

The CEO characteristics and Romanian banks performance

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Abstract: The main objective of this research is to identify to what extent the characteristics of the CEO (chief executive officer) influence the financial performance of banks within the Romanian banking system. The sample under investigation includes all 21 Romanian banks, and the analyzed period included the financial years related to the last 5 financial years (2018–2022). Regarding these characteristics, aspects such as age, gender diversity, education, nationality, and duality were included in the research, the financial performance of the banking system being measured through the ROA (return on assets) and ROE (return on equity) indicators, which are often used in the literature, including control variables such as the size of the bank, assessed by the total value of bank assets, the share of debts in total assets and the share of capital in total assets. Regarding the duality of the CEO, this is the practice of the same person holding both the position of chairman of the board of directors and that of executive manager. The authors tried to find the answer to the question: Is there a correlation between CEO characteristics and the financial performance of the banks, and if the answer is yes, to what extent are these correlations significant? To carry out this research, the authors used the SPSS software, the research methodology being predominantly quantitative, including descriptive methods, correlation analyses and regression models. The results of the research indicate that the financial performance of the banks operating within the banking system in Romania (measured by the ROA and ROE indicators) is influenced by the nationality and education of the persons holding the position of CEO but also by the size of the banks, appreciated by the value of their total banking assets.

Keywords: CEO characteristics, banking performance, ROA, ROE, gender diversity, education, nationality, duality, capital.

JEL Classification: M40, G20, G30.

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Introduction

In terms of corporate governance, one of the important roles of the company's board of directors is to identify and recruit those executive managers who have outstanding

characteristics and skills (Hambrick & Mason, 2014). But nevertheless, this process is difficult and costly, more and more in recent years and at the level of companies. For the banking sector, which is one with specific regulations,

identifying the competent persons to hold the position of CEO (chief executive officer) becomes a much more complex process, requiring skills to ensure the development and stability of the respective bank (Elsharkawy et al., 2018). The CEO of a bank needs both solid financial experience and knowledge and a good knowledge of the legal regulations specific to the banking sector (Pham, 2023).

According to Borio (2020), banks need to be a source of stability and resilience, registering a high level of liquidity and capitalization in recent years to support the financing needs of national economies. However, amid the disruptions manifested in all sectors of the economy, the exposure of banks to a series of excessive risks will result in a series of insolvencies or bankruptcies that may occur at the level of companies.

Corporate performance has lately become more and more highly debated topic that is the subject of increasing number of research, the factors that can influence performance being a significant concern recorded at the level of companies. Among these factors that can have a significant influence on the performance of companies, it is considered that one of the most important can be represented by the executive chairman (CEO), who is the main decision-maker at the level of a company. According to Hosmer (1982), the president of the company (CEO) is one of the most convincing and powerful persons within a company, holding the most important role in decision-making within the organization, and these decisions can greatly affect the development strategy and last but not least the financial performance of the company. According to Zhang et al. (2016), the president of the company (CEO) can have a significant influence on the decisions taken by the members of the board of directors. At the same time, the CEO or the president of the company may have a decisive role in terms of maintaining or not the members of the board of directors, as well as establishing their remuneration or allowance.

At the same time, Hambrick and Mason (1984) appreciate that the experience, education, traits and character of managers have a significant influence on the company's development strategy and implicitly on its financial performance. However, the impact of these factors on the company's performance is often

difficult to quantify in the literature, with associations between the company's performance and factors such as management characteristics, experience, age and the duration of its mandate. Thus, a number of authors of recent studies within the literature, the developments identify a number of characteristics of the CEO who can exert significant influences on the financial performance of companies, e.g., age (Naseem et al., 2020; Nguyen et al., 2018), gender (Kaur & Singh, 2018), term of office (Naseem et al., 2020; Nguyen et al., 2018), nationality (Boone et al., 2019; Crossland & Hambrick, 2011; Ioannou & Serafeim, 2012; Kaur & Singh, 2018; Saidu, 2019) and education (Almășan et al., 2019; Gottesman & Morey, 2010; Mintzberg, 2004; Naseem et al., 2020; Nițescu & Murgu, 2022; Saidu, 2019).

Thus, a series of studies demonstrate the influence on the company performance of the company's president (CEO), nationality or country of origin (Saidu, 2019), and age (Nguyen et al., 2018). At the same time, Nguyen et al. (2018) identified another variable influencing the company's performance, namely the duality of CEO, respectively, the holding of an executive managerial position by the president of the company. In their research, Kaur and Singh (2018) demonstrated that the company's financial performance can be influenced by the level of the CEO's remuneration and his nationality. Liu and Jiang (2020), appreciated that although the age of the CEO (president) does not have a significant influence on the company's financial indicators, the duration of the mandate and its political connections have significant effects on the organization's financial performance.

The main objective of this research is to examine the impact of CEO characteristics on the performance of the Romanian banking system. At the same time, the authors appreciate that this research contributes to the development of the scientific literature in the field, having as a particularity the fact that it focuses on the Romanian banking system, studying the possible influences of CEO characteristics such as age, gender, education, nationality and duality on its financial performance, appreciated in the light of the ROA (return on assets) and ROE (return on equity) indicators.

The research continues with an analytical presentation of the relevant scientific literature in the field, focusing on the variables included in this study, then following the research

methodology used with the presentation of the tools, research methods, sample and research variables analyzed. The following sections present the results of the research, the discussions and, at the end of this article, the conclusions of the research. Thus, this study confirms and expands, at the same time, the previous research in the specialized literature, focusing on the performance of the Romanian banking sector during the 2018–2022 period, with all Romanian banks being included in the sample studied.

1. Theoretical background

In the scientific literature, the agency's theory (Jensen & Meckling, 1976) is considered to be an important foundation for understanding the existing relationship, on the one hand, between the shareholders (as owners or capital holders) and, on the other hand, the members of the board of directors and the executive managers of the company. According to this theory, there may be a conflict of interest between them because there is a risk that the members of the boards of directors or the executive managers may seek to achieve their interests to the detriment of the interests of the shareholders. That is why this possible conflict requires the existence of strong mechanisms to ensure effective control and management of the company's activities (Belascu et al., 2021; Wagana & Nzulwa, 2016). Thus, it is imperative to identify and select those persons who have the appropriate skills and competencies to ensure an increase in business performance (Carter et al., 2003) and to ensure the levers to avoid them pursuing their personal goals and generating harm to the interests of shareholders (Ionașcu et al., 2022; Petcu et al., 2023; Valls & Rambaud, 2019). Thus, Jensen (1993) considers that, in order to effectively supervise the activity of the CEO, it is necessary to separate the role of the person holding the position of CEO from that of the chairman of the board of directors, precisely to avoid the occurrence of these conflicts of interest and to transparently promote the performance of the company.

Given the extremely important role that the CEO can play on business performance, a number of researchers have conducted studies in order to understand those characteristics of the CEO that can influence the financial results of companies. The first aspect studied is the decision-making power

that the CEO has over business performance. Some researchers appreciate that if the CEO holds both the position of chairman of the board of directors and that of executive manager, conflicts of interest can be generated with a negative impact on the performance of companies (Gillan, 2006; Jensen, 1993; Rechner & Dalton, 1991). The argument on which this statement is based is the theory of the agency, according to which the CEO is the person who, as chairman of the board of directors, manages the company in order to maximize the value of the business and the interests of the shareholders. At the same time, there is a risk that the person holding this position may pursue personal interests, engaging in fraudulent practices contrary to the interests of shareholders.

At the same time, several other researchers believe that the existence of this duality can lead to a higher performance of companies because, on the one hand, the CEO will be able to make decisions faster, and on the other hand, he will be more cautious in the decisions taken to protect the company's reputation, thus contributing to the achievement of superior performance while respecting the interests of shareholders (Brickley et al., 1997; Duru et al., 2016; Liang et al., 2013).

