CORPORATE GOVERNANCE AND FIRM VALUE: AN EMPIRICAL INVESTIGATION OF THE WINE COMPANIES

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Abstract

The present empirical paper aims to investigate the effect of a long-term company culture in terms of economic performance and firm value. Is it possible to track the cumulative knowledge (passed from father to son) into firm economic returns? The survey tests the hypothesis that the more experienced companies (higher firm age) will perform better than the others considering a set of performance indicators on a four years pattern (from firm value to EVA and VAIC). Comparing firm longevity with the performance indicators, but also monitoring many other corporate governance or ownership indicators, on a panel dataset of the top Italian wine companies. This methodology results in a deep analysis of the Italian wine business – family buy-out strategies, cooperatives. Family firms represent 42% of the panel, with more than 200 years of experience, a larger presence of women on board, a higher average age of the directors and a higher propensity to the production of grapes. The research findings support the hypothesis that a family firm add value over the generations through generating an internal cumulative knowledge process and a strong brand image. In addition, the presence of an external CEO is positively influencing performance (the Most Trusted Advisor). Firm value increases along with the number of family members within the board, to support the family logic and the social capital theories.
1. INTRODUCTION

Family business is one of the most common governance systems worldwide and it is very successful in industries with strong cultural traditions, as the wine business. The literature still disagrees on whether the familiar corporate structure increases performance or not. In the wine business leading a family business is very common. During the last ten years this industry has widely changed thanks to the internal growth both of the largest groups and the SME. The transition time is a very critical moment also for wine firms that has to be carefully planned (Colli, 2006). Nevertheless, the data demonstrated that this step is easier to manage in the wine firms compared to other industries (Ipso Ricerche).

In the literature there is still some disagreement on its definition and on whether the disadvantages are more relevant than the advantages – distinctive familiness vs. constrictive familiness (Habbershon & Williams, 1999). The peculiarity of a family firm is the coexistence of two different systems: the family - emotional needs- and the firm -business needs- (Adler & Kwon, 2002). The so called familiness represents the alchemy whereby family firms obtain a distinctive advantage, thanks to their social capital. This is made up of company-family culture, human capital, informality, company trust, commitment and knowledge, which is transferable and growing over time (Spender and Grant, 1996). On the other hand, there are also disadvantages, such as nepotism within the company, the scarcity of capital and above all the generational shift, which is a source of conflicts that mean that less than 10% of the family owned businesses survive to the 3rd generation (Le Breton-Miller et al., 2004). Some of the strategies to manage succession efficiently are the family pact, the usufruct, creating a family holding or a trust, or else using private equity strategies, such as the family buy out (FBO).

The survey is focused on the wine business because this industry holds some unique characteristics, as an impressive firm age (e.g. the firms Frescobaldi and Antinori have accomplished respectively 30 and 26 generational shifts) and the economic stability of the industry, also during financial crises\(^1\). The purpose of the research is to investigate if the long-term company culture can influence performances of the firms.

2. LITERATURE REVIEW

Jaskiewicz and Dyer (2017) are offering to the community a definition of family business to address the family business research, since the heterogeneity of the company features can be necessary to "address the elephant in the room". Powell and Eddleston (2017) indicated that family involvement in the firm was indirectly related to four entrepreneurial

\(^1\) In 2017, the data confirm that Italy is the first wine producer worldwide, with 50 ml of hectolitres, followed by France with 43 ml and Spain with 43 ml of hectolitres.
outcomes through family-to-business support, suggesting a particular benefit of the intertwining of family and business in family firms. Isobelle Le-Breton Miller and Danny Miller (2018) suggest the conceptualization of the relevant social and economic issues unexplored in their former papers.

Based on the observation that some family firms innovate less when growing older, others are very successful and innovative over multiple generations, Rau, Werner, Schell (2018) worked on a sample of 942 German firms and showed that innovation output decreases over the generations, but if the third and later generations owner-managers have high levels of psychological ownership, innovation output is as high as in the founder and second generation.

