# AN INVESTIGATION OF THE PERFORMANCE OF LUXURY FIRMS IN EUROPE FROM AN AGENCY THEORY PERSPECTIVE

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The luxury sector is one of the most significant segments of the economy. It is increasingly attracting the interest of investors given the high margins and growth that companies in this sector exhibit. What is the "secret" of this outstanding performance? Extant literature shows that firm-level strategies, i.e. marketing policies, supply-chain management, R&D investments, etc. are the keys to luxury company success. However, it neglected the investigation of ownership structure, in the context of the agency theory, as another determinant of company performance. This is an important gap since evidence indicates that ownership structure affects features that are crucial to the success of luxury firms. Accordingly, this paper uses a large panel dataset of luxury companies (1,153 unique firms and 8,253 firm-year observations) located in the European continent, OLS multivariate regression models with robust econometric features as well as a robustness test that controls for endogeneity and explores these firms from an agency theory perspective. It finds that luxury entities with higher ownership concentration perform better than the others. This relationship is stronger among non-EU member states and was not affected by the financial crisis. This investigation complements extant research on luxury companies showing that their governance does matter in explaining their success; thus it suggests to researchers of the luxury sector that the ownership structure of these entities cannot be ignored. The evidence reported in the paper helps owners and managers of luxury firms to detect potential agency issues and investors to spot features of highly profitable luxury firms.

**Keywords:** Firm Profitability, Firm Efficiency, Firm Liquidity, Luxury Industry, Ownership Concentration

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#### 1. INTRODUCTION

Ownership of firms and the issues related to this

topic have given rise to an entire body of research on corporate governance. The impact of the ownership structure on firm life and performance

VIRTUS 161

has always been under the spotlight in several contexts and in different types of economies (e.g. Lskavyan and Spatareanu, 2006). The first warning about possible relationships between ownership and firm performance came from Adam Smith in 1776 who stated that 'directors of limited companies are the managers of other people's money. For this reason, it cannot be expected that they watch over it with the "same anxious vigilance" with which the partners in a private co-partnery frequently watch over it' (Smith, 1776). One century and a half later, Berle and Means (1932) claimed that the growing dispersion of ownership was creating a separation between ownership (shareholders) and control (managers) of firms. Jensen and Meckling (1976) introduced the Agency Theory stating that the owners of firms (principals) hire skilled managers (agents) to run the firm on their behalf. However, they state that interests of the agents are not always the same as those of the principals, thus it creates a sort of agency problem. On the basis of that, it has been argued that when the ownership is highly dispersed the performance of firms may suffer because of the usurpation of power from the managers that may follow their own interests rather than those of the owners.

The analysis of the relationship between ownership concentration and firm performance has been widely investigated in different contexts such as highly efficient market economies (e.g. Acheson et al., 2016; Lskavyan and Spatareanu, 2006), small stock market economies (e.g. Grimaldi, 2016; Ntoung et al., 2017; Kapopoulos and Lazaretou, 2007; Scafarto et al., 2017), emerging economies (e.g. Abu Haija and Alrabba, 2017; Al-Matari et al., 2017; Ganguli, 2016; Lskavyan and Spatareanu, 2006: Mayur, 2016; Phung and Mishra, 2016). Overall, the findings of previous studies highlight benefits coming from high ownership concentration but there are also others that conclude that high levels of shareholdings in the hands of few people create a different type of conflict of interests, that between major shareholders and minority shareholders. Accordingly, ownership concentration can also become detrimental or have no significant effects on company performance.

Extant research has looked at the relationship between ownership structure and company performance at sector level such as banks (Shehzad et al., 2010), insurance companies (Cheng et al., 2017; Ke et al., 1999), pharmaceutical entities (Nath et al., 2015), financial service industry (Mudambi and Nicosia, 1998). However, the review of the literature has not found any paper focused on the luxury industry although it is a significant sector for the economy and the interest of financial investors in luxury firms has been growing persistently because of their high margins and high growth (Deloitte, 2017). Indeed, statistics indicates that just the top 100 luxury firms, generate \$212 billion of sales, with a year-over-year luxury goods sales growth of 6.8%, a composite return on assets of 7.9% and a composite net profit margin of 9.7%, thus an average performance much stronger than that of leading consumer products companies (Deloitte, 2017).

Research on luxury firms, in fact, has focused more on investigating how factors that are peculiar to this industry like brand equity management (Kim and Kim, 2005), logistic and supply chain

<u>VIRTUS</u>

management (Brun and Castelli, 2008), export strategies (Aulakh et al., 2000), purchasing management (Luzzini and Ronchi, 2010) determine company performance. Surprisingly, no study took into account the organizational structure of such companies and, in particular, their ownership characteristics. This is an important gap in the literature because there is evidence that indicates that ownership structure has a significant impact on features that are crucial to the success of luxury firms such as technological innovation (Choi et al., 2012; Gudmundson et al., 2003; Teece, 1996), creation, ownership, protection and use of difficultto-imitate commercial and industrial knowledge assets (Teece, 2000), R&D investments (Lee and O'neill, 2003; Yanbing, 2007; Ting et al., 2016), performance of intellectual capital (Shahveisi et al., 2017). Ownership structure, having an effect on the above-mentioned features, may consequently impact the success of luxury firms.

This paper aims to fill this gap and, using a large sample of luxury firms located in the European continent (1,153 unique firms and 8,253 firm-year observations), explores whether ownership concentration has an impact on different aspects of their performance, namely, profitability, efficiency, and liquidity. It finds that luxury firms with higher ownership concentration exhibit а better performance. This relationship is stronger in countries that are not members of the European Union, thus subject to weaker regulation systems that exacerbate the conflict of interests between ownership and control in the presence of dispersed shareholdings (Burkart and Panunzi, 2006). Finally, it shows that the relationship between ownership concentration and firm performance is not affected by the global financial crisis.

This investigation complements extant research on luxury companies looking at such entities from an agency theory point of view. It shows that the type of ownership of these firms does matter in explaining their success. The findings of this paper could be of interest to owners of luxury firms which could investigate whether their companies have significant agency problems and may want to mitigate any potential agency conflict. They are relevant for investors that could spot the features of highly profitable luxury firms. Finally, they can also be used to extend extant studies on this sector and investigate whether the efficacy of firm-level strategies in terms of marketing, supply chain, logistic, etc. is affected by firm ownership structure.

The rest of the paper is organized as follows. Section 2 explores the literature on the agency theory and the reasons why ownership structure may affect company performance. It also describes the main features of the luxury industry, the determinants of the performance of luxury firms and highlights the missing, but relevant, the link between ownership structure and performance of such firms. Finally, in accordance with the literature investigated, this section reports the hypotheses that will be empirically tested. Section 3 describes how the firms included in the sample have been selected. It defines how ownership concentration is estimated providing also some preliminary descriptive statistics about it and it reports the different dimensions of firm performance examined (i.e. profitability, efficiency, and liquidity). This

section ends by explaining the regression models and the econometric techniques used to test the hypotheses. Section 4 presents and discusses the empirical results. It also reports additional analyses that include a robustness test that controls for endogeneity and the investigation of the effect of the financial crisis on the main results. Finally, Section 5 closes the paper highlighting its main conclusions, contributions, and limitations. It also provides some ideas for future research.

## 2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

The progressive growth of firms and the consequent separation between people that invest their capital in the companies and those who actually run the day-to-day business gave rise to the literature on corporate governance. Back in 1776, Adam Smith stated that 'directors of limited companies are the managers of other people's money. For this reason, it cannot be expected that they watch over it with the 'same anxious vigilance' with which the partners in a private co-partnery frequently watch over it' (Smith, 1776). The same concepts were recalled 156 years later by Berle and Means who argued that 'the significant growth of firms makes extremely difficult for the original owners to maintain their majority stockholdings because stocks become dispersed among a large number of small shareholders. 'The consequence of this dispersal is the usurpation of power by those who run the day-to-day affairs of the firm.' (Berle and Means, 1932). This separation creates a conflict of interests between owners (principals) and managers (agents) with possible negative consequences on profit maximization as theorised by Jensen and Meckling (1976) in their well-known agency theory. More precisely, it is argued that dispersed ownership shifts significant power in the hands of the managers who may have interests that do not coincide with those of the shareholders thus corporate resources may not be used for the maximization of shareholder value (Claessens and Djankov, 1999). It implies a negative relationship the dispersion between of shareholdings and corporate performance.

