
Challenging the glass cliff: a survival analysis of board member tenure in the Polish capital market

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Abstract

Purpose – The article investigates the role of women in the corporate governance system within the Polish capital market, with a particular focus on the glass cliff phenomenon. Glass cliff theory posits that women are more likely to depart from corporate boards of companies experiencing changes in financial standing.

Design/methodology/approach – Using survival analysis, we analyzed a sample of 355 companies listed on the Warsaw Stock Exchange, encompassing 11,223 observations of management and supervisory board members.

Findings – The findings revealed no significant differences in board tenure or the risk of leaving corporate boards between men and women. Notably, the results suggest that women are less influenced by a company's financial condition when deciding to leave or remain on the board, potentially indicating gender-based differences in risk attitudes. Specifically, the financial condition of a company has a lower impact on women's hazard of board departure than men, challenging the glass cliff theory. Moreover, the study highlights the importance of other factors, such as regulatory frameworks, company size and owner type, which may affect board tenure duration.

Originality/value – The research provides empirical evidence on the factors that influence the tenure of corporate board members in two-tier corporate governance structures. It also demonstrates the potential gender-based differences in risk perception.

Keywords Glass cliff, Women on boards, Tenure, Two-tier model, Financial standing

Paper type Research article

Introduction

The problem of low representation of female directors is present in both public debate and the literature (Ciappei, Liberatore, & Manetti, 2023). Women's appointment to management positions attracts the attention of researchers and institutions promoting gender balance in top positions. Some phenomena explain the presence of women in management positions. For example, the glass ceiling illustrates the social barrier that prevents women from being appointed to management positions (Taparia & Lenka, 2022). Thus, it serves to explain the low presence of female directors (Aluchna, Honig, & Kamiński, 2023).

Apart from the glass ceiling, which shows the obstacles for female leaders, there is another phenomenon called the glass cliff (Ryan & Haslam, 2007; Velte, 2018; Morgenroth, Kirby, Ryan, & Sudkämper, 2020; Cao, Tahir, Rizvi, & Khan, 2024; Poma & Pistoresi, 2024). It explains under which circumstances companies are more likely to diversify their boards in terms of gender. According to the glass cliff theory, financial distress, risky situations, and decreasing performance increase the willingness to appoint women for leadership positions (e.g. Ryan & Haslam, 2007). It means that risky situations create new opportunities for women

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to take leadership positions, but also that organizations hire female directors in more risky positions. Literature confirms the glass cliff phenomenon for female CEO appointments for American companies (Cook & Glass, 2014; Elsaid & Ursel, 2018; Bonner, Hyde, & Faile, 2023; Reinwald, Zaia, & Kunze, 2023). Signaling theory explains the existence of the glass cliff. The appointment of female leaders by companies facing poor performance signals a change to the stakeholders (Ryan & Haslam, 2007; Kulich, Gartzia, Komarraju, & Aelenei, 2021; Reinwald *et al.*, 2023). Another explanation for the glass cliff is psychological factors, which clarify why risk-averse women accept precarious leadership positions. This female propensity to take risky positions is called the glass cliff paradox (Darouei & Pluut, 2018).

The glass cliff phenomenon also serves to explain the reasons for the earlier exit of female directors and their shorter tenure (Elsaid & Ursel, 2018). The concept posits that if female directors are appointed in precarious situations and financial losses, their risk of removal is greater than for their male counterparts. Becker-Blease, Elkinawy, Hoag, and Stater (2016) confirmed this assumption for US companies and Saeed and Riaz (2023) for Chinese companies.

To break the glass ceiling and overcome gender bias, both international and domestic institutions take some initiatives. For many years, soft regulations, such as corporate governance codes, served to promote gender diversity on boards in European Union (EU) countries. They are based on the “comply or explain” approach, which means that the company can decide if the selected rule or principle is applied. However, other countries (e.g. France, Germany, Italy, and Belgium) implemented hard regulations that require some companies to appoint women to governing bodies and thus achieve the expected level of gender diversity. Nevertheless, scholars still observed the inequality between women and men in leadership positions in many EU countries.

We aimed to investigate the glass cliff phenomenon within the Polish capital market, specifically examining whether financial standing affects the risk of departure for female board members. The central research question addresses the differences in how a company’s financial condition impacts the decision to leave the board for women compared to men and how these findings relate to the glass cliff theory. This research offers a deeper understanding of the challenges women face in attaining top positions within corporate governance structures, no matter their qualifications. This understanding may help identify factors that increase the likelihood of women exiting management and supervisory boards, particularly during periods of financial difficulty. The insights gained from this study could be instrumental in developing strategies to support women in advancing to and remaining in top-level positions. Moreover, the findings may contribute to the promotion of gender equality and the creation of a more inclusive working environment.