The duality of the CEO represents the practice that the same person holds both the position of president and executive director within the company, which can contribute to increasing control at the company level (Kaur & Singh, 2018). At the same time, according to Jensen (1986), the holding by the same person of the position of both CEO and executive director presents a very high risk of dependence of the company's development strategies on the decisions taken by a single individual. This risk occurs especially if it manifests an opportunistic behavior and can affect the efficiency of the board of directors and, implicitly, the corporate performance. The relationship that may exist between CEO duality and corporate performance can be evidenced by the two theories, namely agency theory and management or company management theory.

According to the agency's theory, the duality of the CEO is appreciated as having a negative impact on the company's financial performance and considers that the decision-making power should not differ from a single person holding the position of CEO but also

of the president of the company (Pucheta-Martinez & Gallego-Alvarez, 2020; Ujunwa, 2012). Nguyen et al. (2018), in research on a sample of listed companies in Australia, demonstrated that the duality of a CEO could provide him with considerable and excessive power, reducing that of board members, with a negative effect on the company's ability to improve its financial performance.

At the same time, the duality of the CEO can influence the decisions of the board of directors, limiting the independence of its members and turning it into a tool for the company to obtain poor performance. Also, Hsu et al. (2021), in the study of all non-financial firms listed on the Taipei and Taiwan Stock Exchange, demonstrated that the duality of the CEO has a significantly negative impact on the financial performance of the companies under research. In their research, Naseem et al. (2020) confirmed the agency's theory and considered that the duality of the CEO does not have a favorable and positive impact on corporate performance, arguing that in order to improve financial performance, the company's ownership must be separated from its management.

At the same time, by studying the financial performance of FTSE 100 companies in the UK, Brahma et al. (2021) have demonstrated that the duality of the CEO has a significant negative influence on the performance of companies. At the same time, the administration theory appreciates that the duality of the CEO can help reduce conflicts at the level of the members of the board of directors, with a positive impact on the efficiency and development of the company. Pucheta-Martinez and Gallego-Alvarez (2020), reached the same result following research on a sample of 34 countries from six geographical regions (Europe, Asia, Africa, North America, Latin America and Oceania).

In the situation of CEO duality, the decision-making process is more limited, thus contributing to the increase of the company's performance (Sheikh & Wang, 2012), a conclusion reached by the authors Ahmadi et al. (2018) following the study on a sample of French companies listed on the stock exchange. Kanakriyah (2021) considers that a person holding both the position of CEO and president can act with maximum responsibility in making decisions at the company level and may show a greater interest in improving its financial performance. On the other hand,

in the literature, we find the study carried out on a sample of Chinese companies by Peng et al. (2010), in which they consider that the duality of CEOs may have a negative influence on state-owned companies but a positive impact on privately-owned companies.

In the study of a representative sample of companies listed on the Australian Stock Exchange, Nguyen et al. (2018) demonstrated that the age of the CEO has an insignificant negative influence on the value of the shares of these companies, appreciating the fact that the performances of companies whose CEOs are younger are higher compared to the financial results of companies managed by directors who are older. At the same time, Ali et al. (2022) have demonstrated in a research on listed companies in the non-financial sector of Pakistan, that the age of the CEO positively influences their overall performance. In contrast, Liu and Jiang (2020) in a study of publicly traded Chinese companies, estimated that the CEO's age has no influence on their financial performance. The same conclusions were reached by Ahmad et al. (2022), following research on a sample of food companies in Malaysia, Indonesia and Singapore.

Garcia-Blandon et al. (2019), using the Harvard Business Review list of the world's best CEOs in their research, also demonstrated that between the age of a CEO and the company's performance, there is no significant direct influence. CEOs who are older are often extremely conservative in their decisions, showing some reluctance to take risks, while younger CEOs tend to make riskier and bolder financial decisions. At the same time, in a study of the top 100 companies in the UK, it was shown that the age of women who hold the position of CEO significantly and positively influences the financial performance of companies (Brahma et al., 2021).

Bertrand and Schoar (2003) appreciate that younger CEOs show high energy and enthusiasm, motivated to achieve both personal and company goals, while older CEOs generally adopt a less risky investment strategy, being much more careful and restrained regarding the investments and financial decisions of companies. The same point of view is found in the literature in the study conducted by Serfling (2014), who believes that CEOs tend to take fewer risks as they age, and older CEOs generally choose more conservative financial

investment policies with lower long-term performance. Kuo et al. (2015), who, following the research conducted on 729 American companies listed in ExecuComp, have demonstrated that older CEOs can have a significant influence on the performance of companies, able to generate high financial returns.

Regarding the banking system, Johan and Sari (2020) studied the impact of CEO characteristics on the performance of commercial banks in Indonesia for 2014–2018 and demonstrated that age has a significant impact on banks' financial results.

Gupta and Mahakud (2020), in a study of 36 commercial banks in India between 2009 and 2017, demonstrated the financial expertise of the person holding the position of CEO, in addition to its duality, contributes to improving the financial performance of banks.

Regarding the relationship between company performance and CEO sex, it has also been the subject of numerous studies within the literature (Alazzani et al., 2017; Assenga et al., 2018; Azam et al., 2019; Bjuggren et al., 2018; Darmadi, 2013; Fernandez-Temprano & Tejerina-Gaite, 2020; Groening, 2019; Proenca et al., 2020; Ullah et al., 2020; Vairavan & Zhang, 2020). Khan and Vieito (2013) have demonstrated, that at the level of the US companies, those with high gender diversity at the management level register a surplus in the quality of the services provided, and those where the share of female executives is high can achieve increased financial performance. At the level of publicly traded companies in Istanbul, Solakoglu and Demir (2016) demonstrated that gender diversity has a significant positive impact on the financial performance of companies with a ownership control percentage of more than 30%.

Erhardt et al. (2003), and Bunea and Dinu (2020) demonstrated that there is a direct significant link between gender diversity and company profitability, respectively, the higher the share of women in the boards of directors of companies, the higher their financial performance. The same result was demonstrated by Fan et al. (2021), following research on some US companies, indicating a significant and positive influence between women holding the position of CEO and the financial performance of these companies under study, the authors appreciated that female CEOs are oriented towards reducing labor costs and

therefore contribute to improving the company's performance. At the same time, Kaur and Singh (2018), studying the performance of Indian companies, appreciated that the gender of the person holding the position of CEO does not have a significant influence on the financial performance of the company.

Regarding the results of research on the performance of food companies in Malaysia, Indonesia and Singapore, they indicate a significant influence of the gender of the person occupying the position of CEO on the financial performance of the companies included in the studied sample, appreciated through the indicators ROA (return on assets), ROE (return on equity) and profitability of sales (ROS), respectively. These results may be affected by the small number of women holding the position of CEO within the companies included in the surveyed sample (Ahmad et al., 2022). At the same time, Robb and Watson (2012) appreciate that both women and men who hold the position of CEO have similar influences on the financial performance of companies. Palvia et al. (2015) demonstrated that female CEOs are more restrained in terms of risk exposure, preferring to select less risky strategies compared to the attitude of men holding CEO positions, a result supported by Khan and Vieito (2013) and Bunea and Dinu (2018), respectively. At the same time, Sun and Zou (2021) demonstrated that the performance of companies listed on the Chinese Stock Exchange is higher in the case of those who register women as CEOs.

Crossland and Hambrick (2011) focused on a nationality as a characteristic of the CEO. It has been demonstrated that certain characteristics of the home country of the person holding the position of CEO, such as selfishness or individualism, reaction to risks and concentration on ownership, can affect the attitude of the individual in the decision-making process and implicitly influence the financial performance of the company. Ioannou and Serafeim (2012), came to the same conclusion, considering that the education and training process existing at the national level in aspects of culture, politics, social, education or even human relationships at a professional level, has an undoubted influence on the performance of companies. Thus, based on the studies in the specialized literature, nationality can have a significant influence on the financial results of a company

using the principles and values of the person holding the position of manager and based on the expertise and knowledge received in his country of origin (education, culture, political influence and labor relations) (Ioannou & Serafeim, 2012; Vătămănescu et al., 2018).