Another stream of literature developed after the agency theory claims that high ownership concentration can lead to a second type of agency problem ('agency problem type II') through the creation of incentives and opportunities for asset misappropriation and tunnelling from majority shareholders at the expenses of minority shareholders (Goldberg et al., 2016; La Porta et al., 1999; Liu, 2017; Xie, 2017). High ownership concentration can also significantly affect managers' strategic decision compromising their ability to undertake profitable opportunities (Shan and Xu, 2012).

Given the importance of the structure of ownership for firm performance, numerous studies investigated this matter at sector level but none has focused on the luxury industry. Based on recent data published by Deloitte (2017), the luxury sector looks particularly attractive with the top 100 luxury firms generating \$212 billion of sales, with a year-overyear luxury goods sales growth of 6.8%, a compound composite return on assets of 7.9% and a composite net profit margin of 9.7%. Such a higher profitability and consistent growth have appealed the attention of investors that monitor such firms as targets of their investments (Deloitte, 2017).

To the best of our knowledge, researchers that investigate the determinants of luxury company performance never looked at corporate governance aspects. Indeed extant literature mainly focuses on managerial features of this industry. For example, Kim and Kim (2005) suggest that well-managed brand equity through brand loyalty, perceived quality, and brand image has positive effects the performance of luxury hotels and chain restaurants. Atwal and Williams (2009) claim that luxury firm performance cannot leave marketing out of consideration. They state that luxury brands need to stay always close to their luxury consumers and discover new and different ways to satisfy their desires departing from traditional marketing tools that may confuse luxury advertising with that of other consumer products. Kang and Park (2016) identify two categories of luxury customers: 'covert' and 'overt' customers. The former prefer to have trendy items, value quantity more than quality, and choose loud luxury goods; the latter exhibit a comparatively slower purchasing cycle and prefer classic and limited symbolic items, prioritizing quality over quantity, and choosing quiet luxury goods (Kang and Park, 2016). Given such different approaches to luxury purchase, luxury companies should target these customers with different marketing strategies if they want to maximise the potential profitability that can be obtained from them. Kim and Ko (2012) suggest that social media marketing enhances value equity, relationship equity, and brand equity acting through customers intimacy and trust and thus positively influencing their purchase intention (Kim and Ko, 2010). Indeed, Kim et al. (2012) conclude that consumers' attitudes toward luxury brands are the drivers of customer equity and customer lifetime. Caniato et al. (2011) investigate supply chain management in the luxury industry and state that the success in this sector relies on high standards throughout the whole supply chain, from production to distribution. Their evidence is supported by Danese et al. (2016) who reach the same conclusions looking at 12 Italian luxury fashion retailers.

While, of course, all of the above-mentioned areas are crucial keys to success for this type of companies, it is surprising how research on luxury firms has neglected the investigation of ownership structure on firm performance especially in an industry where several entities are linked to the name of a founder and are usually owned by founders or their closest family members or heirs. This is indeed an important gap because there is evidence that ownership structure affects features deemed crucial for the luxury sector such as technological innovation (Choi et al., 2012: Gudmundson et al., 2003; Teece, 1996), creation, ownership, protection and use of difficult-to-imitate commercial and industrial knowledge assets (Teece, 2000), R&D investments (Lee and O'neill, 2003; Yanbing, 2007; Ting et al., 2016), performance of intellectual capital (Shahveisi et al., 2017). Teece (1996) claims that firm organization, including ownership structure, and not just product market structure is an important determinant of innovation and acknowledges how such point has been often

neglected by economists. In his paper, he dedicated a full paragraph to the 'principal-agent distortion' that can affect innovation. Teece (1996, p. 202) recognises that "firms of great size are rarely owner managed". He also discusses that the conflict of interests between managers (agents) and owners (principals) may lead the former to follow enterprise performance at the expense of investments in innovation. Teece (1996) motivates this statement highlighting that "the tenure of top management is usually much shorter than the gestation period for major innovations" Teece (1996, p. 202). He also points the finger at the owners, saying that, "may insist on certain expenditure sometimes. controls which themselves slow decision making and thwart innovation" Teece (1996, p. 202). Choi et al. (2012) find that ownership type, such as institutional and foreign owners have a significant impact on innovation. Teece (2000) also highlights the relevance of firm structure in terms of creation and protection of know-how or, using his words, "the creation, ownership, protection, and use of difficult-to-imitate commercial and industrial knowledge assets" (Teece, 2000, p. 35). Baysinger et al. (1991) instead, point out that the level of a firm's investment in R&D is a strategy affected by the potential manager-shareholder conflicts. Accordingly, Lee and O'neill (2003) find that in contexts where the conflict of interests between owners and managers is quite strong, like in the US, the level of stock concentration is positively related to the investments in R&D. In line with this evidence, Yanbing (2007) finds that ownership concentration affects R&D investments. In particular, Ting et al. (2016) indicate that family ownership and foreign ownership concentration are positively related to company performance especially if they invest more in R&D. Shahveisi et al. (2017) find that ownership concentration also increases intellectual capital performance, except when the owner is the government. In conclusion, it is clear from these studies that the ownership structure and the related agency problems do impact on features that are relevant indeed for the luxury sector and that may impact on their performance. This paper aims to fill this gap and to gather evidence to test the following hypothesis:

*H1:* There is a relationship between ownership concentration and performance of luxury firms.

The majority of studies that investigated the effect of ownership concentration in different types of economies and in several sectors document that firms with higher ownership concentration (i.e. less separation between ownership and control) are superior to entities with more dispersed shareholdings not only in terms of financial performance (e.g. Abu Haija and Alrabba, 2017; Acheson et al., 2016; Al-Matari, 2017; Hess and Gunasekarage, 2010; Hu and Izumida, 2008; Ma et al., 2010; Silva and Majluf, 2008; Ting et al. 2016) but also in terms of reduced bank riskness (Shehzad et al. 2010), increased labour productivity (Claessens and Djankov, 1999), bigger investment in R&D and innovation (Deng, et al., 2013). Evidence that contradicts these results also exists. In particular, there are findings that indicates either the absence or a non-linear relationship between the level of ownership concentration and firm performance (e.g. Campa, 2017; Chen et al., 2005; De Miguel et al.,

2004; Ganguli, 2016; Mayur, 2016; Phung and Mishra, 2016; Omran et al., 2008) and others that show that ownership concentration has negative effects on companies (e.g. Beuselinck and Manigart, 2007; Dam and Scholtens, 2013; Rubin, 2007).

Different reasons have been highlighted for the presence of contradictory results. While some of them are methodological since different studies use dissimilar proxies for company performance (e.g. Demsetz and Villalonga, 2001), others are related to the investor protection of countries in which companies operate (e.g. Burkart and Panunzi, 2006). Indeed, the latter studies claim that the strength of country legal protection affects the expropriation of shareholders as well as blockholders' incentives to monitor. Burkart and Panunzi (2006) explain that when legal protection facilitates monitoring, the effect of ownership concentration is less important. By contrast, when legal protection does not ensure monitoring, ownership concentration must play its role, irrespective of whether or not the majority private shareholders can obtain benefits. Accordingly, this paper aims to look also at the impact of the strength of the institutional setting on the relationship between ownership structure and performance of firms. Thus, the second hypothesis is formulated as follows:

*H2*: The strength of the institutional setting has an impact on the relationship between ownership concentration and performance of luxury firms.

#### **3. METHODOLOGY**

#### 3.1. Sample selection

Using the search criteria in Amadeus database<sup>6</sup>, the sample investigated in the paper includes all companies operating in the European continent that have the word 'luxury' in their 'Industry and Activities' field. The data cover a period from 2005 to 2014 being those years the oldest and the most recent year available at the time of data collection. Since some of the variables used for the analyses must be lagged, the analyses span the period from 2006 to 2014. Starting from a population of 1,567 firms, after deleting all firm-year observations with missing data and those where some of the variables included in the models could not be calculated because of the absence of necessary data, the final sample counts 1,153 unique companies operating in 31 different countries<sup>7</sup> and a total of 8,293 firm-year observations<sup>8</sup>.