It is not a simple detail that a family business brand could be considered inimitable because of the owning family’s unique history, its identity, and the family members that have exemplified family and firm values over time, perpetuated in stories anchored in the minds of employees, customers, and other stakeholders (Blombäck, 2011). Following this studies, Astrachan et al. (2018) define the “family branding” as a valuable idiosyncratic resource, the family nature of the firm. Some authors demonstrated that a family-owned business is more likely to select an intra-firm member as the new CEO when the incumbent CEO is a family member. Moreover, a family-owned business is prone to selecting new CEOs from external sources when the shareholding ratio of outside directors is greater (Luan et al., 2018).

Broccardo et al. (2015) compare 288 Italian and French family firms (FFs) and 302 non-family firms (NFFs) operating in the wine sector in terms of performance. Their study find that the family variable is partly important to achieve good economic and financial performance. In terms of economic performance, FFs both in Italy and in France outperform in terms of ROE and ROA, though only Italian NFFs outperform in EBIT. In terms of financial performance, both in Italy and in France NFFs outperform FFs in current ratio and liquidity ratio, while FFs outperform in solvency ratio. Ali et all. (2018) provide the casual effect of boardroom gender diversity on default risk. Based on a sample of 831 Australian firms, they showed that the proportion of female directors have an overall negative effect on default risk.

3. METHODOLOGY

The sample of the largest Italian wine companies, which were listed by Mediobanca in a survey of the industry published in April 2017. We developed an empirical analysis based on secondary sources such as the wine firms’ financial reports, website information, archive financial databases (Registroimprese.it), on-line wine business reviews (winenews.com), wine industry reports (the Wine Advocate), business statistics (Istat and Sinab) and also some primary sources such as direct interviews to the firms by e-mails and phone calls.
In particular, the survey develops both linear regression and correlation to evaluate the statistically significant relationships existing between a set of corporate governance/ownership characteristics and intellectual capital/ firm value.

On the performance side, we calculated each indicator based on a 4 years pattern (2013-2016): ROI, ROS, turnover, Z-Score\(^2\), VAIC\(^3\), firm value\(^4\) and EVA\(^5\). On the CG we tested the following variables for all firms: the type of governance structure (if Family Firm/Non-Family/Cooperative), Type of Activity (Wine Producer/Wine Seller), Firm’s Age, No. of Board Members, Women on Board, Women Executive, Average Age of the Board Members, No. of Board Members on the No. of Employees, CEO Duality, No. of Employees. Exclusively for family firms we tested the following variables: No. of Generational Shifts, No. of Actual Successors in the Current Governance, No. of Family-Member in the Board of Directors, No. of Non-Family Members in the Board of Directors, Role of the Non-Family Members (Chairman/CEO/Others), No. of Non-Family Members on the No. of Family Members, Presence of a Family Chairman, Non-Family Women on Board, Type of successors (brothers/cousins/dynasty).

The first hypothesis is that a firm with a long-term company culture and an accumulated knowledge over the generations holds a greater firm value. To test this hypothesis, we used “firm age” as a proxy of the firm experience. Firm value was calculated with the profits formula (\(W = R/i\)) for all companies of the sample over a four years time. This hypothesis will be confirmed by the analysis presented in the next paragraphs. The second hypothesis is that a firm with a long-term company culture holds a greater lever of intellectual capital. To test this hypothesis, we used “firm age” as a proxy of the accumulated knowledge. The level of intellectual capital held by the company, was tested using VAIC (value added intellectual capital) calculated on a four years time. This hypothesis has not been confirmed by the statistically significant results obtained. In fact VAIC resulted to be negative for all companies (including FF). Probably some intangible assets that are very important for the wine industry have not been represented properly in the formula. The third hypothesis is that there is a correlation between the more experienced firms (higher firm age) and better EVA results. This hypothesis will not be positively confirmed. There is, instead, a negative correlation between EVA and firm age, probably explained by the more ancient firms being all FF and using a great amount of the family capital and thus having lower EVA calculations results.