Regarding the education of the person holding the position of CEO, a series of researches have shown that the studies and experience in the financial field help the bank to achieve its objectives in an efficient way, the CEO having a good understanding of the financial issues that banks face (Gupta & Mahakud, 2020; Lusardi & Mitchell, 2007). At the same time, good financial preparation plays an important role in the effective communication of the CEO with potential external investors, in the execution of financial policies and rapid adaptation to financial changes in the business environment (Custódio & Metzger, 2014).

Thus, taking into account the results of the research that can be found in the specialized scientific literature, the authors have formulated the following five research hypotheses:

H1: The CEO age impacts significantly the performance of Romanian banks.

H2: The CEO gender impacts significantly the performance of Romanian banks.

H3: The CEO education impacts significantly the performance of Romanian banks.

H4: The CEO duality impacts significantly the performance of Romanian banks.

H5: The CEO nationality impacts significantly the performance of Romanian banks.

2. Research methodology

The research methodology used to test the objectives formulated is mainly quantitative, based on deductive statistical analysis, to test and identify potential cause and effect links and their significance level through the SPSS software under Windows (descriptives statistics, correlation methods and regression models). Thus, the main objective of this survey is to test the impact of CEO characteristics on the financial performance of banks in the Romanian banking system during 2019–2021. The characteristics of the persons holding the position of CEO within the Romanian banking system were analyzed according to age, gender, nationality, education and duality.

At the end of 2022, 21 banks were operating in the Romanian banking system, all of which were included in the sample under investigation. In order to extract the information necessary for the study, the authors used the data published on the official websites of each bank (financial reports and transparency reports), as well as on the official website of the Romanian Bank of Romania for the end of the financial years 2018, 2019, 2020, 2021 and 2022, respectively.

In order to achieve the research objectives, the authors used the following categories of variables:

i) **Independent variables:** five independent variables were used, namely age, gender, nationality, education and duality of the person holding the CEO position (variables presented in Tab. 1);

Tab. 1: Independent variables

Variable name	Symbol used	Method of determination
Age of CEO	CEOA	Age of the person holding the position of CEO (number of years)
Gender CEO	CEOG	Variable "1" if CEO is male and "0" if CEO is female
Nationality CEO	CEON	Variable "0" if CEO is Romanian and "1" if CEO comes from another country of origin
Education CEO	CEOE	Variable "1" if CEO has financial economic higher education and „0" if CEO has technical higher education (mathematics, computer science)
Duality CEO	CEOD	Variable "1" if CEO also holds the position of CEO and "0" if he only holds the position of CEO

Source: own

Tab. 2: Dependent and control variables

Variable	Symbol used	Method of determination
Dependent variables		
Return on assets	ROA	Net profit/total assets
Return on equity	ROE	Net profit/total equity
Control variables		
Bank size	BS	Logarithm (total bank assets)
Share of liabilities in relation to total assets	BL	Total liabilities/total assets
Share of capital relative to total assets	BC	Total equity/total assets

Source: own

ii) **Dependent variables:** the indicators ROA (return on assets) and ROE (return on equity) were used to measure the financial performance of the banks included in the surveyed sample;

iii) **Control variables:** within the literature, there is a number of variables that can influence the financial results of companies, such as the size of the company, the share of liabilities in relation to the total value of assets and the share of capital in relation to the total value of companies' assets (Liu & Jiang, 2020).

The situation of the dependent and control variables, the symbol used and how to determine them are presented in Tab. 2.

Statistical regression models have been developed through the SPSS software under Windows and are defined as follows.

The first model investigates whether the characteristics of the CEO impact the financial performance of banks measured through the ROA (return on assets) indicator, often used in the literature (Binacci et al., 2016). This model is as follows:

$$ROA = \alpha + \beta_1 CEOA + \beta_2 CEOG + \beta_3 CEON + \beta_4 CEOE + \beta_5 CEOD + \beta_6 BS + \beta_7 BL + \beta_8 BC + \varepsilon \quad (1)$$

The second regression model uses ROE (return on equity) as a dependent variable investigating the influence of CEO characteristics on the ability of banks in the Romanian banking system to generate profits from the invested capital (Saleh et al., 2020), being defined by the following relationship:

$$ROE = \alpha + \beta_1 CEOA + \beta_2 CEOG + \beta_3 CEON + \beta_4 CEOE + \beta_5 CEOD + \beta_6 BS + \beta_7 BL + \beta_8 BC + \varepsilon \quad (2)$$

3. Results and discussion

The descriptive statistics of the sample under investigation are presented in Tab. 3. Thus, the average values of the ROA indicator recorded by the banks within the Romanian banking system are 0.4150, with a minimum value of -4.9395 and a maximum of 2.5950. At the same time, ROE records an average value at the level of the Romanian banks of 3.3069, a minimum value of -26.7060 and a maximum level of 20.00, respectively. Regarding the age of the persons holding the position of CEO, there is an average at the level of the Romanian banking system of 59 years, with a minimum age of 45 years and a maximum age of 73 years, respectively. Regarding gender diversity, it is noted that the average value is 0.90, which means that men who hold the share in terms of occupying the position of CEO at the level of Romanian banks. In terms of nationality, the average value is 0.57, which means that CEOs of Romanian nationality have a slightly higher share compared to CEOs who have another country of origin (of a different nationality). Regarding the education of the persons holding the position of CEO, an average value of 0.76 is observed, which represents the fact that CEOs who have higher economic education hold the share in the Romanian banking system.

Regarding the duality of CEO, the average value is 0.19, so that most of the people holding the position of CEO do not occupy

Tab. 3: Descriptive statistics – CEO characteristics and performance of Romanian banks

Variable	Mean	Std. dev.	Min	Max
ROA	0.415	1.307	-4.940	2.595
ROE	3.307	12.701	-26.706	20.000
CEOA	59.000	8.201	45.000	73.000
CEOG	0.900	0.296	0.000	1.000
CEON	0.570	0.499	0.000	1.000
CEOE	0.760	0.429	0.000	1.000
CEOD	0.190	0.396	0.000	1.000
BS	16.280	1.632	13.150	19.770
BL	88.158	3.797	77.740	93.590
BC	11.842	3.797	6.410	20.260

Note: ROA – return on assets; ROE – return on equity; CEOA – CEO age; CEOG – CEO gender; CEON – CEO nationality; CEOE – CEO education; CEOD – CEO duality; BS – banks size; BL – banks leverage; BC – banks capital.

Source: own

Tab. 4: Correlation matrix ROA (N = 105)

		ROA	CEOA	CEOG	CEON	CEOE	CEOD	BS	BL	BC
Pearson cor.	ROA	1.000	0.189	-0.034	0.618	-0.665	-0.123	0.565	-0.033	0.033
	CEOA	0.189	1.000	0.179	0.154	-0.192	-0.164	-0.137	0.320	-0.320
	CEOG	-0.034	0.179	1.000	0.047	0.200	-0.256	0.198	-0.189	0.189
	CEON	0.618	0.154	0.047	1.000	0.194	0.175	-0.147	-0.390	0.390
	CEOE	-0.665	-0.192	0.200	0.194	1.000	0.271	0.035	-0.192	0.192
	CEOD	-0.123	-0.164	-0.256	0.175	0.271	1.000	-0.527	-0.055	0.055
	BS	0.565	-0.137	0.198	-0.147	0.035	-0.527	1.000	0.046	-0.046
	BL	-0.033	0.320	-0.189	-0.390	-0.192	-0.055	0.046	1.000	-1.000
	BC	0.033	-0.320	0.189	0.390	0.192	0.055	-0.046	-1.000	1.000
Sig.	ROA		0.069	0.396	0.043	0.038	0.168	0.048	0.398	0.398
	CEOA	0.069		0.080	0.114	0.065	0.100	0.142	0.005	0.005
	CEOG	0.396	0.080		0.358	0.058	0.022	0.060	0.069	0.069
	CEON	0.043	0.114	0.358		0.064	0.085	0.126	0.001	0.001
	CEOE	0.038	0.065	0.058	0.064		0.016	0.393	0.066	0.066
	CEOD	0.168	0.100	0.022	0.085	0.016		0.000	0.334	0.334
	BS	0.048	0.142	0.060	0.126	0.393	0.000		0.360	0.360
	BL	0.398	0.005	0.069	0.001	0.066	0.334	0.360		0.000
BC	0.398	0.005	0.069	0.001	0.066	0.334	0.360	0.000		

Note: ROA – return on assets; CEOA – CEO age; CEOG – CEO gender; CEON – CEO nationality; CEOE – CEO education; CEOD – CEO duality; BS – banks size; BL – banks leverage; BC – banks capital.