#### 3.2. Ownership concentration

Information about ownership concentration is collected from Amadeus database. More precisely, the data employed in the analysis is called 'BvD Independence Indicator', also used in other studies (e.g. van Rossum and Mosk, 2012). This indicator

 <sup>&</sup>lt;sup>6</sup> Amadeus is a database provided by Bureau Van Dijk that contains information on around 21 million companies across Europe.
 <sup>7</sup> Companies are distributed among different countries as follows: Austria (15), Belgium (40), Bulgaria (17), Czech Republic (26), Germany (29), Spain (66), Finland (13), France (170), United Kingdom (417), Greece (40), Croatia (2), Hungary (7), Ireland (6), Iceland (1), Italy (160), Lithuania (3), Latvia (3), Moldova (1), Malta (1), Netherland (21), Norway (14), Poland (14), Portugal (20), Romania (9), Serbia (2), Russia (39), Sweden (8), Slovenia (2), Slovakia (2), Turkey (1), Ukraine (4).
 <sup>8</sup> The number of total firm-year observations is lower than the number of unique firms multiplied by the number of years investigated.

did not have data for the entire time series investigated.

looks at the ownership concentration as the degree of independence of a company with regard to its shareholders. It takes values from A to D where: A indicates that there is no recorded shareholder with a direct or a total shareholdings higher than 25%, i.e. these are the companies with the lowest degree of ownership concentration; B indicates that there is no recorded shareholder with a direct or a total shareholdings higher than 50% but at least one has a shareholdings higher than 25%; C indicates a company that has a recorded shareholder with a total or a calculated total ownership over 50%; D indicates a company that has a recorded shareholder with a direct ownership of over 50%, i.e. these are the companies with the highest degree of ownership concentration. These indicators have been converted into a number from 1 to 4, thus having an index that increases in value with the increase of the degree of ownership concentration. In relation to the sample investigated, 891 firms (77.28%) have a BvD indicator of A; 26 firms (2.25%) have a BvD indicator of B; 176 firms (15.26%) have a BvD indicator of C; 60 firms (5.20%) have a BvD indicator of D, indicating that two thirds of the companies in the sample have highly dispersed ownership.

#### 3.3. Measuring firm performance

Numerous papers have examined the relationship between firm performance and different ownership structure variables. In doing that the choice of the variables that could better reflect the former is particularly relevant. The majority of previous literature mainly focused on two indicators, namely, return on assets and Tobin's Q (see Garcia-Meca and Sanchez-Ballesta, 2011, p. 43 and Yu, 2013, p. 78 for a summary of previous studies and performance variables used). As highlighted by Kiel and Nicholson (2003), the choice of these two measures is related to their nature since they represent the two main proxies used in the literature for the measurement of accounting-based and market-based performance. However, the sample used in this study also includes unlisted firms thus market-based variables are not applicable.

This paper deals with companies which are involved in producing and selling luxury goods and/or services, thus we use indicators that look at the three main performance areas of such firms: profitability, efficiency, and liquidity. Profitability is related to the ability of a company to generate an adequate return from its assets; efficiency refers to the ability of an entity to generate sales while minimising operating costs; liquidity refers to the ability of a firm to meet financial deadlines. While these definitions look at three different areas, they are strictly interrelated. For example, inefficient companies, in the medium term, cannot generate a satisfactory profitability; indeed inefficiency means bad cost management that negatively impacts the profitability. Higher levels of costs also mean higher cash outflows that, in turn, affect firm liquidity. Financial difficulties may require borrowing of money at higher interest rates with a further increase in costs and, consequently, a decrease in profitability.

Company profitability is analysed using the return on assets ratio (ROA) calculated as net income divided by beginning total assets. Indeed, it relates the profit generated by a firm to the amount of assets invested in the company. Efficiency is proxied by the profit margin. It is calculated as operating profit divided by net sales and it represents the percentage of sales kept in the company after covering the costs needed to generate those sales. It indicates how well the process of generating and selling goods and/or services is implemented so it is a measure of cost management. Finally, liquidity is investigated using the current ratio. It is calculated as current assets divided by current liabilities and it measures company's ability to meet its financial obligations.

The magnitude of the above-mentioned ratios may be affected by the sector and the country in which firms operate thus a given ratio could be satisfactory in one sector/country but disappointing others. To deal with this situation, country-industryyear adjusted ratios rather than raw ratios are used in the analyses, in accordance with other studies (e.g. Kang and Kim, 2012). This is a more approach appropriate as it captures how better/worse a firm performs in relation to its closest competitors. The three indicators used for the analyses are then calculated, for each firm, in each country and for every single year, as follows:

*Adjusted ROA (ADJ\_ROA)* = Firm-level ROA minus the median ROA of all firms in the sample that belong to the same industry, year, and country.

*Adjusted Profit Margin* (*ADJ\_PM*) = Firm-level profit margin minus the median profit margin of all firms in the sample that belong to the same industry, year, and country.

*Adjusted Current Ratio* (*ADJ\_CR*) = Firm-level current ratio minus the median current ratio of all firms in the sample that belong to the same industry, year, and country.

#### 3.4. Ownership concentration and firm performance

To analyse the effect of ownership concentration on firm performance the following Model (1) is estimated:

$$\begin{aligned} Y_{it} &= a + \beta_1 OWNCONC_{it} + \beta_2 SIZE_{it} + \beta_3 LEV_{it} + \beta_4 GROWTH_{it} + \beta_5 CAP_INTENS_{it} + \beta_6 INT_INTENS_{it} \\ &+ \beta_7 AGE_{it} + \beta_8 LISTED_{it} + \varepsilon_{it} \end{aligned}$$
(1)

where:

 $Y = ADJ_ROA$ ,  $ADJ_PM$  or  $ADJ_CR$ .

*OWNCONC* = Indicator variable for the degree of ownership concentration.

*SIZE* = Natural logarithm of total assets.

*LEV* = Total liabilities divided by total assets.

*CAP\_INTENS* = Non-current assets divided by total assets.

*INT\_INTENS* = Total intangible assets divided by total assets.

*GROWTH* = Annual change in net sales.

AGE = Natural logarithm of the age of the company.

LISTED = 1 if a company is listed on a financial market and 0 otherwise.

The relationship between ownership structure



and firm performance will be examined through the coefficient  $\beta_{L}$  If it is significantly positive (negative), it indicates that higher levels of concentrated ownership improve (disimprove) firm performance.

A set of control variables is also included in the regression to control for other firm-level factors that can influence company performance. They include firm size (e.g. Chen, 2001; Gilson, 1997), firm growth and leverage (Chen, 2001), investment in long-term assets and in intangible assets (Maury, 2006), the age of the company (Anderson and Reeb, 2003) as well as their listed/unlisted status (Ball and Shivakumar, 2005).

As mentioned in Section 2, Burkart and Panunzi

(2006) explain that when legal protection facilitates the monitoring of companies, the effect of ownership concentration becomes less important. To test if the legal context matters also on the relationship between ownership concentration and performance of luxury firms, model (1) is extended to separate firms that are located in a country which is also a member of the European Union (EU), thus subject to its monitoring and its rules, from those that are located in the European continent but are not EU member states such as Iceland, Moldova, Norway, Serbia, Russia, Turkey and Ukraine. Thus, *HP 2* is tested by the following equation (2):

 $Y_{it} = a + \beta_1 OWNCONC_{it} + \beta_2 SIZE_{it} + \beta_3 LEV_{it} + \beta_4 GROWTH_{it} + \beta_5 CAP_INTENS_{it} + \beta_6 INT_INTENS_{it} + \beta_7 AGE_{it} + \beta_8 LISTED_{it} + \beta_9 EU_{it} + \beta_{10} OWNCONC * EU_{it} + \varepsilon_{it}$ (2)

where:

EU = 1 if a company is located in an EU member state and 0 otherwise.

All of the other variables are as defined above.

The coefficient  $\beta_{10}$  represents the marginal effect of ownership concentration on the performance of firms located in the EU. If  $\beta_{10}$  is positive (negative) it indicates that the effect of ownership concentration on the performance of firms is amplified (reduced) among EU member states.

All models will be estimated using OLS. However, since the paper uses panel data (i.e. data from a group of firms over several years), some econometric features should be used to make the outputs of the models more robust. Indeed, in the presence of panel data, the residuals of classic OLS may be correlated across firms and time, thus the estimated standard errors can be biased (Petersen, 2009). Several methods have been proposed for estimating standard errors in the presence of residuals correlated across firms or years (For a detailed analysis and explanation about the different methods for estimating robust standard errors in the presence of panel data sets please refer to Petersen, 2009). Following Petersen (2009), this paper uses standard errors clustered by the unique firm since this is the most accurate method in the presence of a firm effect. However, the models do control also for the effect of countries and time on the dependent variables through the inclusion of country and year dummy variables.

