

## RESEARCH ARTICLE

# Relationship between governance diversity and company growth: Evidence from the FT 1000 Europe's fastest growing companies

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## Abstract

The issue of diversity within the boards of directors (BoD) of companies is a key topic; however, it is still highly focused on gender diversity. In this study, several elements of BoD diversity are related to economic variables other than profitability, namely corporate growth, by analysing the fifth annual Financial Times (FT) 1000 ranking based on the Compound Annual Growth Rate (CAGR). These results indicate that gender diversity does not affect corporate growth. Instead, the BoD's age and members' educational levels play a key role.

## KEYWORDS

board of director, corporate governance, diversity, gender, growth rate

## 1 | INTRODUCTION

The relationship between companies' distinguishing characteristics and profit levels has been a widely researched topic in recent decades (e.g., Lan & Cong, 2020; Yazdanfar, 2013). In particular, firm size, the industrial sector to which it belongs, geographic area, stock market listing, and, more recently, substantive and/or communicative commitment to sustainability issues are the elements most correlated with corporate profitability (Bryson & Lombardi, 2009; de Vries et al., 2015; Onyama, 2021; Tyrowicz et al., 2020). Instead of governance aspects, researchers have paid attention to the unclear role of the presence of both genders in the Board of Directors (BoD). Some criticism has been levelled at these studies as being unable to grasp the complexity of reality, and often being self-limited to an in-depth analysis of a few aspects. This is especially the case with those studies that put under the magnifying glass the existing relationship between gender diversity in the BoD and company profitability, as measured by various measures (Đặng et al., 2020; Nadeem et al., 2019). These critical issues are compounded by the fact that two measures, gender diversity and profitability, are no longer relevant, especially in light of new developments in sustainability and corporate responsibility and

crises of various kinds that have currently impacted the economic, social, and environmental spheres (Naveed et al., 2023). These upheavals, including the COVID-19 crisis (Uribe Bohorquez & García Sánchez, 2023) and the Russian-Ukrainian War (Ferriani & Gazzani, 2023), have led to the need to consider other measures of economic and financial performance. Profitability is a static measure subject to distortions created by differences between industry sectors and geographic areas of operation (Hang, 2022; Tyrowicz et al., 2020). Moreover, in rapidly changing and disruptive environments, such as today, this measure is of little relevance because annual profitability can be completely distorted by uncontrollable and independent exogenous events and factors (Nugroho et al., 2021). An alternative measure considered in this study is the growth rate, which is a dynamic and strictly competitive measure (Pham et al., 2020). This measure detects and captures an improvement in firm performance, not just good positioning (which can happen to firms that do not grow but maintain a high level of profitability). With regard to gender diversity, however, it is important to consider how even in light of the thrust of international bodies (such as the United Nations with the Global Compact and Agenda 2030), attention is being paid to all facets of diversity. This is not only a matter of gender differences, but

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also differences in age, educational level, and personal characteristics (origin, religion, traditions, etc.). These diversities can better represent a set of potential factors that can influence the decisions of a company, primarily a BoD (Cordeiro et al., 2020; Kunze et al., 2013; Porcena et al., 2020).

Based on the fifth annual Financial Times (FT) 1000 ranking, which provides a snapshot of Europe's most promising growth businesses, the present study aims to contribute to the strand of literature that analyses the relationships between a company's economic and financial performance and the characteristics of its BoD, by attempting to take the analysis and discussion to a higher level. The contribution of this study is to show the need to consider diversity in an increasingly broader sense, as well as growth as an alternative measure to classical profitability. In this way, it is intended to breathe new life into the academic debate on corporate governance and diversity, as well as provide the management world with insights into managing and bringing about change in the company to achieve important economic growth goals.

The article is divided as follows: in the next section, the most relevant literature on the topic of corporate governance and its diverse elements is presented and the research hypotheses are outlined. After outlining the methodology used, the main findings are presented and a discussion of them combined with the study's conclusions is offered.