Source: own

other managerial positions within the banks in the Romanian banking system. The average value of the size of the banks included in the sample, assessed by logging the total assets, is 16.28, with a minimum level of 13.15 and a maximum value of 19.77, respectively. Regarding the share of liabilities in total banking assets, an average level of 88.158 can be observed, a minimum value of 77.740 and a maximum of 95.590 and, last but not least, the share of equity in total assets records an average value of 11.842 with a minimum level of 6.41 and a maximum of 20.26, respectively.

In order to achieve the objectives of the research, the rejection or acceptance of the five hypotheses formulated is based on a series of linear regression analysis results (respectively, the multiple regression model under SPSS or the Backward method). The Backward method is the most often used in practice, starting with

the analysis of all the variables considered in the model, and at each step, the weakest predictor (independent variable) is eliminated. The worst predictor is defined by the least important independent variable, that is, the variable that causes the smallest reduction in Fisher statistics (*F*). The analysis is performed using SPSS software and is described in detail below. The results are found in Tabs. 4–5 (correlation matrix), Tabs. 6–7 (ANOVA results), Tabs. 8–9 (regression coefficients).

In order to test the potential links between the variables included in the research as well as the intensity of these relationships, the authors used the Pearson correlation coefficient and the results obtained are presented in Tab. 4 (ROA) and Tab. 5 (ROE), respectively.

From Tabs. 4–5, it can be seen that the value of the coefficients on the diagonal is equal to 1, each variable being perfectly correlated

Tab. 5: Correlation matrix ROE (N = 105)

		ROE	CEOA	CEOG	CEON	CEOE	CEOD	BS	BL	BC
Pearson cor.	ROE	1.000	0.094	-0.061	0.655	-0.614	-0.099	0.521	-0.054	0.054
	CEOA	0.094	1.000	0.179	0.154	-0.192	-0.164	-0.137	0.320	-0.320
	CEOG	-0.061	0.179	1.000	0.047	0.200	-0.256	0.198	-0.189	0.189
	CEON	0.655	0.154	0.047	1.000	0.194	0.175	-0.147	-0.390	0.390
	CEOE	-0.614	-0.192	0.200	0.194	1.000	0.271	0.035	-0.192	0.192
	CEOD	-0.099	-0.164	-0.256	0.175	0.271	1.000	-0.527	-0.055	0.055
	BS	0.521	-0.137	0.198	-0.147	0.035	-0.527	1.000	0.046	-0.046
	BL	-0.054	0.320	-0.189	-0.390	-0.192	-0.055	0.046	1.000	-1.000
	BC	0.054	-0.320	0.189	0.390	0.192	0.055	-0.046	-1.000	1.000
Sig.	ROE		0.232	0.318	0.013	0.046	0.220	0.005	0.338	0.338
	CEOA	0.232		0.080	0.114	0.065	0.100	0.142	0.005	0.005
	CEOG	0.318	0.080		0.358	0.058	0.022	0.060	0.069	0.069
	CEON	0.013	0.114	0.358		0.064	0.085	0.126	0.001	0.001
	CEOE	0.046	0.065	0.058	0.064		0.016	0.393	0.066	0.066
	CEOD	0.220	0.100	0.022	0.085	0.016		0.000	0.334	0.334
	BS	0.005	0.142	0.060	0.126	0.393	0.000		0.360	0.360
	BL	0.338	0.005	0.069	0.001	0.066	0.334	0.360		0.000
BC	0.338	0.005	0.069	0.001	0.066	0.334	0.360	0.000		

Note: ROE – return on equity; CEOA – CEO age; CEOG – CEO gender; CEON – CEO nationality; CEOE – CEO education; CEOD – CEO duality; BS – banks size; BL – banks leverage; BC – banks capital.

Source: own

with itself. From the analysis of the results in Tabs. 4–5, we found slightly significant links between the dependent variables ROA, ROE and the independent variables bank size (total banking assets), nationality and education of the person holding the position of CEO, the values of Pearson correlation coefficients between 0.521 and 0.655, with Sig. values that are lower than 0.05. Regarding the connection between the financial performance of the banks included in the sample and

the education of the persons holding CEO positions, there are negative values of the Pearson coefficient, respectively -0.665 (ROA) and -0.614 (ROE), which indicates that the banks whose CEOs have technical higher education (mathematics, IT) have higher financial performance than those whose CEOs have economic higher education, without having mathematics/IT studies.

In Tabs. 6–7, the ANOVA results are observed separately for ROA and ROE,

Tab. 6: ANOVA – ROA

	Model	Sum of squares	df	Mean square	F	Sig.
1	Regression	29.003	8	3.625	1.513	0.163 ^b
	Residual	229.996	96	2.396		
	Total	258.999	104			
2	Regression	28.998	7	4.143	1.747	0.107 ^c
	Residual	230.000	97	2.371		
	Total	258.999	104			
3	Regression	28.845	6	4.807	2.047	0.066 ^d
	Residual	230.154	98	2.349		
	Total	258.999	104			
4	Regression	28.744	5	5.749	2.472	0.037 ^e
	Residual	230.255	99	2.326		
	Total	258.999	104			
5	Regression	28.229	4	7.057	3.058	0.020 ^f
	Residual	230.769	100	2.308		
	Total	258.999	104			
6	Regression	26.929	3	8.976	3.907	0.011 ^g
	Residual	232.070	101	2.298		
	Total	258.999	104			
7	Regression	22.252	2	11.126	4.794	0.010 ^h
	Residual	236.746	102	2.321		
	Total	258.999	104			

Note: Dependent variable: ROA; ROA – return on assets; CEOA – CEO age; CEOG – CEO gender; CEON – CEO nationality; CEOE – CEO education; CEOD – CEO duality; BS – banks size; BL – banks leverage; BC – banks capital.

^bPredictors: (constant), BC, BS, CEOE, CEOG, CEON, CEOA, BL; ^cPredictors: (constant), BS, CEOE, CEOG, CEON, CEOA, CEOD, BL; ^dPredictors: (constant), BS, CEOE, CEON, CEOA, BL; ^ePredictors: (constant), BS, CEOE, CEON, CEOA; ^fPredictors: (constant), CEOE, CEON, CEOA; ^gPredictors: (constant), CEOE, CEON; ^hPredictors: (constant), CEOE, CEON.

Source: own

respectively, presenting the results of the analysis of the variance of the dependent variable under the influence of the regression factor and the residual factor, that is, showing information on the sum of the squares of the deviations of the dependent variable, due to the regression model and the residual factor, the degrees of freedom, the estimates of the variances due to the sources of variation, the *F* and Sig. ratio.

From the analysis of Tabs. 6–7 ANOVA in the case of the dependent variable ROA and ROE, respectively, it can be observed that the value of the significance of the *F* statistic is small (Sig. is less than 0.05), corresponding to the model explaining the variation of both

ROA (Sig. 0.032) and ROE (0.002) depending on the size of the bank (the value of the total assets), the education of the CEO and, respectively, the nationality of the person holding the position of CEO. The Sig. values for *F* being lower than 0.05, the linear relationship between the variables ROA, ROE and the size of the bank, the nationality and the education of the CEO is significant, the intensity being higher in the case of ROE, where an extremely low value of the significance of the *F* statistic is observed, respectively 0.002 (for ROA the Sig. value is 0.032).