#### 4. RESULTS AND DISCUSSION

#### 4.1. Descriptive statistics and univariate analyses

Table 1 shows the descriptive statistics for the variables used in the study.

	Ν.	Mean	1 <sup>st</sup> quartile	Median	3 <sup>rd</sup> quartile	Std. dev.
ADJ_ROA	8,293	0.019	-0.026	0.000	0.050	0.087
ADJ_PM	8,293	0.013	-0.028	0.000	0.057	0.113
ADJ_CR	8,293	0.006	-0.004	0.000	0.006	0.019
OWNCONC	8,293	1.500	1.000	1.000	1.000	0.947
SIZE	8,293	9.799	8.656	9.681	10.825	1.707
LEV	8,293	0.612	0.447	0.642	0.800	0.234
GROWTH	8,293	0.094	-0.069	0.042	0.170	0.363
CAP_INTENS	8,293	0.354	0.088	0.275	0.569	0.300
INT_INTENS	8,293	0.027	0.000	0.001	0.017	0.066
AGE	8,293	3.142	2.639	3.135	3.664	0.822
LISTED	8,293	0.059	0.000	0.000	0.000	0.235

Table 1. Descriptive statistics

Notes:  $ADJ_ROA = Year-industry-country adjusted ROA; ADJ_PM = Year-industry-country adjusted profit margin; <math>ADJ_CR = Year-industry-country adjusted current ratio; OWNCONC = Indicator variable for the degree of ownership concentration; SIZE = Natural logarithm of total assets; LEV = Total liabilities divided by total assets; CAP_INTENS = Non-current assets divided by total assets; INT_INTENS = Total intangible assets divided by total assets; GROWTH = Annual change in net sales; AGE = Natural logarithm of the age of the company; LISTED = 1 if a company is listed on a financial market and 0 otherwise.$ 

It indicates that, on average, companies overperform their peers by around 1.5% in terms of ROA and profit margin and by 0.6% in terms of current ratio. The ownership concentration index averages 1.5 on a maximum of 4 highlighting significant ownership dispersion. The other variables indicate that the companies included in the sample finance their assets by debt rather than equity given a leverage ratio of around 61%; their growth is at a rate of 9.14%, in line with the data provided by Deloitte (2017); they are quite labour intensive since non-current assets account, on average, only for 35% of total assets. Only a small portion of firms, less than 6%, is listed, supporting the EU data that indicate that 99% of European companies are unlisted small-medium enterprises (European Commission 2015).

Correlation matrix is reported in Table 2.

VIRTUS 166

	ADJ_ROA	ADJ_PM	ADJ_CR	OWNCONC	SIZE	LEV	GROWHT	CAP_INTENS	INT_INTENS	AGE	LISTED
ADJ_ROA											
ADJ_PM	0.639***										
ADJ_CR	0.111***	0.126***									
OWNCONC	-0.022**	-0.009	0.051***								
SIZE	-0.051***	0.051***	-0.013	-0.094***							
LEV	-0.262***	-0.249***	-0.480**	-0.017	-0.017						
GROWHT	0.150***	0.098***	-0.026**	-0.020*	0.017	-0.151***					
CAP_INTENS	-0.155***	-0.062***	-0.146**	0.061***	0.236***	-0.001	-0.008				
INT_INTENS	-0.050***	-0.031***	-0.102**	0.003	0.176***	0.022	-0.001	0.134***			
AGE	0.003	0.011	0.018*	0.042***	0.147***	0.003	-0.112***	0.103***	-0.051***		
LISTED	-0.027**	0.014	0.038***	0.162***	0.321***	-0.027	0.120***	0.120***	0.229***	0.164***	

Table 2. Correlation table

Notes: ADJ\_ROA = Year-industry-country adjusted ROA; ADJ\_PM = Year-industry-country adjusted profit margin; ADJ\_CR = Year-industry-country adjusted current ratio; OWNCONC = Indicator variable for the degree of ownership concentration; SIZE = Natural logarithm of total assets; LEV = Total liabilities divided by total assets; CAP\_INTENS = Non-current assets divided by total assets; INT\_INTENS = Total intangible assets divided by total assets; GROWTH = Annual change in net sales; AGE = Natural logarithm of the age of the company; LISTED = 1 if a company is listed on a financial market and 0 otherwise.

Table 3. Ownership concentration and luxury firm performance

	(A)	(B)	(C)
Dependent variable	ADJ_ROA	ADJ_PM	ADJ_CR
INTERCEPT	0.142***	0.103***	0.017***
INTERCEPT	(0.000)	(0.000)	(0.000)
OWNCONC	0.002**	0.003**	0.001***
OWINCOINC	(0.029)	(0.029)	(0.000)
SIZE	0.001	0.006***	0.001***
SILE	(0.324)	(0.000)	(0.000)
LEV	-0.109***	-0.131***	-0.042***
LEV	(0.000)	(0.000)	(0.000)
GROWTH	0.039***	0.035***	0.000
JKUWIH	(0.000)	(0.000)	(0.901)
CAP_INTENS	-0.058***	-0.042***	-0.015***
CAP_INTENS	(0.000)	(0.000)	(0.000)
INT_INTENS	0.016	-0.034	-0.019***
	(0.296)	(0.104)	(0.000)
ACE	-0.001	-0.002	-0.001***
AGE	(0.653)	(0.368)	(0.000)
LISTED	-0.020***	-0.020***	-0.002**
LISTED	(0.000)	(0.005)	(0.034)
Observations	8,293	8,293	8,293
R-squared	0.174	0.110	0.308
F-Stat	37.26***	22.87***	46.69***
Year dummies	Yes	Yes	Yes
Country dummies	Yes	Yes	Yes

Notes: P-values (in parentheses below the coefficients) are calculated using robust standard errors. For clarity, the year-specific and country-specific intercepts are omitted. \*, \*\*, \*\*\* indicate that a coefficient is statistically significant at the 10%, 5%, and 1% level or better.

Regression model:

 $Yit = \alpha + \beta 10WNCONCit + \beta 2SIZEit + \beta 3LEVit + \beta 4GROWTHit + \beta 5CAP_INTENSit + \beta 6INT_INTENSit + \beta 7AGEit + \beta 8LISTEDit + \varepsilon it$ 

Y = Year-industry-country adjusted ROA (column A): Year-industry-country adjusted profit margin (column B): Year-industry-country adjusted current ratio (column C): OWNCONC = Indicator variable for the degree of ownership concentration; SIZE = Natural logarithm of total assets; LEV = Total liabilities divided by total assets; CAP\_INTENS = Non-current assets divided by total assets; INT\_INTENS = Total intangible assets divided by total assets; GROWTH = Annual change in net sales; AGE = Natural logarithm of the age of the company; LISTED = 1 if a company is listed on a financial market and 0 otherwise.

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Table 2 shows a negative (positive) correlation between firm profitability (liquidity) and ownership concentration while the coefficient between the adjusted profit margin and ownership concentration is not significant. The three performance indicators are positively correlated to each other, especially *ADJ\_ROA* and *ADJ\_PM* ( $\rho = 0.639$ ), for the reasons discussed in section 3.3 that summarised the interactions between these areas of company performance. The correlation between the variables will not be a concern for the multivariate analyses since the performance indicators are used separately in the models. Overall, firm performance is negatively related to the leverage and the amount of non-current assets, while the sign and the significance of the correlation coefficients with the other variables depend on the type of performance.

It is worth noticing that because of the several correlations between the variables; only a multivariate analysis can provide statistically reliable evidence to test the proposed hypothesis. A diagnostic test for multicollinearity based on the estimation of the Variance Inflation Factor (VIF) coefficients for the regression models is employed. VIFs are always below the threshold of 10 (Kennedy, 2008) thus suggesting that multicollinearity does not affect the analyses presented below.

#### 4.2. Multivariate analysis

Table 3 reports the estimation of Model 1 to gather evidence about *HP1*.

The model is always significant (p-value = 0.000 in all columns) and the R2 goes from 11% (column B) to 31% (column C).

The coefficient  $\beta_i$  is consistently positive and significant, at least at the 5% level, in all columns. It indicates that company performance, measured both in terms of profitability, efficiency, and liquidity, is higher in the presence of high ownership concentration. These results are consistent with the agency theory and with those studies that highlight benefits in terms of firm performance coming from concentrated ownership.

