217	1,350
Abnormal RPT lending (residual) (%)	830	-	0.020	-0.008	-0.001	0.003
RP Associate	2,488	0.176	0.381	0.000	0.000	0.000
RP Joint Venture	2,488	0.089	0.285	0.000	0.000	0.000
RP Others	2,488	0.253	0.435	0.000	0.000	1.000
RP Ultimate Parents	2,488	0.066	0.248	0.000	0.000	0.000
RP Unconsolidated subsidiaries	2,488	0.369	0.483	0.000	0.000	1.000
RP Individual	2,488	0.047	0.212	0.000	0.000	0.000
Panel B						
EQI Index	2,488	0.165	0.706	-0.513	0.552	0.767
Corruption Index	2,488	0.103	0.456	-0.187	0.006	0.498
Panel C						
Size	2,488	19.752	1.611	18.707	19.666	20.968
Assets (Thousand/Euro)	2,488	1,480,000	4,310,000	133,000	348,000	1,280,000
Leverage	2,488	0.406	0.200	0.282	0.358	0.516
Sales Growth	2,488	-0.009	0.237	-0.100	-0.020	0.079

Table 3 - Pearson Correlation Matrix

	1	2	3	4	5	6	7	8	9	10	11
1 RPT sales raw	1.000										
2 Abnormal RPT sales	0.944	1.000									
3 RPT borrowing raw	.	.	1.000								
4 Abnormal RPT borrowing	.	.	0.631	1.000							
5 RPT lending raw	.	.	.	.	1.000						
6 Abnormal RPT lending	.	.	.	.	0.769	1.000					
7 EQI Index	-0.226	-0.064	-0.019	0.014	0.028	-0.049	1.000				
8 Corruption Index	-0.189	-0.069	-0.089	0.035	0.023	-0.024	0.868	1.000			
9 Size	-0.038	0.010	0.015	-0.004	-0.246	0.009	-0.077	-0.085	1.000		
10 Leverage	0.037	0.043	0.260	-0.021	0.088	0.029	0.002	0.006	-0.056	1.000	
11 Sales Growth	-0.019	-0.015	-0.078	0.012	0.010	0.000	-0.068	-0.052	-0.027	0.083	1.000

Correlation is measured by Pearson coefficients. See Appendix B for variable definitions.

Table 4 – Second stage regression - H1 RPT Sales

H1	RPT sales				RPT sales			
	Raw		Residual (Abnormal)		Raw		Residual (Abnormal)	
	Estimate	p-value	Estimate	p-value	Estimate	p-value	Estimate	p-value
EQI Index	-0.021	0.003	-0.013	0.058				
Corruption Index					- 0.008	0.150	-0.008	0.096
Size	-0.001	0.021	0.0001	0.818	-0.001	0.018	0.0001	0.921
Leverage	-0.001	0.783	0.001	0.769	0.001	0.867	0.003	0.602
Sales Growth	-0.005	0.232	-0.003	0.490	-0.005	0.192	-0.003	0.437
Constant	0.071	<0.001	0.019	0.245	0.068	<0.001	0.019	0.257
Country fixed effect	Included		Included		Included		Included	
Industry fixed effect	Included		Included		Included		Included	
Number of observation	1470		1470		1470		1470	

Coefficient p-values are two-tailed and are based on asymptotic t-statistics robust to heteroscedasticity, following the methodology in White (1980). Estimates on industry and country dummies are not reported for the sake of brevity. See Appendix B for variable definitions.

Table 5 – Second stage regression - H1 RPT Lending

H1	RPT lending				RPT lending			
	Raw		Residual (Abnormal)		Raw		Residual (Abnormal)	
	Estimate	p-value	Estimate	p-value	Estimate	p-value	Estimate	p-value
EQI Index	0.002	0.772	-0.009	0.100				
Corruption Index					0.004	0.210	0.0004	0.897
Size	-0.004	<0.001	0.000003	0.995	-0.004	<0.001	-0.00002	0.977
Leverage	0.009	0.224	0.0005	0.932	0.009	0.228	0.001	0.915
Sales Growth	-0.0003	0.931	-0.0004	0.882	-0.0004	0.893	-0.0001	0.983
Constant	0.091	<0.001	-0.008	0.575	0.070	<0.001	-0.036	0.005
Country fixed effect	Included		Included		Included		Included	
Industry fixed effect	Included		Included		Included		Included	
Number of observation	830		830		830		830	