## 2 | LITERATURE REVIEW AND DEVELOPMENT OF HYPOTHESES

The results of the present study can be ascribed to the Upper Echelon Theory. This theoretical framework explains the relationship between the characteristics of the BoD and the firm's strategic vision, which leads to operational decisions (Hambrick & Mason, 1984). The Upper Echelon Theory states that the characteristics of directors (including gender, age, education, experience, and knowledge) are important aspects of firm performance (Tulung & Ramdani, 2016). Directors orient the vision of an organisation, define objectives, and create conditions for achieving specific goals to achieve long-term development and profitability (Fernández-Temprano & Tejerina-Gaite, 2020). Thus, directors' characteristics may affect firm performance and corporate growth (Alodat et al., 2023; Amorelli & García-Sánchez, 2021).

Based on the Upper Echelon Theory, the variables most widely used in the literature to describe the impact of corporate governance on firm decisions, including business success, are related to board size, the presence of women on the board, the age of the board members, and their level of education (e.g., Post et al., 2011; Rao & Tilt, 2016; Setó-Pamies, 2015). These variables may influence strategic decisions which can ultimately affect firm growth and profitability.

### 2.1 | Board size

The literature on board size shows no convergent results. Krishnan and Visvanathan (2009) and Pathan (2009) argue that board size

depends on a firm's complexity. Baker and Gompers (2003), Kocher and Sutter (2005), and Coles et al. (2008) demonstrated that the difficulties involved in monitoring and advising firms with complex businesses require larger boards. Allegrini and Greco (2013) highlighted the positive and significant relationship between board size and governance disclosures.

Laksmana (2008) and Guest (2009) highlight the possible problems of diversification on smaller boards. They argue that smaller boards may have a low degree of diversification in terms of education, expertise, stakeholders, and gender representation. By contrast, De Andres et al. (2005) identify some positive items about smaller boards. They argue that smaller boards are more effective in monitoring and controlling firm governance than larger ones. Similarly, Ahmed et al. (2006) and Dey (2008) argue that directors with a higher level of commitment can be identified on smaller boards.

In light of the above evidence, we can hypothesise an inverse relationship between the size of the BoD and company growth, and therefore, a lower placement in the FT ranking. Therefore, we propose the following hypothesis:

**Hypothesis 1.** The larger the board of directors, the lower the company's FT ranking.

### 2.2 | Board gender diversity

Gender diversity in boards is one of the most controversial variables in the literature. Deschênes et al. (2015) and Prado-Lorenzo & Garcia-Sanchez (2010) found a negative association between social and environmental practices and the presence of women on a board, with possible negative repercussions on the firm's market share. According to Kiliç et al. (2015) and Glass et al. (2016), board gender diversity has a weak, statistically significant, and positive impact on social and environmental reporting. Similarly, Alodat et al. (2023, p. 2053) 'showed that sustainability disclosure fully mediates the relationship between board gender diversity and the performance of the firm'. Other studies (e.g., Alazzani et al., 2017; Amran et al., 2014; Galbreath, 2013; Giannarakis, 2014; Khan, 2010; Mallin et al., 2013; Walls et al., 2012) found no significant relationship between board gender diversity and firm growth based on social and environmental policies.

However, the literature generally suggests that the presence of more women on boards tends to influence firms' decisions in more socially responsible ways than those with fewer women (Galletta et al., 2022). In this vein, Post et al. (2011) and Ferrero-Ferrero et al. (2015) analyse the relationship between Corporate Social Responsibility (CSR) outcomes and board diversity, and demonstrate that women directors encourage companies to adopt a more socially responsible approach, obtaining a positive reputation for a firm's growth. The same conclusions were drawn by Bear et al. (2010), Setó-Pamies (2015), Ibrahim and Hanefah (2016), and Matuszak et al. (2019) in their studies on the presence of women on boards and firm CSR disclosures.

Al-Shaer and Zaman (2016), Ben-Amar et al. (2017), and Hollindale et al. (2019) argued that the presence of women on boards

may enhance companies' awareness of environmental and social issues by implementing and promoting proactive strategies to respond to corporate stakeholders' social and ethical demands and expectations. Thus, a stable capital level may help firm growth in the market. Moreover, according to Boulouta (2013), Hussain et al. (2018), and Cullinan et al. (2019), women directors enhance a company's sustainability performance due to greater apprehension concerning climate change (Ciocirlan & Pettersson, 2012).