\(^2\) Z-score is a synthetic indicator that results by pondering financial returns, assets and efficiency indicators.

\(^3\) VAIC is an analytical procedure that evaluate the efficiency of value added (VA) using the following equation \(VAIC = CEE + HCE + SCE\); where the Capital Employed Efficiency (CEE) is an indicator of VA efficiency of capital employed; the Human Capital Efficiency (HCE) is an indicator of VA efficiency of human capital; the Structural Capital Efficiency (SCE) is an indicator of VA efficiency of structural capital.

\(^4\) Firm value has been calculated with the profits formula \(W = R/i\).

\(^5\) Economic value added is the net profit less the equity costs of the firm’s capital. Net operating profit (NOPAT) less capital charge, which is provided by the product of the cost of capital and the economic capital. Several adjustments have been operated.
The sample made of the first Italian wine companies has been subdivided into three groups according to their corporate structure: family firms (FF), non-family firms (NFF) and cooperatives (COOP). FF have 42% share, NFF 25% and 33% Coop. The presence of women on the board of directors of the wine firms is generally speaking very low for all type of companies, but the value is decreasing going from the family firms to the cooperatives. The presence of a woman with an executive role is minimal and the presence of women external to the family is none. The minimum ratio between the number of directors and the total number of employees is held by NFF. CEO duality feature only appears in 30% of the firms, which is an unexpected result having a sample with a large presence of FF. In fact, 50% of the family firms employed one non-family member to work as a CEO. In the literature many authors have been focusing their studies on the impact that a non-family CEO would have on FF performances (Miller et al., 2013; Villalonga & Amit, 2006; Bennedsen et al., 2007).

**Table 1.** Average values of the corporate and ownership variables analyzed for the three samples of firms according to their governance model (left side)

<table>
<thead>
<tr>
<th>Variables Analyzed</th>
<th>FF</th>
<th>NFF</th>
<th>Coop</th>
<th>Corporate Governance Analyzed For FF</th>
<th>FF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distribution of the firms</td>
<td>42%</td>
<td>25%</td>
<td>33%</td>
<td>No. of Generational Shifts</td>
<td>8</td>
</tr>
<tr>
<td>Wine Producer Activity</td>
<td>70%</td>
<td>62%</td>
<td>30%</td>
<td>No. of Actual Successors in the Current Governance</td>
<td>2</td>
</tr>
<tr>
<td>Firm's Age</td>
<td>216</td>
<td>103</td>
<td>66</td>
<td>No. of Family-Member in the Board of Directors</td>
<td>3.3</td>
</tr>
<tr>
<td>No. of Board Members</td>
<td>6</td>
<td>3</td>
<td>17</td>
<td>No. of Non-Family Members in the Board of Directors</td>
<td>2.6</td>
</tr>
<tr>
<td>Women on Board</td>
<td>20%</td>
<td>17%</td>
<td>13%</td>
<td>No. of Non-Family Members on the No. of Family Members</td>
<td>30%</td>
</tr>
<tr>
<td>Women Executive</td>
<td>10%</td>
<td>0</td>
<td>0</td>
<td>Non-Family Member as CEO</td>
<td>50%</td>
</tr>
<tr>
<td>Average Age of the Board Members</td>
<td>61</td>
<td>57</td>
<td>53</td>
<td>Presence of a Family - Chairman</td>
<td>100%</td>
</tr>
<tr>
<td>No. Board Members/No. Employees</td>
<td>5%</td>
<td>3%</td>
<td>6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEO Duality</td>
<td>30%</td>
<td>33%</td>
<td>25%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. of Employees</td>
<td>146</td>
<td>155</td>
<td>283</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: On the right part there are the variables analyzed only for the sample: family firms (FF).