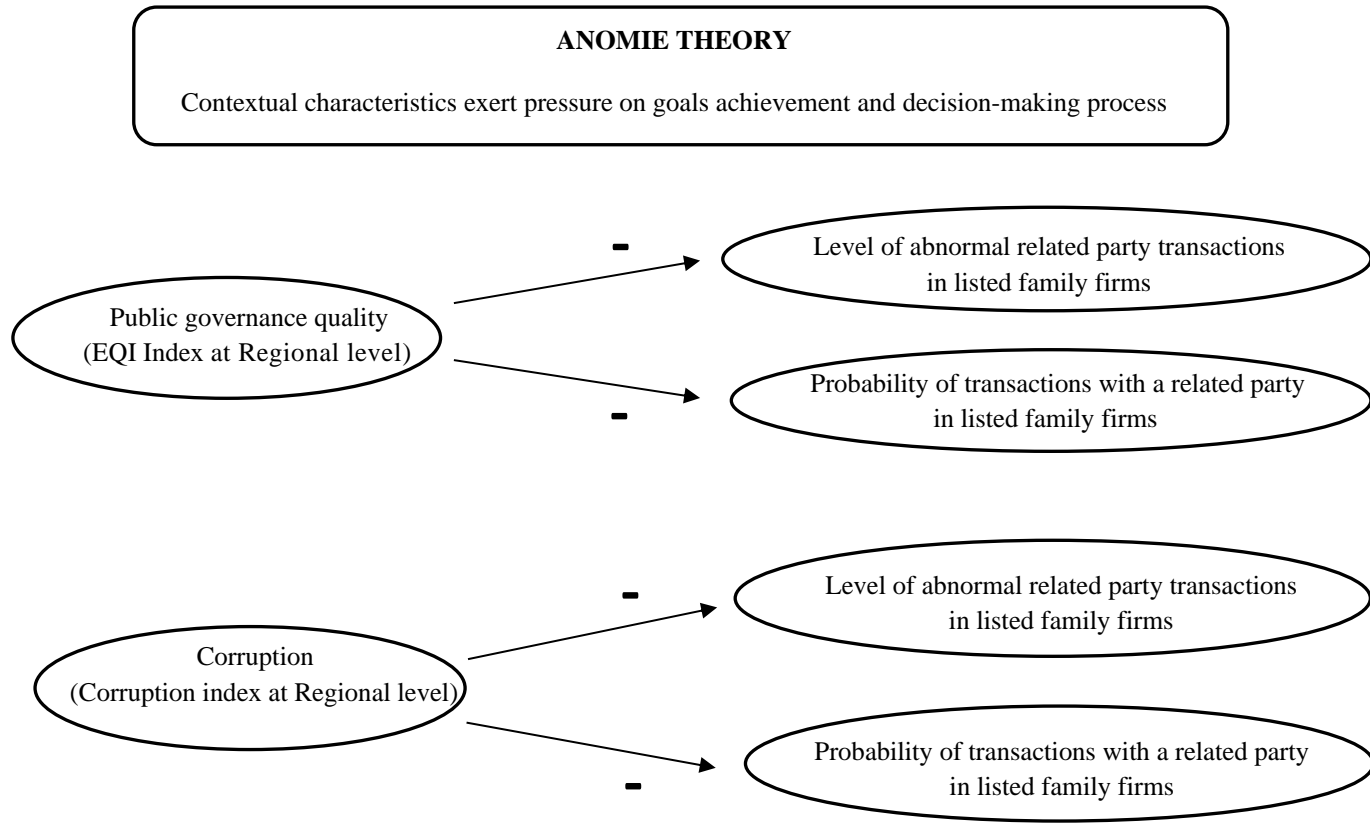
Coefficient p-values are two-tailed and are based on asymptotic t-statistics robust to heteroscedasticity, following the methodology in White (1980). Estimates on industry and country dummies are not reported for the sake of brevity. See Appendix B for variable definitions.

Table 6 –Regression H2

H2	RP Associate		RP Joint Venture		RP Others		RP Ultimate Parents		RP Unconsolidated subsidiaries		RP Individual	
	Estimate	p-value	Estimate	p-value	Estimate	p-value	Estimate	p-value	Estimate	p-value	Estimate	p-value
EQI Index	-0.787	0.008	-1.750	<0.001	1.348	<0.001	-1.086	0.005	0.425	0.172	-0.180	0.722
Corruption Index												
Size	0.297	<0.001	0.434	<0.001	-0.287	<0.001	0.480	<0.001	-0.230	<0.001	-0.072	0.238
Leverage	1.119	0.002	0.731	0.134	0.392	0.232	0.622	0.378	-0.424	0.251	-1.807	0.003
Sales Growth	-0.209	0.388	-0.143	0.697	-0.380	0.075	0.790	0.068	0.296	0.138	0.426	0.307
Constant	-9.618	<0.001	-9.945	<0.001	8.378	<0.001	-11.822	<0.001	0.171	0.893	-2.331	0.058
Country fixed effect	Included		Included		Included		Included		Included		Included	
Industry fixed effect	Included		Included		Included		Included		Included		Included	
Number of observations that predict failure perfectly	24		0		0		709		0		371	
Number of observations	2464		2488		2488		1779		2488		2117	