In relation to the other control variables, bigger companies are more efficient, probably because of economies of scale, and have better liquidity. Company performance, in all its aspects measured here, is negatively related to the degree of leverage. Firms with higher growth opportunities exhibit higher profitability and efficiency but they do not better liquidity growth requires show since investments. Capital intensive firms exhibit, on average, a performance that is worse than other entities. Companies with greater investments in intangibles exhibit a worse level of liquidity. This type of assets, in fact, is very important for the luxury sector but it also requires large investments. However, such investment in intangibles does not compromise firm profitability and efficiency since the coefficients related to the variable INT\_INTENS in column A and B are not significant. Liquidity is also poorer among younger firms probably due to the significant investments needed at the first stages of a company life. Finally, company performance, under all the three aspects investigated, is negatively related to their 'listed' status.

The estimation of Model (2) that investigates *HP2* is reported in the following Table 4.

	(A)	(B)	(C)
Dependent variable	ADJ_ROA	ADJ_PM	ADJ_CR
INTERCEPT	0.089***	0.052***	0.034***
INTERCEPT	(0.000)	(0.000)	(0.000)
OWNCONC	0.010**	0.009*	0.002*
OWNCONC	(0.024)	(0.089)	(0.081)
SIZE	0.000	0.006***	0.001***
SIZE	(0.793)	(0.000)	(0.000)
LEV	-0.111***	-0.133***	-0.042***
LLV	(0.000)	(0.000)	(0.000)
GROWTH	0.041***	0.035***	0.000
0.000/111	(0.000)	(0.000)	(0.748)
CAP_INTENS	-0.054***	-0.041***	-0.014***
CAI_INTENS	(0.000)	(0.000)	(0.000)
INT_INTENS	-0.015	-0.037*	-0.022***
INT_INTENS	(0.313)	(0.064)	(0.000)
AGE	0.001	-0.000	-0.001***
AUL	(0.245)	(0.844)	(0.002)
LISTED	-0.015****	-0.016**	-0.001
LISTED	(0.000)	(0.019)	(0.185)
EU	0.006	-0.002	-0.005**
LO	(0.497)	(0.863)	(0.026)
OWNCONC*EU	-0.011**	-0.009*	-0.001
	(0.011)	(0.100)	(0.425)
Observations	8,293	8,293	8,293
R-squared	0.138	0.110	0.291
F-Stat	60.95***	22.87***	93.28***
Year dummies	Yes	Yes	Yes
Country dummies	No	No	No

**Table 4.** Ownership concentration and luxury firm performance: the effect of EU membership

Notes: P-values (in parentheses below the coefficients) are calculated using robust standard errors. For clarity, the year-specific and country-specific intercepts are omitted. \*, \*\*, \*\*\* indicate that a coefficient is statistically significant at the 10%, 5%, and 1% level or better.

 $\begin{aligned} Regression \ model: \ Yit = \alpha + \beta 10WNCONCit + \beta 2SIZEit + \beta 3LEVit + \beta 4GROWTHit + \beta 5CAP_INTENSit + \beta 6INT_INTENSit + \beta 7AGEit + \beta 8LISTEDit + \beta 9EUit + \beta 80WNCONC*EUit + \varepsilon it \end{aligned}$ 

Y = Year-industry-country adjusted ROA (column A); Year-industry-country adjusted profit margin (column B); Year-industrycountry adjusted current ratio (column C); OWNCONC = Indicator variable for the degree of ownership concentration; SIZE = Natural logarithm of total assets; LEV = Total liabilities divided by total assets; CAP\_INTENS = Non-current assets divided by total assets; INT\_INTENS = Total intangible assets divided by total assets; GROWTH = Annual change in net sales; AGE = Natural logarithm of the age of the company; LISTED = 1 if a company is listed on a financial market and 0 otherwise; EU = 1 if a company is located in an EU member state and 0 otherwise.

VIRTUS NTERPRESS® 168

Overall, the coefficient  $\beta_1$  still remains consistently positive and significant in all columns, highlighting a positive effect of ownership concentration on company performance. The coefficient  $\beta_{10}$  is negative and significant at the 5% level in column A. It shows that the impact of ownership concentration on firm profitability is less important for companies located in EU member states, in accordance with Burkart and Panunzi (2006) explanation. The same conclusion can be seen in column B of Table 5 that looks at company efficiency: the coefficient  $\beta_{10}$  is negative and significant at the 10% level. Both in column A and B the coefficient  $\beta_9$  is not significant indicating that the profitability and the efficiency of luxury firms is not related to their political belonging to the EU.

Results look a bit different in column C that focuses on liquidity. In this case, the coefficient  $\beta_g$  is negative and significant highlighting that luxury firms located in the EU exhibit a worse performance in terms of liquidity. The coefficient  $\beta_{10}$  is, instead, not significant indicating that the positive effect of ownership concentration on company liquidity, highlighted by the coefficient  $\beta_1$ , does not decrease among firms located in the EU.

#### 4.3. Additional tests

#### *4.3.1. Test of endogeneity*

Existing studies show that ownership structure of a firm may be thought as an endogenous variable in respect to performance, especially in a situation where the former changes over time. Although the research already employs a robust methodology with clustered standard errors and fixed effects, to be on the safe side, an additional estimation of the model with a direct control for endogeneity is used, more precisely the Heckman (1979) two-stage procedure. Accordingly to this methodology, in the first stage, ownership concentration is regressed over each measure of profitability as well as the control variables. Heckman (1979) methodology requires the inclusion of the inverse Mills' ratio from the first stage equations in all the regression models as it controls for endogeneity in the second stage (the inverse Mills' ratio is estimated using STATA software). Thus, the inverse Mills' ratio is estimated and added to model (1). Results are presented in the following Table 5.

Table 5. Ownership concentration and lux	ry firm performance	– Heckman (1979) procedure
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	(A)	(B)	(C)
Dependent variable	ADJ_ROA	ADJ_PM	ADJ_CR
NITEDCEDT	0.141***	-0.000	0.004***
INTERCEPT	(0.000)	(0.999)	(0.000)
OWNCONC	0.002**	0.004***	0.001****
OWNCONC	(0.028)	(0.004)	(0.000)
SIZE	0.002	0.080***	0.021***
SIZE	(0.536)	(0.100)	(0.000)
LEV	-0.110***	-0.200***	-0.061***
LEV	(0.000)	(0.000)	(0.000)
GROWTH	0.040***	0.057***	0.006***
GROWIH	(0.000)	(0.100)	(0.000)
CAP_INTENS	-0.060***	-0.224***	-0.063***
CAP_INTEN3	(0.000)	(0.100)	(0.000)
INT_INTENS	0.019	0.196***	0.037***
IINT_IINTEINS	(0.270)	(0.100)	(0.000)
AGE	-0.001	-0.023***	-0.007***
AGE	(0.558)	(0.121)	(0.000)
LISTED	-0.026	-0.511***	-0.133***
LISTED	(0.136)	(0.000)	(0.000)
MILLSRATIO	-0.041	-3.066***	-0.828***
MILLSKATIO	(0.702)	(0.000)	(0.000)
Observations	8,293	8,293	8,293
R-squared	0.174	0.156	0.810
F-Stat	36.47***	30.72***	328.86***
Year dummies	Yes	Yes	Yes
Country dummies	Yes	Yes	Yes

Notes: P-values (in parentheses below the coefficients) are calculated using robust standard errors. For clarity, the first stage regression as well as the year-specific and country-specific intercepts are omitted. \*, \*\*, \*\*\* indicate that a coefficient is statistically significant at the 10%, 5%, and 1% level or better.

 $\label{eq:regression} \begin{array}{l} \textit{Regression model: Yit = $\alpha$ + $\beta$ 10WNCONCit + $\beta$ 2SIZEit + $\beta$ 3LEVit + $\beta$ 4GROWTHit + $\beta$ 5CAP_INTENSit + $\beta$ 6INT_INTENSit + $\beta$ 7AGEit + $\beta$ 8LISTEDit + $\beta$ 9MILLSRATIOit +$cit \\ \end{array}$ 

Y = Year-industry-country adjusted ROA (column A); Year-industry-country adjusted profit margin (column B); Year-industrycountry adjusted current ratio (column C); OWNCONC = Indicator variable for the degree of ownership concentration; SIZE = Natural logarithm of total assets; LEV = Total liabilities divided by total assets; CAP\_INTENS = Non-current assets divided by total assets; INT\_INTENS = Total intangible assets divided by total assets; GROWTH = Annual change in net sales; AGE = Natural logarithm of the age of the company; LISTED = 1 if a company is listed on a financial market and 0 otherwise; MILLSRATIO = Inverse Mills' ratio calculated from a first-stage regression model.