Konrad et al. (2008), Fernandez-Feijoo et al. (2012, 2014), and Manita et al. (2018), among others, demonstrate that at least three women must be present in a BoD to have a significant and positive impact on sustainability and corporate governance. Specifically, Post et al. (2011) argue that BoD with three or more female members highly regard environmental issues. In this way, the presence of women on the BoD can push companies towards sustainable growth (e.g., Valls Martinez et al., 2019).

Based on this literature, we can hypothesise that:

**Hypothesis 2.** The presence of women on the board positively affects the company's FT ranking.

### 2.3 | Board age

Age diversity within the BoD expresses the coexistence of different generations, and therefore, of different values, motivational goals, and experiences, influencing the decision-making processes adopted by directors (Chen & Hao, 2022). Botwinick (1977) and Burke and Light (1981) argued that cognitive abilities (learning, memory, and reasoning) decrease with age. Carlsson and Karlsson (1970) and Vroom and Pahl (1971) demonstrate that older executives tend to avoid risky decisions.

However, the relationship between age and risk propensity remains unclear. According to Campbell (1987), younger managers seem to handle creative and new ideas better than older managers, whereas Guthrie and Olian (1991) argue that younger managers tend to implement riskier and more innovative growth strategies. Morin and Suarez (1983), Brown (1990), Bakshi and Chen (1994), and Pålsson (1996) find a positive correlation between age and risk propensity, whereas Riley Jr and Chow (1992), Halek and Eisenhauer (2001), and Harrison et al. (2007) show that risk aversion is a descendant function of age until 65 years, which increases significantly thereafter. Cohen and Einav (2007) identified a U-shaped relationship between risk-seeking and age. According to Handajani et al. (2014), younger directors are more dynamic, smarter, and more open to technological change than older directors. Age is also negatively associated with environmental attitudes and knowledge about environmental issues (Diamantopoulos et al., 2003).

Based on this literature, it is conceivable that a BoD made up of elderly people may be less receptive to change, both with reference to the implementation of technological innovations (e.g., Kogan et al., 2017) and in choosing a more sustainable orientation of the company in discontinuity with the past (e.g., Chams & García-Blandón, 2019). This attitude can negatively affect company growth.

Therefore, we propose the following hypothesis:

**Hypothesis 3.** The older the board, the lower the company's FT ranking.

### 2.4 | Educational level

In several studies (e.g., Datta & Rajagopalan, 1998; Hambrick & Mason, 1984; Sult et al., 2023; Wailderdsak & Suehiro, 2004) educational level has been considered a good proxy for human capital, knowledge, or intellectual competence. However, this subject has been considered in many studies. Christy et al. (2010), for example, argue that a negative relationship exists between the proportion of board members holding a financial degree and the market risk of equity in Australia. Litov et al. (2014) found that the presence of lawyer directors reduces corporate risk-taking and increases firm value. Audretsch and Lehmann (2006) demonstrated a positive relationship between directors with academic backgrounds and the competitive advantage of firms, especially with reference to access to and absorption of external knowledge spillovers. With reference to Italian listed companies, Lippi and Di Battista (2017) demonstrate that the presence of more directors with degrees in Law and Economics makes companies less aggressive. Moreover, the concentration of directors with degrees in Economics tends to make the BoD more conservative in decision-making. Chams and García-Blandón (2019) find no significant relationship between directors' advanced educational degrees and firm performance sustainability.

In light of this controversial literature, we propose the following hypothesis:

**Hypothesis 4.** The higher the proportion of degrees held by the members of the board, the higher the company's placement in the FT firm ranking.

## 3 | DATA AND METHODOLOGY

The fifth annual FT 1000 ranking provides a snapshot of Europe's most promising growth businesses in the weeks before the coronavirus outbreak. The FT 1000, compiled by Statista, a research company, lists the European companies that achieved the highest compound annual revenue growth rate between 2016 and 2019. The minimum Compound Annual Growth Rate (CAGR) for creating the list was 35.5% this year. For each company in the FT 1000, we gathered information on the characteristics of each board we considered. In particular, we excluded companies whose BoD included other companies (as a result, the sample consisted of 773 companies). We collected information about the name of each director engaged on the board, the number of directors, and gathered information about their gender, age, whether they were graduates, and types of degree. Table 1 lists the variables used in this study. Unfortunately, it was not possible to collect information on total assets for some issuers; thus, this variable was not included in the analysis.