This empirical result might represent the key to understand why FF outperform in the wine business, relying often to a non-family CEO and to a most trusted advisor feature (MTA). Nevertheless, the Chairman role is always played by a family member to support the family logic and social capital inspiration.

Table 1 shows that the top Italian FF have a long history of generational shifts that have been accomplished successfully. The number of successors that run the actual governance reveal that those firms might lasted more than other industries' FF, also because they
have a small number of successors managing the firm (two on average) rather than a dynasty. Moreover, they overcame the limit of a lack of separation between property and management by having employed 30% of the members of the board as professional managers external to the family. The average age of the firms is more than 100 years (138 years), with the oldest firm characterized by 715 years of activity in the wine making. The average amount of the board members is 9 people, but this result is widely spread between only one director and more than 35 members (as in the COOP). The average age of the members is 57 years.

4. THE EMPIRICAL ANALYSIS

By using the statistical models, we tested the significant relationships existing between the corporate governance/ownership variables and performance indicators. Pearson correlation shows very significant results that have been confirmed by the linear regression of the variables on the independent variable EVA. The oldest firms -which also have the largest number of generational shifts, have a positive significant relationship with the amount of family members in the board of directors, with the presence of women on board, with having a non-family CEO. Very important to support the hypothesis formulated, is that the return on sales (ROS) is significantly correlated to the presence of family members in the board of directors. The amount of family members in the board is positively correlated to the firm age, in fact the oldest firms tend to be the FF. The variable firm age is significantly correlated to women on board, and that last variable is positively correlated to turnover. Moreover, firms with a greater number of generational shifts tend to have more board members, more employees than the youngest companies, and thus a greater firm size. Very important to note that the firms with a longer company history (greater firm age) tend to have developed a certain experience that bring them to choose as a CEO someone external to the family, possibly acting as a mediator (most trusted advisor) to mitigate conflicts. The amount of the board members is correlated to the type of corporate governance adopted (FF, NFF, COOP), where the cooperatives have the largest boards while NFF the smaller. Board members are positively correlated to the number of employees and to the amount of non-family members. CEO duality is negatively correlated to the average age of the board members and the smaller is the average age of the board the greater is the total amount of board members. This situation is realized in the cooperatives, but also in the family firms’ boards, in proximity of a generational transition.

The return on the investment (ROI) is significantly correlated to a family Chairman. That last characteristic, as expected, is correlated to the average age of the board (older members tend to have a family chairman). The number of actual successors directing the firm is correlated to a greater presence of family members in the board, as a
track that when cousins or a dynasty is managing the firm, the total amount of family members in the board will increase. Turnover is correlated to the type of corporate governance, to the amount of non-family members and obviously to firm size. Performance indicators are correlated to each other.

The correlation existing with the firm value (w) calculated with the profit’s method (r/i) shows the main result supporting the HP, since w is positively correlated to firm age and generational shifts.

There is a positive correlation between the number of successors managing the firm and the type of successors, thus a dynasty or a cousin’s direction corresponds to a larger number of successors actually managing the firm.

**Table 2.** Linear regression of EVA on the corporate governance, ownership and performance variables developed on 3 models’ progression