The results support the evidence reported in Table 3. The coefficient  $\beta_i$  is consistently positive and significant in all columns suggesting a beneficial effect of ownership concentration on the performance of the luxury firm. Furthermore, more control variables become now significant and they are consistent across all the three measures of

performance investigated. The sign of those variables already significant in Table 3 is also confirmed here. Not tabulated results also support the evidence reported in Table 4 when adding the inverse Mills' ratio to Model (2).

VIRTUS 169

### *4.3.2.* Ownership concentration and firm performance: the effect of the financial crisis

The sample period investigated includes the financial crisis. It would be worth evaluating whether the financial crisis had an impact on the above-

documented relationship between ownership concentration and performance of luxury firms. To carry out this test, Model (1) is extended to separate the years inside and outside the financial crisis. It is expressed by the following equation (3):

 $Y_{it} = a + \beta_1 OWNCONC_{it} + \beta_2 SIZE_{it} + \beta_3 LEV_{it} + \beta_4 GROWTH_{it} + \beta_5 CAP_INTENS_{it} + \beta_6 INT_INTENS_{it} + \beta_7 AGE_{it} + \beta_8 LISTED_{it} + \beta_9 CRISIS_{it} + \beta_{10} OWNCONC * CRISIS_{it} + \varepsilon_{it}$ (3)

where:

CRISIS = 1 for the years within the crisis (i.e. year 2007, 2008, 2009 and 2010) and 0 for the years outside the financial crisis (i.e. year 2006, 2011, 2012, 2013 and 2014).

The coefficient  $\beta_{10}$  represents the marginal

effect of ownership concentration during the financial crisis. If the latter affected the relationship between ownership concentration and performance, the coefficient would have a significant sign. Results of this analysis are reported in Table 6.

Table 6. Ownership concentration and luxury firm performance: the effect of the financial crisis

	(A)	(B)	(C)
Dependent variable	ADJ_ROA	ADJ_PM	ADJ_CR
INTERCEPT	0.143***	0.100***	0.017***
INTERCEPT	(0.000)	(0.000)	(0.000)
OWNCONC	0.003*	0.006***	0.001***
OWNCONC	(0.063)	(0.008)	(0.007)
SIZE	0.001	0.006***	0.001***
SIZE	(0.335)	(0.000)	(0.000)
LEV	-0.108***	-0.130***	-0.042***
LEV	(0.000)	(0.000)	(0.000)
GROWTH	0.039***	0.034***	0.000
01000111	(0.000)	(0.000)	(0.898)
CAP INTENS	-0.058***	-0.042***	-0.015***
CAL_INTENS	(0.000)	(0.000)	(0.000)
INT_INTENS	0.015	-0.035*	-0.019***
INT_INTENS	(0.320)	(0.094)	(0.000)
AGE	-0.001	-0.002	-0.001***
NOL	(0.389)	(0.194)	(0.000)
LISTED	-0.019***	-0.020***	-0.002**
	(0.000)	(0.006)	(0.033)
CRISIS	0.004	0.003	0.000
C14315	(0.239)	(0.564)	(0.741)
OWNCONC*CRISIS	-0.001	-0.004	0.000
	(0.505)	(0.114)	(0.871)
Observations	8,293	8,293	8,293
R-squared	0.173	0.109	0.308
F-Stat	42.38***	25.48***	54.02***
Year dummies	No	No	No
Country dummies	Yes	Yes	Yes

Notes: P-values (in parentheses below the coefficients) are calculated using robust standard errors. For clarity, the year-specific and country-specific intercepts are omitted. \*, \*\*, \*\*\* indicate that a coefficient is statistically significant at the 10%, 5%, and 1% level or better.

Regression model: Yit =  $\alpha + \beta 10WNCONCit + \beta 2SIZEit + \beta 3LEVit + \beta 4GROWTHit + \beta 5CAP_INTENSit + \beta 6INT_INTENSit + \beta 9CRISISit + \beta 80WNCONC*CRISISit + \varepsilon it$ 

Y = Year-industry-country adjusted ROA (column A); Year-industry-country adjusted profit margin (column B); Year-industrycountry adjusted current ratio (column C); OWNCONC = Indicator variable for the degree of ownership concentration; SIZE = Natural logarithm of total assets; LEV = Total liabilities divided by total assets; CAP\_INTENS = Non-current assets divided by total assets; INT\_INTENS = Total intangible assets divided by total assets; GROWTH = Annual change in net sales; AGE = Natural logarithm of the age of the company; LISTED = 1 if a company is listed on a financial market and 0 otherwise; CRISIS = 1 for the years within the crisis (i.e. year 2007, 2008, 2009 and 2010) and 0 for the years outside the financial crisis (i.e. year 2006, 2011, 2012, 2013 and 2014).

The coefficients  $\beta_g$  and  $\beta_{10}$  are both nonsignificant in all columns. It indicates, respectively, that the performance of luxury firms has not been significantly affected by the financial crisis and that the crisis did not affect the relationship between ownership concentration and the performance of companies (the same evidence holds after employing the Heckman (1979) two-stage approach). This evidence suggests that luxury firms did not get significantly hit by the global crisis because, as explained by Aalbers (2009), it has mainly impacted on low-income communities more than others people.

#### **5. CONCLUSIONS AND IMPLICATIONS**

The role of ownership concentration, especially in the presence of the separation between owners and managers, has been the core of the corporate governance literature. This study investigates the relationship between ownership concentration and performance of European luxury firms and finds that they are strongly positively related and that this relationship has not been affected by the financial crisis. In addition, it indicates that ownership concentration has a bigger effect on the performance of firms located in non-EU member states.

VIRTUS 170

Findings from this research have several contributions and implications. They integrate research on luxury firms, historically focused on peculiar firm-level strategies rather than on corporate governance. Emphasising that ownership structure of luxury companies matters in explaining company performance should encourage researchers to take corporate governance into account when investigating the luxury sector. Results indicate that luxury companies may be subject to agency problems thus they can be used by owners and managers to assess whether any mitigating action must be taken. The reported evidence provides investors or any other stakeholders with an observable driver of luxury firm performance and it also indicates that the luxury sector is a safer investment since it remains immune to financial crises.

This research is not free from limitations and provides avenues for future research. This paper should be seen as the first attempt to understand the link between ownership concentration and the performance of luxury firms. Because the large sample employed in the paper includes many private companies from several European countries, a more detailed exploration of the ownership structure was not possible due to data unavailability. Future research can investigate portions of this big sample by collecting exhaustive more details in shareholding information of firms to analyse, for example, whether the relationship between ownership concentration and performance is purely linear or whether it follows a U-shape as indicated by research in other contexts (e.g. Campa, 2017). Future studies could also look at different dimensions of ownership, such as managerial ownership or institutional investors, or at detailed corporate governance mechanisms such as the board of director composition and structure. Finally, additional studies could investigate whether the ownership structure or other corporate governance mechanisms affect the efficacy of firm-level strategies.