**TABLE 1** Description of variables.

Variable	Description
<i>Dependent variable</i>	
Rankingtop	The ranking assigned by FT to each company. It ranges from 1 (assigned to the first 10 companies in the ranking) to 11 (worst level)
<i>Independent variables</i>	
N_directors	Number of directors on the board for each company
Age	The average age of the directors on the board for each company
Nmale	The number of men on the board
Nfemale	The number of women on the board
%Male	The share of men on the board for each company
%Female	The share of women on the board for each company
Degree	Dummy variable: 0 if none of the directors has a degree; 1 if at least 1 director has a degree; 2 if all the directors have a degree
%Eco	The percentage of graduates in Economics and Finance on the board for each company
%Law	The percentage of graduates in Law on the board for each company
Area	Dummy variable: equal to 1 if the company headquarter is based in Spain, Portugal, Italy, Cyprus, Malta, Greece; 2 if the company headquarter is based in Bulgaria, Croatia, Czech Republic, Hungary, Poland; Romania, Slovakia, Slovenia; 3 if the company is based in Austria, Belgium, Denmark, France, Germany, Luxemburg, Netherlands, Switzerland; 4 if the company headquarter is based in Norway, Sweden, Finland, Estonia, Latvia, Lithuania, Ireland and the UK
DummyF	Dummy variable: equal to 1 if the board of directors presents at least 50% of women; 0 otherwise

**TABLE 2** Descriptive statistics.

Variable	Mean	SD	Min	Max
N_directors	2.96	3.06	1	25
Age	46.82	8.94	23.5	77
Nmale	2.57	2.68	0	22
Nfemale	0.39	0.79	0	7
%Male	0.88	0.26	0	1
%Female	0.12	0.26	0	1
Degree	0.56	0.61	0	2
%Eco	0.30	0.38	0	1
%Law	0.03	0.12	0	1
Area	2.46	1.19	1	4
DummyF	0.17	0.37	0	1

We divided our sample by considering the top 10 companies in the FT 1000 ranking and then considering the other companies in a group of 100. In this way, a value of 1 was assigned to the top 10 companies, a value of 2 was assigned to the companies from the 11th to

**TABLE 3** Correlation matrix.

	Ranking	Ndirectors	Age	Nmale	Nfemale	%Male	%Female	Degree	%Eco	%Law	Area	DummyF
Ranking	1											
N_directors	-0.034	1										
Age	0.1371	0.2158	1									
Nmale	-0.0294	0.9710	0.1934	1								
Nfemale	-0.0183	0.5813	0.1805	0.3699	1							
%Male	0.0254	-0.0290	-0.1099	0.1483	-0.6170	1						
%Female	-0.0254	0.0295	0.1099	-0.1477	0.6175	-1.00	1					
Degree	-0.0848	0.5169	0.0360	0.5043	0.2921	-0.0049	0.0052	1				
%Eco	-0.0774	0.1146	-0.1066	0.1186	0.0416	0.0288	-0.0287	0.7012	1			
%Law	-0.0527	0.0660	0.0151	0.0601	0.0519	0.0068	-0.0067	0.3258	-0.0623	1		
Area	-0.0686	0.0475	-0.0509	0.0608	-0.0223	0.0107	-0.0108	0.1151	0.1538	0.0263	1	
DummyF	0.0002	-0.0486	0.1265	-0.2200	0.5600	-0.8772	0.8771	-0.0048	-0.0207	0.0066	-0.0240	1

110th positions, a value of 3 was assigned to the companies from the 111th to 120th positions, and so on.

Table 2 summarises the descriptive statistics of the variables used in the analysis, and Table 3 shows the correlation matrix.

Table 2 shows that, on average, the BoD is quite small (2.96 members), and the directors are 88% men on average. The level of education is on average low: 49% of the BoD is composed of no graduates and the percentage of degree in Law is very low. Conversely, 30% of the directors (on average) have a degree in Economics. The average age of the board ranges from 23.5 to 77 with a mean level of 46.82. A very little number of companies have their headquarters based in Spain, Italy, Portugal, Cyprus, Malta, and Greece.