<table>
<thead>
<tr>
<th>EVA</th>
<th>Coef.</th>
<th>(Std. Err.)</th>
<th>p</th>
<th>Coef.</th>
<th>(Std. Err.)</th>
<th>p</th>
<th>Coef.</th>
<th>(Std. Err.)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>332000000</td>
<td>128000000</td>
<td>0,019</td>
<td>969000000</td>
<td>692000000</td>
<td>0,178</td>
<td>3.6E+08</td>
<td>107000000</td>
<td>0,004</td>
</tr>
<tr>
<td>Board Mem.</td>
<td>711619,8</td>
<td>3651485</td>
<td>0,848</td>
<td></td>
<td></td>
<td></td>
<td>2297070</td>
<td>3126495</td>
<td>0,474</td>
</tr>
<tr>
<td>Firm Value</td>
<td>-120,781</td>
<td>21.41216</td>
<td>0,000</td>
<td>-1.3E+07</td>
<td>92300000</td>
<td>0,186</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-F. Mem</td>
<td>-106000000</td>
<td>116000000</td>
<td>0,374</td>
<td></td>
<td></td>
<td></td>
<td>92300000</td>
<td>0,186</td>
<td></td>
</tr>
<tr>
<td>ROI</td>
<td>5753222</td>
<td>5024957</td>
<td>0,267</td>
<td>6.3E+08</td>
<td>155000000</td>
<td>0,001</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women B.</td>
<td>-477000000</td>
<td>186000000</td>
<td>0,020</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VAIC</td>
<td>-951842</td>
<td>1272194</td>
<td>0,464</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooperatives</td>
<td>-109000000</td>
<td>690000000</td>
<td>0,134</td>
<td>-2.4E+07</td>
<td>774000000</td>
<td>0,762</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private Firms</td>
<td>9E+07</td>
<td>810000000</td>
<td>0,285</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Firm</td>
<td>-157000000</td>
<td>974000000</td>
<td>0,126</td>
<td>-4.8E+07</td>
<td>189000000</td>
<td>0,024</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm Age</td>
<td>-504000000</td>
<td>242000000</td>
<td>0,053</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROE</td>
<td>9936840</td>
<td>2519161</td>
<td>0,001</td>
<td>-1683375</td>
<td>2114747</td>
<td>0,438</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Z Score</td>
<td>-2.8E+08</td>
<td>135000000</td>
<td>0,051</td>
<td>-2.2E+08</td>
<td>118000000</td>
<td>0,085</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The amount of family members is correlated to the average age of the board, thus more family directors tend to have a higher average age. While, the average age of the board members is negatively correlated to the total amount of board members, because the largest board tend to have a lower average age.

Board members are positively correlated to the number of family successors at the direction and negatively to the non-family members in the board. The total amount of family members is positively correlated to firm size, which is a proxy of the number of employees.

The linear regression of the variable economic value added (EVA) has been developed in progression, thanks to 3 models as listed in table 5. The statistical significance is involved in the value of the adjusted R squared, which is 0.5 in the first model, 0.65 in the second and 0.7 in the third model in progression. Some variables influence the creation of value already in the first model, such as the presence of women on board.
and the firm age, both in a negative way. The second model presents a negative relationship between the value creation and some indicators, such as w and z-score. Both those indicators are part of the EVA, thus they explain a little part of the value creation. ROE positively influences the value creation. The third model confirms the data of the first two models, with a greater significance level. It shows that the variables that negatively influence EVA are firm age, women on board and z-score. This result is not confirming the third hypothesis, that there is a correlation between the more experienced firms (higher firm age) and better EVA results. This hypothesis is not positively confirmed. There is, instead, a negative correlation between EVA and firm age, probably explained by the more ancient firms being all FF and using a great amount of the family capital and thus having lower EVA calculations results.

5. THE EMPIRICAL ANALYSIS

The output of the survey has been summarized in a benchmark model for the wine industry. It describes the significant results that have been provided by the statistical operations done. Firm age is positively correlated to: firm value, a non-family Ceo, women on board, the firm size and the larger presence of family members in the board; while negatively to EVA. Firm value is positively correlated to: ROE, ROI, Z-score, the presence of family members; while negatively to EVA. Turnover is positively correlated to the amount of board members, firm size and the type of governance (firstly FF, coop and then NFF). The second line of the model shows the strong interconnections existing between the economic indicators. The number of board members is positively correlated to the number of employees, to non-family members and to the type of cooperative structure; while it is negatively correlated to the average age of the board members, to the NFF governance and to CEO duality. About the average age of the board members, there is a positive correlation with the number of actual successors managing the firm (the more successors, the highest is the average age); while negative with the COOP and the presence of non-f members. The corporate governance (FF as a first dummy, COOP as a second, NFF as a third) is positively correlated to an external CEO, turnover and the total amount of the board members. The greater presence of family members is correlated to firm age, a larger amount of family successors managing the firm and the presence of a dynasty or an enlarged family control, such as cousins (rather than one successor or brothers). The number of employees is correlated to non-family members; while the enlarged familiar control (dynasty) is correlated to firm age, generational shifts and number of actual successors.