Regarding the analysis of the regression coefficients, it can be found in Tabs. 8–9

Tab. 7: ANOVA – ROE

	Model	Sum of squares	df	Mean square	<i>F</i>	Sig.
1	Regression	3,615.320	8	451.915	3.234	0.003 ^b
	Residual	13,416.454	96	139.755		
	Total	17,031.774	104			
2	Regression	3,614.349	7	516.336	3.733	0.001 ^c
	Residual	13,417.425	97	138.324		
	Total	17,031.774	104			
3	Regression	3,611.864	6	601.977	4.396	0.001 ^d
	Residual	13,419.910	98	136.938		
	Total	17,031.774	104			
4	Regression	3,600.313	5	720.063	5.307	0.000 ^e
	Residual	13,431.461	99	135.671		
	Total	17,031.774	104			
5	Regression	3,497.045	4	874.261	6.459	0.000 ^f
	Residual	13,534.729	100	135.347		
	Total	17,031.774	104			
6	Regression	3,159.013	3	1,053.004	7.666	0.000 ^g
	Residual	13,872.761	101	137.354		
	Total	17,031.774	104			

Note: Dependent variable: ROE; ROE – return on equity; CEOA – CEO age; CEOG – CEO gender; CEON – CEO nationality; CEOE – CEO education; CEOD – CEO duality; BS – banks size; BL – banks leverage; BC – banks capital.

^bPredictors: (constant), BC, BS, CEOE, CEOG, CEON, CEOA, CEOD, BL; ^cPredictors: (constant), BC, BS, CEOE, CEON, CEOA, CEOD, BL; ^dPredictors: (constant), BS, CEOE, CEON, CEOA, CEOD, BL; ^ePredictors: (constant), BS, CEOE, CEON, CEOA, CEOD; ^fPredictors: (constant), BS, CEOE, CEON, CEOD; ^gPredictors: (constant), BS, CEOE, CEON.

Source: own

Tab. 8: Correlation coefficients – ROA – Part 1

Model		Unstandardized coefficients		Standardized coefficients	t	Sig.
		B	Std. error	Beta		
1	(Constant)	-3.722	4.571		-0.814	0.418
	CEOA	0.025	0.023	0.130	1.094	0.277
	CEOS	0.143	0.593	0.027	0.241	0.810
	CEON	0.833	0.343	0.263	2.429	0.017
	CEOE	-0.607	0.406	-0.165	-1.494	0.138
	CEOD	0.129	0.515	0.032	0.251	0.802
	BS	0.079	0.119	0.082	0.669	0.505
	BL	0.014	0.037	0.058	0.375	0.708
	BC	0.002	0.050	0.007	0.042	0.967
2	(Constant)	-3.579	3.044		-1.176	0.243
	CEOA	0.025	0.022	0.128	1.141	0.257
	CEOS	0.147	0.579	0.028	0.255	0.800
	CEON	0.835	0.337	0.263	2.482	0.015
	CEOE	-0.608	0.403	-0.165	-1.507	0.135
	CEOD	0.131	0.512	0.033	0.255	0.799
	BS	0.079	0.117	0.081	0.672	0.503
	BL	0.013	0.026	0.054	0.494	0.622
3	(Constant)	-3.465	2.996		-1.156	0.250
	CEOA	0.026	0.021	0.136	1.257	0.212
	CEON	0.831	0.335	0.262	2.485	0.015
	CEOE	-0.579	0.385	-0.157	-1.504	0.136
	CEOD	0.103	0.498	0.026	0.207	0.836
	BS	0.082	0.116	0.084	0.700	0.486
	BL	0.011	0.025	0.048	0.453	0.652
4	(Constant)	-3.206	2.711		-1.183	0.240
	CEOA	0.025	0.020	0.130	1.251	0.214
	CEON	0.839	0.331	0.264	2.537	0.013
	CEOE	-0.556	0.367	-0.151	-1.515	0.133
	BS	0.067	0.094	0.069	0.718	0.475
	BL	0.012	0.025	0.049	0.470	0.639

Tab. 8: Correlation coefficients – ROA – Part 2

Model		Unstandardized coefficients		Standardized coefficients	t	Sig.
		B	Std. error	Beta		
5	(Constant)	-2.359	2.017		-1.169	0.245
	CEOA	0.028	0.019	0.146	1.482	0.142
	CEON	0.792	0.314	0.250	2.520	0.013
	CEOE	-0.566	0.365	-0.153	-1.551	0.124
	BS	0.070	0.093	0.072	0.751	0.455
6	(Constant)	-1.137	1.189		-0.956	0.341
	CEOA	0.027	0.019	0.140	1.427	0.157
	CEON	0.761	0.311	0.240	2.447	0.016
	CEOE	-0.554	0.364	-0.150	-1.524	0.131
7	(Constant)	0.494	0.328		1.505	0.135
	CEON	0.849	0.306	0.267	2.771	0.007
	CEOE	-0.673	0.356	-0.183	-1.892	0.061

Note: Dependent variable: ROA; ROA – return on assets; CEOA – CEO age; CEOG – CEO gender; CEON – CEO nationality; CEOE – CEO education; CEOD – CEO duality; BS – banks size; BL – banks leverage; BC – banks capital.

Source: own

(regression coefficients – ROA, and respectively regression coefficients – ROE), presenting the non-standardized coefficients of the estimated regression model, their standard errors, the standardized regression coefficients with the corresponding standard errors, as well as the values of the test *t* statistic and the corresponding Sig. values. Standardized regression coefficients are used when several independent variables expressed in different units of measurement enter a model in order to facilitate their comparison.

From the analysis of the information presented in Tabs. 7–8, both in the case of the dependent variable ROA and ROE, the Sig. values are less than 0.05, which indicates the existence of significant links between the variables ROA, ROE, and the independent variables nationality, CEO education and the size of the bank (total value of banking assets).

The results of testing hypothesis *H1* indicate that there is no significant link between the age of the person holding the position of CEO and the financial performance of the banks within the banking system in Romania. The same

result is found in the specialized literature, in the studies of Liu and Jiang (2020), which demonstrated that the age of the CEO has no influence on the financial performance of Chinese public firms. Also, Ahmad et al. (2022) appreciated, in their research, that the performance of companies in Malaysia, Indonesia and Singapore is not affected by the age of the person holding the position of CEO within these companies. At the same time, Zhang et al. (2016), following a study on US companies, concluded that the CEO's age negatively influences the company's performance, estimating that the market value of companies decreases with the increase of the CEO's age. Different results were obtained in their studies by Kuo et al. (2015), who demonstrated that the age of the CEO has a significant positive impact on the financial performance of companies.

The hypothesis *H2* was not accepted. The values of the tested coefficients indicated the lack of a significant influence of the gender diversity of the person holding the position of CEO on the performance of the banks operating within the banking system in Romania.

Tab. 9: Correlation coefficients – ROE – Part 1

Model		Unstandardized coefficients		Standardized coefficients	t	Sig.
		B	Std. error	Beta		
1	(Constant)	-66.218	34.911		-1.897	0.061
	CEOA	0.117	0.175	0.075	0.671	0.504
	CEOS	0.377	4.528	0.009	0.083	0.934
	CEON	6.009	2.619	0.233	2.294	0.024
	CEOE	-9.039	3.103	-0.302	-2.913	0.004
	CEOD	6.556	3.937	0.202	1.665	0.099
	BS	3.500	0.906	0.443	3.861	0.000
	BL	0.084	0.284	0.043	0.295	0.768
	BC	0.044	0.380	0.018	0.115	0.909
2	(Constant)	-66.350	34.697		-1.912	0.059
	CEOA	0.122	0.166	0.078	0.734	0.465
	CEON	5.992	2.597	0.233	2.307	0.023
	CEOE	-8.963	2.952	0.300	-3.036	0.003
	CEOD	6.485	3.822	0.200	1.697	0.093
	BS	3.507	0.897	0.444	3.911	0.000
	BL	0.084	0.283	0.043	0.296	0.768
	BC	0.050	0.371	0.020	0.134	0.894
3	(Constant)	-62.867	22.878		-2.748	0.007
	CEOA	0.116	0.159	0.074	0.728	0.469
	CEON	6.044	2.554	0.235	2.366	0.020
	CEOE	-8.966	2.937	-0.300	-3.052	0.003
	CEOD	6.494	3.802	0.200	1.708	0.091
	BS	3.498	0.889	0.443	3.933	0.000
	BL	0.056	0.193	0.029	0.290	0.772
4	(Constant)	-59.054	18.650		-3.166	0.002
	CEOA	0.131	0.150	0.084	0.872	0.385
	CEON	5.819	2.422	0.226	2.402	0.018
	CEOE	-9.029	2.916	-0.302	-3.097	0.003
	CEOD	6.571	3.775	0.203	1.740	0.085
	BS	3.521	0.882	0.446	3.994	0.000