To test our research hypotheses, we run the following ordered logit regressions:

$$\text{ranking} = \beta_1 N_{\text{directors}} + \beta_2 \text{age} + \beta_3 n_{\text{male}} + \beta_4 n_{\text{female}} + \beta_5 \% \text{male} + \beta_6 \% \text{female} + \beta_7 \text{degree} + \beta_8 \text{area} + \epsilon \quad (1)$$

$$\text{ranking} = \beta_1 N_{\text{directors}} + \beta_2 \text{age} + \beta_3 n_{\text{male}} + \beta_4 n_{\text{female}} + \beta_5 \% \text{male} + \beta_6 \% \text{female} + \beta_7 \% \text{eco} + \beta_8 \% \text{law} + \beta_9 \text{area} + \epsilon \quad (2)$$

$$\text{ranking} = \beta_1 N_{\text{directors}} + \beta_2 \text{age} + \beta_3 n_{\text{male}} + \beta_4 n_{\text{female}} + \beta_5 \% \text{eco} + \beta_6 \% \text{law} + \beta_7 \text{area} + \beta_8 \text{dummyF} + \epsilon \quad (3)$$

The ordered logit model is justified, considering that the ranking presents a specific increasing order from the highest to the lowest. In Equation (1), the percentage of degree-holding directors was considered; while in Equation (2), we considered the share of directors with an economic and financial degree and a law degree, in Equation (3), the percentage of directors (men and women) was not considered

because we inserted the dummy variable dummyF to analyse the role of a BoD composed of at least 50% women.

## 4 | FINDINGS AND MAIN COMMENTS

Table 4 presents the results of the analysis; the estimates reported in column (1) consider Equation (1), the results in column (2) are related to Equation (2), and those in column (3) are related to Equation (3).

Overall, the results reported in columns (1), (2), and (3) in Table 4 converge, allowing a single comment. The first significant result that emerges is that the number of directors on the board has no significant impact on the FT ranking; thus, H1 is not confirmed. H2 is rejected, since the percentage of women on the board has no significant impact on the FT ranking. This can be justified by the low number of women on the boards of the issuers examined. The average age of directors has a significant impact on the attribution of the FT ranking. Thus, H3 is confirmed: companies with older boards are not placed at the top of the ranking. H4 is confirmed; the percentage of graduates on the board has a significant impact on the FT ranking (the variable 'degree' presents a negative and significant coefficient in column [1]). While the percentage of directors with a degree in economics and finance has not a significant influence on the FT ranking (column [2] variable %eco), those with a degree in law has a significant impact on the FT ranking (column [2] variable %law).

Table 4 column (3) does not consider the percentage of men and women on the board, but a specific dummy variable (dummyF) which assumes a value equal to 1 if the BoD is composed of at least 50% of women, and 0 otherwise. The obtained results confirm that companies with older boards are placed in the worst position in the FT ranking, and that the presence of a high number of directors with a degree in Law places the company in a better position in the FT ranking.

**TABLE 4** Board composition and FT 1000 ranking.

Variables	(1)	(2)	(3)
N_directors	0.0830 (0.104)	0.0746 (0.104)	-0.0283 (0.0937)
Age	0.0290*** (0.00727)	0.0287*** (0.00737)	0.0280*** (0.00743)
Nmale	-0.112 (0.125)	-0.121 (0.126)	-0.000873 (0.117)
Nfemale			
%Male	9.208 (34.32)	9.052 (35.50)	
%Female	8.726 (34.33)	8.542 (35.52)	
Degree	-0.219* (0.114)		
%Eco		-0.245 (0.174)	-0.243 (0.174)
%Law		-0.883* (0.476)	-0.867* (0.473)
Area	-0.0738 (0.0531)	-0.0712 (0.0539)	-0.0738 (0.0539)
DummyF			-0.0758 (0.243)
Observations	775	774	774
Pseudo R <sup>2</sup>	0.0072	0.0073	0.0068

Note: Ordered logit regression. The dependent variable is ranking. The table reports the odds ratio. Robust standard errors in parentheses.

\*\*\*p < 0.01; \*\*p < 0.05; \*p < 0.1.



Contrary to the literature, the presence of a majority of women on the board (at least 50% as indicated using the dummyF variable) has no impact on the company FT rating.

Thus, at the end of our analysis, we reject H1 and H2, while confirming H3 and H4.