Coefficient p-values are two-tailed and are based on asymptotic t-statistics robust to heteroscedasticity, following the methodology in White (1980). Estimates on industry and country dummies are not reported for the sake of brevity. See Appendix B for variable definitions.

Figure 1 – Research overview



Note: each arrow represents a different regression.

Appendix A – Summary of literature on the impact of contextual characteristics on different issues

General topic	Study	Results
Public governance and institutions characteristics AND Behaviors and organizations	Charron, N., Dijkstra, L., & Lapuente, V. (2014) La gouvernance régionale importe: La qualité des pouvoirs publics au sein des pays membres de l'Union européenne. <i>Regional Studies</i> , 48(1), 68–90.	Good quality of government is highly correlated with levels of socio-economic development and levels of social trust.
	Rodríguez-Pose, A. (2013). Les institutions, sont-elles importantes pour l'aménagement du territoire? <i>Regional Studies</i> , 47(7), 1034–1047.	Good institutions are crucial for economic development.
Public governance and institutions characteristics AND Corporate governance and firm mechanisms	Luo, Y. (2011). Strategic responses to perceived corruption in an emerging market: Lessons from MNEs investing in China. <i>Business & Society</i> , 50(2), 350–387.	Corruption in a setting reduces a multinational enterprises investment commitment and increases its export market orientation.
	Baldini, M., Dal Maso, L., Liberatore, G., Mazzi, F., & Terzani, S. (2018). Role of country-and firm-level determinants in environmental, social, and governance disclosure. <i>Journal of Business Ethics</i> , 150(1), 79–98.	Country-level characteristics such as a political system (legal framework and corruption), labor system (labor protection and unemployment rate), and cultural system (Social Cohesion and Equal Opportunities) significantly affect firms' ESG disclosure practices.
	Ioannou, I., & Serafeim, G. (2012). What drives corporate social performance? The role of nation-level institutions. <i>Journal of International Business Studies</i> , 43(9), 834–864.	Political system, labor and education system, and cultural system are the most important "system categories" of institutions that impact corporate social performance.
Public governance and institutions characteristics AND attractiveness (or not) of the context	Henisz, W. J. (2000). The institutional environment for multinational investment. <i>Journal of Law Economics, and Organization</i> , 16(2), 334–364.	An overall formal environment assessment and political risk influence firms in deciding where setting up or moving.
	López-Duarte, C., & Vidal-Suárez, M. M. (2010).	Country's environment such as political risk, cultural distance and language diversity influence the entry mode choice of firms.

	External uncertainty and entry mode choice: Cultural distance, political risk and language diversity. <i>International Business Review</i> , 19(6), 575–588.	
	Tuman, J. P., & Emmer, C. (1999). Explaining Japanese foreign direct investment in Latin America, 1979–1992. <i>Social Science Quarterly</i> , 80.(3), 539–555.	Political instability, market size, economic adjustment policies influence investment behavior.
	Gani, A. (2007). Governance and foreign direct investment links: Evidence from panel data estimations. <i>Applied Economics Letters</i> , 14(10), 753–756.	Law, control of corruption, regulatory quality, government effectiveness and political stability influence positively foreign direct investment.
	Marchini, P. L., Mazza, T., & Medioli, A. (2019). Corruption and sustainable development: The impact on income shifting in European international groups. <i>Corporate Social Responsibility and Environmental Management</i> , 27, 717–730.	Corrupted countries are less attractive due to their incapacity to detect opportunistic behaviors.
	Rady, T. (2018). The Effect of Transparency, Accountability and Corruption on Foreign Direct Investment in Developing Countries. <i>Journal of Business and Behavioral Sciences</i> , 30(1), 47–58.	No significant results.
Public governance and institutions characteristics AND Trust	Gillanders, R., & Neselevska, O. (2018). Public Sector Corruption and Trust in the Private Sector. <i>Journal of International Development</i> , 1317(August 2017), 1288–1317.	Get in touch with public corruption reduces confidence in all the economic context. It reduces trust in big private corporations, small businesses and local traders.
	Liu, J., Hu, M., Zhang, H., & Carrick, J. (2019). Corruption and Entrepreneurship in Emerging Markets. <i>Emerging Markets Finance & Trade</i> , 55, 1051–1068.	Mixed results. They show an inverted U relationship between corruption and entrepreneurship. Corruption at low levels is positively associated with entrepreneurship, but high levels of corruption are related to low entrepreneurship.
Public governance and institutions characteristics AND Performance	Badawi, A., & Al Qudah, A. (2019). The Impact of Anti-Corruption Policies on the Profitability and Growth of the Firms Listed in the Stock Market-Application on Singapore (Panel Data Analysis). <i>The Journal of Developing Areas</i> , 53(1).	Anti-corruption policies promoted by countries to mitigate corruption risks and to limit the economic and political impacts of corruption are related to better firm performances.
	Van Vu, H., Tran, T. Q., Van Nguyen, T., & Lim, S. (2018).	