Tab. 9: Correlation coefficients – ROE – Part 2

Model		Unstandardized coefficients		Standardized coefficients	t	Sig.
		B	Std. error	Beta		
5	(Constant)	-48.584	14.259		-3.407	0.001
	CEON	6.245	2.370	0.243	2.635	0.010
	CEOE	-9.391	2.883	-0.314	-3.258	0.002
	CEOD	5.789	3.663	0.178	1.580	0.117
	BS	3.363	0.862	0.426	3.903	0.000
6	(Constant)	-36.274	12.031		-3.015	0.003
	CEON	6.438	2.384	0.250	2.700	0.008
	CEOE	-7.894	2.742	-0.264	-2.878	0.005
	BS	2.598	0.718	0.329	3.618	0.000

Note: Dependent variable: ROE; ROE – return on equity; CEOA – CEO age; CEOG – CEO gender; CEON – CEO nationality; CEOE – CEO education; CEOD – CEO duality; BS – banks size; BL – banks leverage; BC – banks capital.

Source: own

Similarly, Kaur and Singh (2018) demonstrated in the study of a sample of Indian companies that the gender of the CEO does not have a significant impact on the performance of research firms. At the same time, Ahmad et al. (2022) came to the same conclusions in their study of companies in Malaysia, Indonesia and Singapore, considering that the gender diversity of the CEO does not have a significant influence on the performance of companies measured through the ROA (return on assets) and ROE (return on equity) indicators. Ullah et al. (2020) demonstrated that female CEOs can significantly influence the financial performance of firms listed on the Pakistan Stock Exchange.

Testing hypothesis *H3* resulted in the identification of a significant relationship between the studies of the persons holding the position of CEO and the performances of the banks within the banking system in Romania, respectively. The financial performances are higher in the case of banks that have CEO persons with higher education (e.g., in mathematics or IT) compared to those in which the CEO has economic studies. Similar results were identified by Sanda et al. (2005), who demonstrated in the research conducted on a sample of US companies that the business experience of CEOs has an extremely important

role in the performance of the company and that superior performance is recorded by companies whose CEOs have both technical and management experience.

The results of hypothesis *H4* testing indicated that there is no significant relationship between the performance of the Romanian banks and the duality of the CEO, and this research hypothesis is not accepted. This result is found in the specialized literature in the research of the authors Vintila et al. (2015), who demonstrated that the CEO's duality does not significantly influence the performance of the companies listed on the Bucharest Stock Exchange. At the same time, studying a sample of Taiwanese companies, Hsu et al. (2021) appreciated that there is a significant negative relationship between the duality of the CEO and the performance of the companies. Dogan et al. (2013) examined a sample that included companies listed on the Istanbul Stock Exchange (Turkey) and concluded that there is a negative correlation between the performance of the company (appreciated through the ROA and ROE indicators) and the duality of the CEO.

H5 hypothesis testing demonstrated the existence of a significant relationship between the nationality of the person holding the position

of CEO at the level of the banks in the Romanian banking system and their financial performance, namely the fact that the financial results of the banks whose CEOs are not of Romanian nationality are higher than those in which the persons holding the position of CEO are Romanians. The same result was obtained by Sanda et al. (2005), who demonstrated that, following the research conducted on a sample of companies in the United States, the fact that the financial performance of companies whose CEO is resident in the United States is lower compared to those whose CEOs are not residents in the United States.

Conclusions

The objective of this research is to assess the impact of the CEO's characteristics on the financial performance of banks operating in the Romanian banking system during the 2018–2022 period. In this study, the financial performance of banks is assessed through the ROA (return on assets) and ROE (return on equity) indicators, and the CEO characteristics studied were age, gender, nationality, education and duality. The sample under investigation included all 21 banks in Romania, and in order to extract the information necessary for the study, the authors used the data published on the official websites of each bank (financial reports and transparency reports), as well as on the official website of the Romanian Bank of Romania for the end of the financial years 2018, 2019, 2020, 2021 and 2022, respectively.

The results of the research indicate that the financial performance of the Romanian banks, measured by the ROA and ROE indicators, is influenced by the nationality and education of the persons holding the position of CEO, but also by the size of the banks, appreciated by the value of their total banking assets. A series of similar results have been identified in the literature, confirming the previous results and expanding, at the same time, the previous research in the literature, focusing on the performance of the Romanian banking sector in the 2018–2022 period.

However, the study presents a number of limits generated primarily by the limited number of banks operating within the Romanian banking system, which have been decreasing numerically more and more in recent years, Romania being one of the most active markets in the Central and Eastern European

region in the field of mergers and acquisitions in the banking system. Despite these limitations, we appreciate that this study represents a challenge for new future research in the Romanian or European banking sector, by extending the research over a longer period of time or including a greater number of financial indicators or new characteristics of the persons holding CEO positions or who are part of the boards of directors. Thus, this research can be an important source of reflection and information for both researchers and practitioners in the field.

References

- Ahmad, G. N., Prasetyo, M. R. P., Buchdadi, A. D., Suherman, Widyastuti, U., & Kurniawati, H. (2022). The effect of CEO characteristics on firm performance of food and beverage companies in Indonesia, Malaysia and Singapore. *Quality – Access to Success*, 23(186), 111–122. <https://doi.org/10.47750/qas/23.186.15>
- Ahmadi, A., Nakaa, N., & Bourri, A. (2018). Chief executive officer attributes, board structures, gender diversity and firm performance among French CAC 40 listed firms. *Research in International Business and Finance*, 44, 218–226. <https://doi.org/10.1016/j.ribaf.2017.07.083>
- Alazzani, A., Hassanein, A., & Aljanadi, Y. (2017). Impact of gender diversity on social and environmental performance: Evidence from Malaysia. *Corporate Governance: The International Journal of Business in Society*, 17(2), 266–283. <https://doi.org/10.1108/cg-12-2015-0161>
- Ali, R., Rehman, R. U., Suleman, S., & Nattim, C. G. (2022). CEO attributes, investment decisions, and firm performance: New insights from upper echelons theory. *Managerial and Decision Economics*, 43(2), 398–417. <https://doi.org/10.1002/mde.3389>
- Almășan, A., Circa, C., Dumitru, M., Gușe, R. G., & Mangiuc, D. M. (2019). Effects of integrated reporting on corporate disclosure practices regarding the capitals and performance. *Amfiteatru Economic*, 21(52), 572–589. <https://doi.org/10.24818/ea/2019/52/572>
- Assenga, M. P., Aly, D., & Hussainey, K. (2018). The impact of board characteristics on the financial performance of Tanzanian firms. *Corporate Governance: The International Journal of Business in Society*, 18(6), 1089–1106. <https://doi.org/10.1108/CG-09-2016-0174>
- Azam, M., Khalid, M. U., & Zia, S. Z. (2019). Board diversity and corporate social responsibility: The moderating role of Shariah compliance.