The results confirm and corroborate some conclusions found in the existing literature, opening a new field of research linked to the board composition. In particular, in the literature board, size gives rise to two opposing strands: many studies demonstrate the importance of larger boards, while others advocate the efficiency and effectiveness of smaller boards. The results of this study are neutral, as the number of directors is not significant for the FT ranking.

The company placed in the high level of the FT ranking has a high level of degree inside the board. However, the directors holding an economic and financial degree have no impact on the FT ranking, while those with a law degree do. This unexpected result suggests that companies placed at the top of the FT ranking presented a high percentage of directors with a degree in law. This is a crucial topic to address in future research because it indicates that different degrees do not confer the same skills, knowledge, and sensibility to the firm's sustainable growth.

Moreover, companies with older directors are bottom placed in the FT ranking. This result, which confirms a part of the literature on the topic (e.g., Diamantopoulos et al., 2003; Handajani et al., 2014), can be read in the light of previous results as well. Many old men and women do have not a degree. They based their success on their capabilities and intuition in an economic world very different from the present one. Thus, we can argue that the top companies of the FT ranking are composed of younger and Law graduate directors.

## 5 | CONCLUSION

Through analysing the inherent characteristics of diversity within the BoD of the most promising European businesses included in the prestigious FT 1000 ranking, this study contributes to the Upper Echelon Theory. In particular, it allows a better understanding of the link between diversity in the BoD and business growth. The results reveal that, at the European level, aspects that are highly considered in the relevant literature such as gender diversity and board size are not significant when considering their link in a large and representative panel, and especially in relation to companies' economic growth. They confirm the diversity of conclusions already present in the literature with reference to these specific dimensions. Conversely, our results corroborate the literature that considers age and the educational level of the BoD as strategic variables for sustainable firm growth. Our study adds to the unclear role of gender diversity in corporate governance as clearly shown by the recent systematic review conducted by Laique et al. (2023), which reveals a huge heterogeneity in studies from 1996 to 2022, and argues that 'it is unclear when and which kind of board diversity measure should capture a firm's financial performance.'

Like all scientific studies, this paper is not without limitations. The time period taken into consideration for the analysis is limited between 2016 and 2019. The basket of companies taken into consideration (FT 1000) represents a particular grouping that might present unique characteristics, which does not allow the generalizability of results. The variables taken into consideration in the analysis represent only one possibility among the different characteristics that can distinguish the components of a corporate BoD.

This study offers an important glimmer to rethink and reflect on the setting of analyses with regard to corporate governance by shifting the focus of the investigation. In particular, regulators must necessarily consider all the variables that characterise the composition of the BoD, but they could draw up a ranking of importance in the light of the results presented in this study. Thus, a deviation from the most-travelled research strands allows offering answers and insights regarding possible business practices, inherent to governance, capable of ensuring not immediate but lasting achievement (growth over the years). The composition of the BoD in terms of gender should be rethought; a prevalence of women or men does not necessarily help the firm growth, but perhaps the right ratio within the board has not yet been determined. Nevertheless, regulators could impose a minimum presence of young people on boards of directors to generate a positive generation mix that could contribute to the firm growth in a sustainable way. Definition of the right mix between young and old directors is a topic that needs to be analysed. These aspects appear relevant, especially in light of the present socio-economic context that presents elements capable of creating unstable conditions with great speed and ease. Some important suggestions on the most impactful elements in the selection of BoD members are of potential interest to the corporate world, with a view to rethinking the diversity of its governance to meet the new business challenges. The inherent characteristics of BoD diversity considered in this study can be investigated in future studies, that could, for example, also focus on more personal aspects such as religion, country of origin, and having children. Other studies should verify our results in different contexts, such as Asian and North American contexts characterised by different peculiarities and histories. Verification of the existence of a relationship between BoD diversity characteristics and the firm's socio-environmental performance is of utmost importance. This represents a strongly developing strand of research that continues to focus on the gender factor when considering diversity within the board (Amorelli & García-Sánchez, 2021; Issa, 2023; Tagliatalata et al., 2023). We recommend broadening the focus of inquiry to consider the relationship between governance and Environmental, Social and Governance (ESG) performance using more innovative and potentially relevant elements of inquiry. Additionally, the potentially relevant effects of national characteristics and different cultures/traditions of origin of BoD members should be taken into account.

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