#### REFERENCES

- 1. Abu Haija, A. A., & Alrabba, H. M. (2017). Relationship between ownership structure and financial performance. *Corporate Ownership & Control, 14(3-2),* 393-398. https://doi.org/10.22495/cocv14i3c2art13
- 2. Acheson, G. G., Campbell, G., Turner, J. D., & Vanteeva, N. (2016). Corporate ownership, control, and firm performance in Victorian Britain. *The Journal of Economic History*, *76*(1), 1-40. https://doi.org/10.1017/S0022050716000450
- 3. Al-Matari, E. M., Al-Matari, Y. A., & Saif, S. A. (2017). Ownership structure, audit quality and firm performance moderating and direct-effect models: An empirical study. *Corporate Board: Role, Duties and Composition, 13(1),* 28-35. https://doi.org/10.22495/cbv13i1p3
- 4. Anderson, R. C., & Reeb, D. M. (2003). Founding-family ownership and firm performance: Evidence from the S&P 500. *The Journal of Finance*, *58*(*3*), 1301-1328. https://doi.org/10.1111/1540-6261.00567
- 5. Atwal, G., & Williams, A. (2009). Luxury brand marketing-the experience is everything! *Journal of Brand Management*, *16*(*5*-*6*), 338-346. https://doi.org/10.1057/bm.2008.48
- 6. Aulakh, P. S., Rotate, M., & Teegen, H. (2000). Export strategies and performance of firms from emerging economies: Evidence from Brazil, Chile, and Mexico. *Academy of Management Journal, 43(3),* 342-361. https://doi.org/10.2307/1556399
- 7. Ball, R., & Shivakumar, L. (2005). Earnings quality in UK private firms: Comparative loss recognition timeliness. *Journal of Accounting and Economics*, *39(1)*, 83-128. https://doi.org/10.1016/j.jacceco.2004.04.001
- 8. Baysinger, B. D., Kosnik, R. D., & Turk, T. A. (1991). Effects of board and ownership structure on corporate R&D strategy. *Academy of Management journal, 34(1),* 205-214. https://doi.org/10.2307/256308
- 9. Berle, A., & Means, G. (1932). The Modern Corporation and private property. New York: Macmillan.
- 10. Beuselinck, C., & Manigart, S. (2007). Financial reporting quality in private equity backed companies: The impact of ownership concentration. *Small Business Economics*, *29(3)*, 261-274. https://doi.org/10.1007/s11187-006-9022-1
- 11. Brun, A., & Castelli, C. (2008). Supply chain strategy in the fashion industry: Developing a portfolio model depending on product, retail channel and brand. *International Journal of Production Economics*, *116(2)*, 169-181. https://doi.org/10.1016/j.ijpe.2008.09.011
- 12. Burkart, M., & Panunzi, F. (2006). Agency conflicts, ownership concentration, and legal shareholder protection. *Journal of Financial Intermediation*, *15(1)*, 1-31. https://doi.org/10.1016/j.jfi.2004.12.004
- 13. Campa, D. (2017). Ownership structure and the performance of Chinese-listed firms after the share reform: Latest evidence from the manufacturing sector. *International Journal of Corporate Governance, 8(2),* 106-127. https://doi.org/10.1504/IJCG.2017.10008328
- 14. Caniato, F., Caridi, M., Castelli, C., & Golini, R. (2011). Supply chain management in the luxury industry: A first classification of companies and their strategies. *International Journal of Production Economics, 133(2),* 622-633. https://doi.org/10.1016/j.ijpe.2011.04.030
- 15. Chen, J. (2001). Ownership structure as corporate governance mechanism: Evidence from Chinese listed companies. *Economics of Planning*, *34*(*1-2*), 53-72. https://doi.org/10.1023/A:1017548432111
- 16. Chen, Z., Cheung, Y. L., Stouraitis, A., & Wong, A. W. (2005). Ownership concentration, firm performance, and dividend policy in Hong Kong. *Pacific-Basin Finance Journal*, *13(4)*, 431-449. https://doi.org/10.1016/j.pacfin.2004.12.001
- 17. Cheng, J., Cummins, J. D., & Lin, T. (2017). Organizational form, ownership structure, and CEO turnover: Evidence from the property-casualty insurance industry. *Journal of Risk and Insurance, 84(1),* 95-126. https://doi.org/10.1111/jori.12083
- 18. Choi, S. B., Park, B. I., & Hong, P. (2012). Does ownership structure matter for firm technological innovation performance? The case of Korean firms. *Corporate Governance: An International Review, 20(3),* 267-288. https://doi.org/10.1111/j.1467-8683.2012.00911.x
- 19. Claessens, S., & Djankov, S. (1999). Ownership concentration and corporate performance in the Czech Republic. *Journal of Comparative Economics, 27(3),* 498-513. https://doi.org/10.1006/jcec.1999.1598

VIRTUS

- 20. Dam, L., & Scholtens, B. (2013). Ownership concentration and CSR policy of European multinational enterprises. *Journal of Business Ethics*, *118*(1), 117-126. https://doi.org/10.1007/s10551-012-1574-1
- 21. Danese, P., Romano, P., & Vinelli, A. (2016). Logistics and supply chain management in luxury fashion retail: Empirical investigation of Italian firms. A Review and Outlook. In *A Journey through Manufacturing and Supply Chain Strategy Research* (pp. 169-198).USA: Springer International Publishing. https://doi.org/10.1007/978-3-319-31104-3\_7
- 22. De Miguel, A., Pindado, J., & De La Torre, C. (2004). Ownership structure and firm value: New evidence from Spain. *Strategic Management Journal, 25(12),* 1199-1207. https://doi.org/10.1002/smj.430
- Deloitte (2017). Global Powers of Luxury Goods 2017. Retrieved from the World Wide Web: https://www2.deloitte.com/content/dam/Deloitte/global/Documents/consumer-industrial-products/gx-cipglobal-powers-luxury-2017.pdf.
- 24. Demsetz, H., & Villalonga, B. (2001). Ownership structure and corporate performance. *Journal of Corporate Finance*, *7*(3), 209-233. https://doi.org/10.1016/S0929-1199(01)00020-7
- Deng, Z., Hofman, P. S., & Newman, A. (2013). Ownership concentration and product innovation in Chinese private SMEs. *Asia Pacific Journal of Management*, *30(3)*, 717-734. https://doi.org/10.1007/s10490-012-9301-0
   European Commission (2015). *Annual report on European SMEs.* Retrieved from the World Wide Web:
- 26. European Commission (2015). Annual report on European SMEs. Retrieved from the World Wide Web: http://ec.europa.eu/growth/smes/business-friendly-environment/performance-review/index\_en.htm
- 27. Ganguli, S. K. (2016). Persistent high liquidity, ownership structure and firm performance: Indian evidence. *Corporate Ownership & Control, 14(1),* 38-47. https://doi.org/10.22495/cocv14i1p4
- Corporate Governance: The International Journal of Business in Society, 11(1), 41-53. https://doi.org/10.1108/14720701111108835
- 29. Gilson, S. C. (1997). Transactions costs and capital structure choice: Evidence from financially distressed firms. *The Journal of Finance*, *52*(1), 161-196. https://doi.org/10.1111/j.1540-6261.1997.tb03812.x
- 30. Goldberg, S. R., Danko, D., & Kessler, L. L. (2016). Ownership structure, fraud, and corporate governance. *Journal of Corporate Accounting & Finance, 27(2),* 39-46. https://doi.org/10.1002/jcaf.22120
- 31. Grimaldi, F. (2016). Ownership structure and turnaround processes: Evidences from Italian listed companies. *Corporate Ownership & Control, 14(1),* 117-127. https://doi.org/10.22495/cocv14i1p11
- 32. Gudmundson, D., Tower, C. B., & Hartman, E. A. (2003). Innovation in small businesses: Culture and ownership structure do matter. *Journal of Developmental entrepreneurship, 8(1),* 1-17.
- 33. Heckman, J. (1979). Sample selection bias as a specification error. *Econometrica*, *47(1)*, 153-161. https://doi.org/10.2307/1912352
- 34. Hess, K., Gunasekarage, A., & Hovey, M. (2010). State-dominant and non-state-dominant ownership concentration and firm performance: Evidence from China. *International Journal of Managerial Finance*, *6*(4), 264-289. https://doi.org/10.1108/17439131011074440
- 35. Hu, Y., & Izumida, S. (2008). Ownership concentration and corporate performance: A causal analysis with Japanese panel data. *Corporate Governance: An International Review, 16(4),* 342-358. https://doi.org/10.1111/j.1467-8683.2008.00690.x
- 36. Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, *3*(4), 305-360. https://doi.org/10.1016/0304-405X(76)90026-X
- 37. Kang, Y. S., & Kim, B. Y. (2012). Ownership structure and firm performance: Evidence from the Chinese corporate reform. *China Economic Review, 23(2),* 471-481. https://doi.org/10.1016/j.chieco.2012.03.006
- 38. Kang, Y. J., & Park, S. Y. (2016). The perfection of the narcissistic self: A qualitative study on luxury consumption and customer equity. *Journal of Business Research, 69(9),* 3813-3819. https://doi.org/10.1016/j.jbusres.2015.12.073
- 39. Kapopoulos, P., & Lazaretou, S. (2007). Corporate ownership structure and firm performance: evidence from Greek firms. *Corporate Governance: An International Review, 15(2),* 144-158. https://doi.org/10.1111/j.1467-8683.2007.00551.x
- 40. Ke, B., Petroni, K., & Safieddine, A. (1999). Ownership concentration and sensitivity of executive pay to accounting performance measures: Evidence from publicly and privately-held insurance companies. *Journal of Accounting and Economics, 28(2),* 185-209. https://doi.org/10.1016/S0165-4101(99)00021-X
- 41. Kennedy, P. (2008). A guide to econometrics. New Jersey: Wiley-Blackwell.
- 42. Kiel, G. C., & Nicholson, G. J. (2003). Board composition and corporate performance: How the Australian experience informs contrasting theories of corporate governance. *Corporate Governance: An International Review*, *11(3)*, 189-205. https://doi.org/10.1111/1467-8683.00318
- 43. Kim, H. B., & Kim, W. G. (2005). The relationship between brand equity and firms' performance in luxury hotels and chain restaurants. *Tourism Management, 26(4),* 549-560. https://doi.org/10.1016/j.tourman.2004.03.010
- 44. Kim, A. J., & Ko, E. (2010). Impacts of luxury fashion brand's social media marketing on customer relationship and purchase intention. *Journal of Global Fashion Marketing*, *1(3)*, 164-171. https://doi.org/10.1080/20932685.2010.10593068
- 45. Kim, A. J., & Ko, E. (2012). Do social media marketing activities enhance customer equity? An empirical study of luxury fashion brand. *Journal of Business Research*, *65(10)*, 1480-1486. https://doi.org/10.1016/j.jbusres.2011.10.014
- 46. Kim, K. H., Ko, E., Xu, B., & Han, Y. (2012). Increasing customer equity of luxury fashion brands through nurturing consumer attitude. *Journal of Business Research,* 65(10), 1495-1499. https://doi.org/10.1016/j.jbusres.2011.10.016
- 47. La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (1999). Corporate ownership around the world. *The Journal of Finance*, *54(2)*, 471-517. https://doi.org/10.1111/0022-1082.00115
- 48. Lee, P. M., & O'neill, H. M. (2003). Ownership structures and R&D investments of US and Japanese firms: Agency and stewardship perspectives. *Academy of Management Journal*, *46(2)*, 212-225. https://doi.org/10.2307/30040615
- 49. Liu, K. (2017). The effect of private benefits of control on minority shareholders: A theoretical model and empirical evidence from state ownership. *International Journal of Business & Economic Sciences Applied Research*, *10*(2), 26-34. https://doi.org/10.25103/ijbesar.102.03