- Corporate Governance: The International Journal of Business in Society*, 19(6), 1274–1288. <https://doi.org/10.1108/CG-01-2019-0022>
- Belascu, L., Dumitrescu, D. G., Smedoiu Popoviciu, A., & Horobet, A. (2021). What drives profitability in the Romanian ICT sector? *Amfiteatru Economic*, 23(S15), 899–913. <https://doi.org/10.24818/ea/2021/s15/899>
- Bertrand, M., & Schoar, A. (2003). Managing with style: The effect of managers on firm policies. *The Quarterly Journal of Economics*, 118(4), 1169–1208. <https://doi.org/10.1162/003355303322552775>
- Binacci, M., Peruffo, E., Oriani, R., & Minichilli, A. (2016). Are all non-family managers (NFM) equal? The impact of NFM characteristics and diversity on family firm performance. *Corporate Governance: An International Review*, 24(6), 569–583. <https://doi.org/10.1111/corg.12130>
- Bjuggren, P., Nordström, L., & Palmberg, J. (2018). Are female leaders more efficient in family firms than in non-family firms? *Corporate Governance: The International Journal of Business in Society*, 18(2), 185–205. <https://doi.org/10.1108/CG-01-2017-0017>
- Boone, C., Lokshin, B., Guenter, H., & Belderbos, R. (2019). Top management team nationality diversity, corporate entrepreneurship, and innovation in multinational firms. *Strategic Management Journal*, 40(2), 277–302. <https://doi.org/10.1002/smj.2976>
- Borio, C. (2020). The Covid-19 economic crisis: Dangerously unique. *Business Economics*, 55(4), 181–190. <https://doi.org/10.1057/s11369-020-00184-2>
- Brahma, S., Nwafor, C., & Boateng, A. (2021). Board gender diversity and firm performance: The UK evidence. *International Journal of Finance & Economics*, 26(4), 5704–5719. <https://doi.org/10.1002/ijfe.2089>
- Brickley, J. A., Coles, L. J., & Jarrell, G. (1997). Leadership structure: Separating the CEO and chairman of the board. *Journal of Corporate Finance*, 3(3), 189–220. [https://doi.org/10.1016/S0929-1199\(96\)00013-2](https://doi.org/10.1016/S0929-1199(96)00013-2)
- Bunea, M., & Dinu, V. (2020). The relationship between the boards characteristics and the risk management of the Romanian banking sector. *Journal of Business Economics and Management*, 21(5), 1248–1268. <https://doi.org/10.3846/jbem.2020.12694>
- Carter, D. A., Simkins, B. J., & Simpson, W. G. (2003). Corporate governance, board diversity, and firm value. *The Financial Review*, 38(1), 33–53. <https://doi.org/10.1111/1540-6288.00034>
- Crossland, C., & Hambrick, D. C. (2011). Differences in managerial discretion across countries: How nation-level institutions affect the degree to which CEOs matter. *Strategic Management Journal*, 32(8), 797–819. <https://doi.org/10.1002/smj.913>
- Custódio, C., & Metzger, D. (2014). Financial expert CEOs: CEO's work experience and firm's financial policies. *Journal of Financial Economics*, 114(1), 125–154. <https://doi.org/10.1016/j.jfineco.2014.06.002>
- Darmadi, S. (2013). Do women in top management affect firm performance? Evidence from Indonesia. *Corporate Governance: The International Journal of Business in Society*, 13(3), 288–304. <https://doi.org/10.1108/CG-12-2010-0096>
- Dinu, V., & Bunea, M. (2018). The impact of the gender diversity on the Romanian banking system performance. *Transformations in Business & Economics*, 17(2), 42–59.
- Doğan, M., Elitas, B. L., Agca, V., & Ögel, S. (2013). The impact of CEO duality on firm performance: Evidence from Turkey. *International Journal of Business and Social Science*, 4(2), 149–155.
- Duru, A., Iyengar, R. J., & Zampelli, E. M. (2016). The dynamic relationship between CEO duality and firm performance: The moderating role of board independence. *Journal of Business Research*, 69(10), 4269–4277. <https://doi.org/10.1016/j.jbusres.2016.04.001>
- Elsharkawy, M., Paterson, A. S., & Sherif, M. (2018). Now you see me: Diversity, CEO education, and bank performance in the UK. *Investment Management and Financial Innovations*, 15(1), 277–291. <https://doi.org/10.21511/imfi.13>
- Erhardt, N. L., Werbel, J. D., & Shrader, C. B. (2003). Board of director diversity and firm financial performance. *Corporate Governance*, 11(2), 102–111. <https://doi.org/10.1111/1467-8683.00011>
- Fan, X., Li, S., & Villatoro, N. (2021). CEO gender and corporate labor cost. *Review of Financial Economics*, 39(3), 360–380. <https://doi.org/10.1002/rfe.1141>
- Fernandez-Temprano, M. A., & Tejerina-Gaité, F. (2020). Types of director, board diversity and firm performance. *Corporate Governance: The International Journal of Business in Society*, 20(2), 324–342. <https://doi.org/10.1108/CG-03-2019-0096>

Garcia-Blandon, J., Argilés-Bosch, J. M., & Ravenda, D. (2019). Exploring the relationship between CEO characteristics and performance. *Journal of Business Economics and Management*, 20(6), 1064–1082. <https://doi.org/10.3846/jbem.2019.10447>

Gillan, S. L. (2006). Recent developments in corporate governance: An overview. *Journal of Corporate Finance*, 12(3), 381–402. <https://doi.org/10.1016/j.jcorpfin.2005.11.002>

Gottesman, A. A., & Morey, M. R. (2010). CEO educational background and firm financial performance. *Journal of Applied Finance*, 20(2).

Groening, C. (2019). When do investors value board gender diversity? *Corporate Governance: The International Journal of Business in Society*, 19(1), 60–79. <https://doi.org/10.1108/CG-01-2018-0012>

Gupta, N., & Mahakud, J. (2020). CEO characteristics and bank performance: Evidence from India. *Managerial Auditing Journal*, 35(8), 1057–1093. <https://doi.org/10.1108/MAJ-03-2019-2224>

Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: The organization as a reflection of its top managers. *The Academy of Management Review*, 9(2), 193–206. <https://doi.org/10.5465/amr.1984.4277628>

Hambrick, D. C., & Quigley, T. J. (2014). Toward more accurate contextualization of the CEO effect on firm performance. *Strategic Management Journal*, 35(4), 473. <https://doi.org/10.1002/smj.2108>

Hosmer, L. T. (1982). The importance of strategic leadership. *Journal of Business Strategy*, 3(2), 47. <https://doi.org/10.1108/eb038966>

Hsu, S., Lin, S. W., Chen, W. P., & Huang, J. W. (2021). CEO duality, information costs, and firm performance. *The North American Journal of Economics and Finance*, 55, 101011. <https://doi.org/10.1016/j.najef.2019.101011>

Ioannou, I., & Serafeim, G. (2012). What drives corporate social performance? The role of nation-level institutions. *Journal of International Business Studies*, 43(9), 834–864. <https://doi.org/10.1057/jibs.2012.26>

Ionașcu, I., Ionașcu, M., Nechita, E., Săcărin, M., & Minu, M. (2022). Digital transformation, financial performance and sustainability: Evidence for European Union listed companies. *Amfiteatru Economic*, 24(59), 94–109. <https://doi.org/10.24818/EA/2022/59/94>

Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers.

The American Economic Review, 76(2), 323–329.

Jensen, M. C. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *The Journal of Finance*, 48(3), 831–880. <https://doi.org/10.1111/j.1540-6261.1993.tb04022.x>

Jensen, M. C., & Meckling, W. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.