The main implication is that the output suggests that a family firm is an efficient governance model, that a long history of generational successions is likely to influence positively the firms returns, also in
terms of brand image, reputation and cumulative know-how. Despite that, the presence of a CEO external to the family to manage the firm, increases the performances, as well as a majority of family members in the board, a higher average age of the board and a family chairman.

The results are summarized in Figure 1 to describe the successful formula of the wine business corporate governance structure.

**Figure 1.** Model that represents the main corporate governance and ownership features to maximize profits in the wine business

Figure 1 focuses on the family business wine companies, since they are the most productive once and the biggest segment encountered. The figure shows the significant relationship existing between firm age and the performance indicators (economic capital $w$, ROI, ROS and $Z$-score). To maximize returns the top wine firms also provide a non-family CEO, but a majority of the board members belong to the founder's family. A CEO external to the family allows to act as a mediator and reducing possible conflicts, above all in proximity of the generational transitions (Barbera & Hasso, 2013; Salvato & Corbetta, 2013). A majority of family members managing the firm is to support the family logic that rises the so-called social capital. On the other hand, firm longevity is determining other two characteristics: the presence of women on board and an older average age of the directors.

6. CONCLUSIONS

The analysis of the main Italian wine companies shows that family firms (FF) are the most diffused corporate structure, followed by the cooperatives (COOP) and then by the non-family firms (NFF). The output supports the hypothesis that a firm with a longer company culture is able to transform it into a higher firm value. The longevity of the firm creates value for the firm in terms of economic capital ($w$), but it destroys value in terms of EVA. EVA is the only indicator to be negatively correlated to
all the other performance indicators (w, z-score, ROI, turnover and ROS) because the cost of capital inclusion in the formula heavily tracks the family investment in the vineyard, the cellar and other fixed assets, which often belong to proper capital; but also because of the intangibles that characterize the wine industry and do not appear in the balance sheet, such as terroir, biological cultivation and experience. As expected, ROE is influencing EVA in the second model of the linear regression, but that relationship becomes less significant in the third model when including other variables in progression. Thus, the return on equity does not have an impact so determining on EVA and result provides us an input for future insights and researches. The limits of the research are the limited amount of the sample analyzed and the simplicity of the statistical models used rather than more sophisticated econometrics systems. Further researches will provide a comparison between the largest companies (volume strategy) and the premium price companies (selected as the most awarded by the customers).

The main implication of the paper is a practical experience to support the academic community that claims the efficiency of family business as a model. The usefulness of the output for the firms is to have a benchmark model of governance, above all for family firms. In fact, not to destroy the "familiness" advantage, family firms are suggested to set the governance in this way:

- the chairman to be a member of the family (the founder or his successor);
- a greater amount of family members in the board rather than non-family members (to defend the social capital logic);
- the main managing power (CEO) not to be a member of the family (possibly a person that has gained during the years trust and would act as a most trusted advisor), (Strike, 2013);
  - a greater longevity of the firm (to pass knowledge from father to son);
  - a higher average age of the board members (compared to the other 2 segments);
  - type of successors that would be brothers or cousins (rather than a dynasty which normally leads to entropy);
  - the presence of women on board of directors (many associations and wine firms are nowadays managed by women with a great success).

References