VIRTUS

- 50. Lskavyan, V., & Spatareanu, M. (2006). Ownership concentration, market monitoring and performance: Evidence from the UK, the Czech Republic and Poland. *Journal of Applied Economics*, *9*(1), 91-104.
- 51. Luzzini, D., & Ronchi, S. (2010). Purchasing management in the luxury industry: organization and practices. *Operations Management Research*, *3*(1-2), 7-21. https://doi.org/10.1007/s12063-009-0024-4
- 52. Ma, S., Naughton, T., & Tian, G. (2010). Ownership and ownership concentration: which is important in determining the performance of China's listed firms? *Accounting & Finance, 50(4),* 871-897. https://doi.org/10.1111/j.1467-629X.2010.00353.x
- 53. Maury, B. (2006). Family ownership and firm performance: Empirical evidence from Western European corporations. *Journal of Corporate Finance*, *12(2)*, 321-341. https://doi.org/10.1016/j.jcorpfin.2005.02.002
- 54. Mayur, M. (2016). Agency conflicts and operating performance in an emerging market. *Corporate Ownership & Control, 14(1),* 73-83. https://doi.org/10.22495/cocv14i1p7
- 55. Mudambi, R., & Nicosia, C. (1998). Ownership structure and firm performance: evidence from the UK financial services industry. *Applied Financial Economics, 8(2),* 175-180. https://doi.org/10.1080/096031098333159
- 56. Nath, S. D., Islam, S., & Saha, A. K. (2015). Corporate board structure and firm performance: the context of pharmaceutical industry in Bangladesh. *International Journal of Economics and Finance*, *7(7)*, 106-115. https://doi.org/10.5539/ijef.v7n7p106
- 57. Ntoung, L. A. T., Vila Biglieri, J. E., De Oliveira, S. H. M., Benjamim, M. F., Outman, B. C., & Masárová, E. (2017). The impact of ownership structure on firm performance: The role of chairman and CEO in Portugal. *Corporate Board: Role, Duties and Composition*, *13(2)*, 6-19. https://doi.org/10.22495/cbv13i2art1
- 58. Omran, M. M., Bolbol, A., & Fatheldin, A. (2008). Corporate governance and firm performance in Arab equity markets: Does ownership concentration matter? *International Review of Law and Economics, 28(1),* 32-45. https://doi.org/10.1016/j.irle.2007.12.001
- 59. Petersen, M. A. (2009). Estimating standard errors in finance panel data sets: Comparing approaches. *The Review of Financial Studies*, *22*(1), 435-480. https://doi.org/10.1093/rfs/hhn053
- 60. Phung, D. N., & Mishra, A. V. (2016). Ownership structure and firm performance: evidence from Vietnamese listed firms. *Australian Economic Papers*, *55(1)*, 63-98. https://doi.org/10.1111/1467-8454.12056
- 61. Rubin, A. (2007). Ownership level, ownership concentration and liquidity. *Journal of Financial Markets, 10(3),* 219-248. https://doi.org/10.1016/j.finmar.2007.04.002
- 62. Scafarto, V., Ricci, F., Della Corte, G., & De Luca, P. (2017). Board structure, ownership concentration and corporate performance: Italian evidence. *Corporate Ownership & Control*, 15(1-2), 347-359. https://doi.org/10.22495/cocv15i1c2p4
- 63. Shan, Y. G., & Xu, L. (2012). Do internal governance mechanisms impact on firm performance? Empirical evidence from the financial sector in China. *Journal of Asia-Pacific Business*, *13(2)*, 114-142. https://doi.org/10.1080/10599231.2012.667312
- 64. Shahveisi, F., Khairollahi, F., & Alipour, M. (2017). Does ownership structure matter for corporate intellectual capital performance? An empirical test in the Iranian context. *Eurasian Business Review*, *7*(1), 67-91. https://doi.org/10.1007/s40821-016-0050-8
- 65. Shehzad, C. T., de Haan, J., & Scholtens, B. (2010). The impact of bank ownership concentration on impaired loans and capital adequacy. *Journal of Banking & Finance, 34(2),* 399-408. https://doi.org/10.1016/j.jbankfin.2009.08.007
- 66. Silva, F., & Majluf, N. (2008). Does family ownership shape performance outcomes? *Journal of Business Research*, *61(6)*, 609-614. https://doi.org/10.1016/j.jbusres.2007.06.035
- 67. Smith, A. (1776). An enquiry into the nature and causes of the wealth of nations. Indianapolis: Liberty Fund.
- 68. Teece, D. J. (1996). Firm organization, industrial structure, and technological innovation. *Journal of economic behavior & organization*, *31(2)*, 193-224. https://doi.org/10.1016/S0167-2681(96)00895-5
- 69. Teece, D. J. (2000). Strategies for managing knowledge assets: the role of firm structure and industrial context. *Long range planning*, *33(1)*, 35-54. https://doi.org/10.1016/S0024-6301(99)00117-X
- 70. Ting, I. W. K., Kweh, Q. L., Lean, H. H., & Ng, J. H. (2016). Ownership structure and firm performance: The role of R&D. *Institutions and Economies*, *8*(4), 1-21.
- 71. Xie, Y. (2017). How controlling shareholders tunnel under a strong legal system: A Hong Kong case. *International Journal of Critical Accounting*, *9*(3), 177-192. https://doi.org/10.1504/IJCA.2017.10009640
- 72. Yanbing, W. (2007). Market structure, ownership structure and R&D An empirical study on Chinese manufacturing industry. *Statistical Research*, *5*, 67-75.
- 73. Yu, M. (2013). State ownership and firm performance: Empirical evidence from Chinese listed companies. *China Journal of Accounting Research, 6(2),* 75-87. https://doi.org/10.1016/j.cjar.2013.03.003
- 74. van Rossum, W., & Mosk, T. (2012). The relation between bank ownership concentration and financial stability.<br/>Retrieved from the World Wide Web: <a href="http://arno.uvt.nl/show.cgi?fid=129615">http://arno.uvt.nl/show.cgi?fid=129615</a>

VIRTUS 173