Johan, S., & Sari, W. R. (2020). The influence of CEO characteristic on banking performance. In *Proceedings of the International Conference on Management, Accounting, and Economy (ICMAE 2020)* (Vol. 151, pp. 27–30). <https://doi.org/10.2991/aebmr.k.200915.007>

Kanakriyah, R. (2021). The impact of board of directors' characteristics on firm performance: A case study in Jordan. *The Journal of Asian Finance, Economics and Business*, 8(3), 341–350. <https://doi.org/10.13106/jafeb.2021.vol8.no3.0341>

Kaur, R., & Singh, B. (2018). CEOs' characteristics and firm performance: A study of Indian firms. *Indian Journal of Corporate Governance*, 11(2), 185–200. <https://doi.org/10.1177/0974686218806714>

Khan, W. A., & Vieito, J. P. (2013). CEO gender and firm performance. *Journal of Economics and Business*, 67, 55–66. <https://doi.org/10.1016/j.jeconbus.2013.01.003>

Kuo, H. C., Wang, L. H., & Lin, D. (2015). CEO traits, corporate performance, and financial leverage. *International Journal of Economics and Finance*, 7(1), 68–86. <https://doi.org/10.5539/ijef.v7n1p68>

Liang, Q., Xu, P., & Jiraporn, P. (2013). Board characteristic and Chinese bank performance. *Journal of Banking & Finance*, 37(8), 2953–2968. <https://doi.org/10.1016/j.jbankfin.2013.04.018>

Liu, C., & Jiang, H. (2020). Impact of CEO characteristics on firm performance: Evidence from China listed firms. *Applied Economics Letters*, 27(14), 1–5. <https://doi.org/10.1080/13504851.2019.1607965>

Lusardi, A., & Mitchell, O. (2007). Financial literacy and retirement preparedness: Evidence and implications for financial education. *Business Economics*, 42(1), 35–44. <https://doi.org/10.2145/20070104>

Mintzberg, H. (2004). *Managers not MBAs. A hard look at the soft practice of managing*

and management development. Berrett-Koehler Publishers.

Naseem, M. A., Lin, J., Rehman, R., Ahmad, M. I., & Ali, R. (2020). Does capital structure mediate the link between CEO characteristics and firm performance? *Management Decision*, 58(1), 164–181. <https://doi.org/10.1108/MD-05-2018-0594>

Nguyen, P., Rahman, N., & Zhao, R. (2018). CEO characteristics and firm valuation: A quantile regression analysis. *Journal of Management & Governance*, 22(1), 133–151. <https://doi.org/10.1007/s10997-017-9383-7>

Nițescu, D. C., & Murgu, V. (2022). Factors supporting the transition to a “green” European economy and funding mechanisms. *Amfiteatru Economic*, 24(61), 630–647. <https://doi.org/10.24818/EA/2022/61/630>

Palvia, A., Vahamaa, E., & Vahamaa, S. (2015). Are female CEOs and chairwomen more conservative and risk-averse? Evidence from the banking industry during the financial crisis. *Journal of Business Ethics*, 131(3), 577–594. <https://doi.org/10.1007/s10551-014-2288-3>

Peng, M. W., Li, Y., Xie, E., & Zhongfeng, S. (2010). CEO duality, organizational slack, and firm performance in China. *Asia Pacific Journal of Management*, 27(4), 611–624. <https://doi.org/10.1007/s10490-009-9161-4>

Petcu, M. A., Dinu, E. M., Cișmașu, I. D., & Popescu Predulescu, R. A. (2023). The analysis of the impact of energy and environmental policies of the European Union on the economic performance of companies. Case study in the transport sector. *Amfiteatru Economic*, 25(63), 362–379. <https://doi.org/10.24818/EA/2023/63/362>

Pham, N. H. (2023). CEO characteristics and bank performance: Case of Vietnamese commercial banks. *Cogent Economics & Finance*, 11(1), 2162687. <https://doi.org/10.1080/23322039.2022.2162687>

Proenca, C., Augusto, M., & Murteira, J. (2020). Political connections and banking performance: The moderating effect of gender diversity. *Corporate Governance: The International Journal of Business in Society*, 20(6), 1001–1028. <https://doi.org/10.1108/CG-01-2020-0018>

Pucheta-Martinez, M. C., & Gallego-Alvarez, I. (2020). Do board characteristics drive firm performance? An international perspective. *Review of Managerial Science*, 14(6), 1251–1297. <https://doi.org/10.1007/s11846-019-00330-x>

Rechner, P. L., & Dalton, D. R. (1991). CEO duality and organizational performance:

A longitudinal analysis. *Strategic Management Journal*, 12(2), 155–160. <https://doi.org/10.1002/smj.4250120206>

Robb, A. M., & Watson, J. (2012). Gender differences in firm performance: Evidence from new ventures in the United States. *Journal of Business Venturing*, 27(5), 544–558. <https://doi.org/10.1016/j.jbusvent.2011.10.002>

Saidu, S. (2019). CEO characteristics and firm performance: Focus on origin, education and ownership. *Journal of Global Entrepreneurship Research*, 9(1), 1–15. <https://doi.org/10.1186/s40497-019-0153-7>

Saleh, M. M., Salem, K. F. M., & Elabd, A. B. (2020). Definition of selection criterion using correlation and path coefficient analysis in rice (*Oryza sativa* L.) genotypes. *Bulletin of the National Research Centre*, 44(143). <https://doi.org/10.1186/s42269-020-00403-y>

Sanda, A. U., Mikailu, A. S., & Garba, T. (2005). *Corporate governance mechanisms and firm financial performance in Nigeria* (AERC Research Paper 149). African Economic Research Consortium.

Serfling, M. A. (2014). CEO age and the riskiness of corporate policies. *Journal of Corporate Finance*, 25, 251–273. <https://doi.org/10.1016/j.jcorpfin.2013.12.013>

Sheikh, N. A., & Wang, Z. (2012). Effects of corporate governance on capital structure: Empirical evidence from Pakistan. *Corporate Governance: The International Journal of Business in Society*, 12(5), 629–641. <https://doi.org/10.1108/14720701211275569>

Solakoglu, M. N., & Demir, N. (2016). The role of firm characteristics on the relationship between gender diversity and firm performance. *Management Decision*, 54(6), 1407–1419. <https://doi.org/10.1108/MD-02-2015-0075>

Sun, R., & Zou, G. (2021). Political connection, CEO gender, and firm performance. *Journal of Corporate Finance*, 71, 101918. <https://doi.org/10.1016/j.jcorpfin.2021.101918>

Ujunwa, A. (2012). Board characteristics and the financial performance of Nigerian quoted firms. *Corporate Governance: The International Journal of Business in Society*, 12(5), 656–674. <https://doi.org/10.1108/14720701211275587>

Ullah, I., Fang, H., & Jebran, K. (2020). Do gender diversity and CEO gender enhance firm's value? Evidence from an emerging economy. *Corporate Governance: The International Journal of Business in Society*, 20(1), 44–66. <https://doi.org/10.1108/CG-03-2019-0085>

Vairavan, A., & Zhang, G. P. (2020). Does a diverse board matter? A mediation analysis of board racial diversity and firm performance. *Corporate Governance: The International Journal of Business in Society*, 20(7), 1223–1241. <https://doi.org/10.1108/CG-02-2020-0081>

Valls, M. C., & Rambaud, S. (2019). Women on corporate boards and firm's financial performance. *Women's Studies International Forum*, 76, 102251. <https://doi.org/10.1016/j.wsif.2019.102251>

Vătămănescu, E.-M., Alexandru, V.-A., Cristea, G., Radu, L., & Chirica, O. (2018). A demand-side perspective of bioeconomy: The influence of online intellectual capital on consumption. *Amfiteatru Economic*, 20(49), 536–552. <https://doi.org/10.24818/EA/2018/49/536>

Vintila, G., Onofrei, M., & Gherghina, S. C. (2015). The effects of corporate board and CEO characteristics on firm value: Empirical evidence from listed companies on the Bucharest Stock Exchange. *Emerging Markets Finance and Trade*, 51(6), 1244–1260. <https://doi.org/10.1080/1540496X.2015.1073518>

Wagana, D. M., & Nzulwa, J. D. (2016). Corporate governance, board gender diversity and corporate performance: A critical review of literature. *European Scientific Journal*, 12(7), 221–233. <https://doi.org/10.19044/esj.2016.v12n7p221>

Zhang, X., Tang, G., & Lin, Z. (2016). Managerial power, agency cost and executive compensation – An empirical study from China. *Chinese Management Studies*, 10(1), 119–137. <https://doi.org/10.1108/CMS-11-2015-0262>