	Corruption, Types of Corruption and Firm Financial Performance: New Evidence from a Transitional Economy. <i>Journal of Business Ethics</i> , 148, 847–858.	The intensity of bribery and the majority of the forms of corruption have negative impacts on firms' financial performance.
Public governance and institutions characteristics AND Disclosure and practices	Girella, L., Rossi, P., & Zambon, S. (2019). Exploring the firm and country determinants of the voluntary adoption of integrated reporting 1. <i>Business Strategy and the Environment</i> , 28, 1323–1340.	Firms are more likely to implement integrated reporting if they are located in countries with a higher level of corruption perception and a better risk rating.
	Daniel, S. J., Cieslewicz, J. K., & Pourjalali, H. (2012). The impact of national economic culture and country-level institutional environment on corporate governance practices. <i>Management International Review</i> , 52, 365–394.	Institutions and culture are linked to corporate governance practices.

Appendix B – Variable Definitions

Dependent Variables: RPT variables	
RPT sales raw	total Euro amount of sales RPT divided by sales
RPT borrowing raw	total Euro amount of financial debit RPT divided by sales
RPT lending raw	total Euro amount of financial credit RPT divided by sales
RPT sales abnormal	Residual of the first stage regressions year-by-year and country-by-country
RPT borrowing abnormal	Residual of the first stage regressions year-by-year and country-by-country
RPT lending abnormal	Residual of the first stage regressions year-by-year and country-by-country
Independent Variables: Regional corruption	
EQI Index	The final regional index was the result of aggregating the scores for the three pillars for each region. To calculate the final score for each country and region, the regional scores for each of the countries included in the 2013 survey were aggregated by regional population weights. This national average of regional scores is used to measure the extent to which region X in country Y conforms to the national QoG standard, which is done by subtracting the national average from each region's score. A positive score for a region implies that it is above the national mean and a negative score indicates that the regions QoG performance is below the national mean. In the final index, this regional score is added to the national WGI score, so that each region's score is adjusted; centered around the WGI. In combining the regional and WGI data, none of the regional variation within countries is lost.
Corruption Pillar.	Pillar of EQI Index representing the corruption of the country constructed as before.
Control variables	
Size	= the natural logarithm of total assets at the end of the fiscal year;
Leverage	= total equity scaled by total assets at the end of the fiscal year;
Sales Growth	= (revenues t – revenues t-1) scaled by revenues t-1;

Appendix C – Sample selection - Identifying family firms

- Start with the population of Italian, France and Germany listed firms and select firms with a voting threshold of at least 25% and chose those where the threshold of 25% is owned by a family member (Ansari et al., 2014).
Computing ultimate voting control: Family control (or voting control) is measured as the votes held by the family shareholders plus any additional voting control resulting from pyramidal ownership (measured by the weakest link in the chain of control) expressed as a percentage of total votes outstanding following the methodology used by Villalonga & Amit, (2009) to identify the votes controlled by the family shareholders. The controlling shareholder's cash-flow rights and control rights may differ because of indirect ownership through one or more intermediate firms that the shareholder also controls. This is termed a control chain. In such cases, the cash-flow rights are the product of the ownership stakes along the control chain and the voting rights are measured as the 'weakest link' or the lowest percentage in the control chain. These calculations are all done manually.

- Firms where the controlling family did not remain the largest shareholder for half of the period were excluded.
- Check if the incumbent CEO is a member of the same family as the controlling shareholder(s) and if there had been at least one change in their CEO or re-appointment. (Firms with no change in the CEO are dropped) (Hillier & McColgan, 2009).

Appendix D – Example of sample selection