We derived the motivation to conduct this research from two reasons. First, the context of Poland is noteworthy due to the low representation of women in governing bodies, including both management and supervisory boards (Olszewska-Miszuris, Golec, Włodarczyk, & Opolska, 2021). To facilitate the appointment of women to top management positions, the authorities adopted Directive (EU) 2022/2381 of the European Parliament and of the Council of 23 November 2022 on improving the gender balance among directors of listed companies and related measures. Following that, all EU countries must implement the gender quotas into their domestic regulations before 28 December 2024. However, Poland is still using soft law through corporate governance codes. According to the last regulation – Best Practice for GPW Listed Companies 2021 (GPW, 2021) – women must account for 30% of both management and supervisory boards. Despite this, there are no sanctions if an organization does not achieve this level of gender diversity. However, Sosnowski and Wawryszuk-Misztal (2023) showed that despite companies’ attitudes toward board gender diversity in Poland gradually changing, there is still a shortage of women in leadership positions. This suggests a persistent gender bias toward women in leadership positions. Thus, it is interesting to explore whether the institutional environment that promotes the appointment of women to leadership positions affects the evaluation of their performance and, thus, their tenure.

Second, existing research on the glass cliff phenomenon is very limited, especially for two-tier board structures that comprise the management and supervisory boards. Extant studies for Polish directors usually analyze CEO tenure or turnover (Bohdanowicz, 2019; Byrka-Kita, Czerwiński, Ferris, Preś-Perepeczo, & Wiśniewski, 2020), whereas this research includes the tenure of all governing bodies.

Using survival analysis on a sample of 355 Polish stock companies and 11,223 observations of corporate board members, we found no evidence to support the glass cliff phenomenon. The analysis revealed no significant differences in board tenure or the likelihood of departing from corporate boards between men and women. However, the findings indicated that women were less influenced by a company's financial condition when deciding whether to stay on or leave the board. Specifically, the financial condition of a company has a smaller effect on the likelihood of women exiting their board positions compared to men, which aligns with the immunity perspective.

This research contributes to the literature on corporate governance and gender dynamics in several significant ways. First, it provides valuable insights into the Polish capital market, thereby expanding the geographical scope of corporate governance research. Specifically, the article addresses gaps related to governance in two-tier systems, characterized by separate management and supervisory boards. It is a relatively underexplored area, particularly in relation to the glass cliff phenomenon and board dynamics within such systems. Moreover, in contrast to much of the existing literature that predominantly focuses on CEO tenure, this study examines the entire composition of both management and supervisory boards. This broader scope offers a more comprehensive view of board dynamics and governance issues, moving beyond the narrower focus on CEO roles. Moreover, we employed survival analysis techniques, including the Kaplan–Meier estimator and the Cox proportional hazards model, to assess board tenure. This methodological approach allows for a nuanced examination by accounting for both board departures and the status of current board members. As a result, the analysis captured both completed and ongoing board tenures, providing a more thorough understanding of board dynamics and tenure patterns.

The remainder of this article is organized as follows. The next section will contain the literature review and hypotheses. Then, we will describe the sample construction and research design. The next section will present the research results and discuss them. The last section will be devoted to conclusions.

Literature review

The literature presents two contrasting explanations for the tenure of women in management positions (Hill, Upadhyay, & Beekun, 2015; Elsaid & Ursel, 2018; Buchwald & Hottenrott, 2019; Saeed & Riaz, 2023). The first approach, known as the susceptibility perspective, suggests that female leaders have a higher turnover likelihood than their male counterparts. It is based on Eagly and Karau's (2002) role congruity theory, which assumes that gender roles and leadership roles are the source of two types of prejudice. Firstly, since we stereotypically attribute leadership ability to men, we evaluate women's potential for leadership less favorably. Second, women who take leadership positions are less favorably evaluated than their male counterparts because leadership behavior is expected more from men (Eagly & Karau, 2002). Consequently, the incongruity between stereotyped expectations of female directors and their behaviors leads to the dismissal of women (Jiang, Cheng, & Xie, 2024).

The second approach that explains the length of tenure and that has the support of resource dependence theory and the immunity perspective (Saeed & Riaz, 2023) argues that minorities, like female directors, receive more favorable treatment, resulting in longer tenures. The company has to obtain unique and inimitable resources from the environment. Thus, directors play a special role in providing these resources to the company. Board diversity in terms of demographic characteristics (i.e. gender, ethnicity, age, education, experience) increases the availability of rare and inimitable resources. Following resource-based arguments, Hill *et al.*

(2015) explain that minorities, including female directors and ethnic minorities, might receive more favorable treatment, leading to longer tenure of female directors in comparison with their male counterparts.

These resourced-based arguments are also rooted in institutional theory, where companies seek legitimacy by addressing societal pressures to reduce gender inequalities. Removing women from management positions risks social dissatisfaction, negative publicity, and loss of legitimacy (Saeed & Riaz, 2023). The immunity perspective also supports this assumption. If a company aims to survive, it must gain legitimacy, which is possible by answering to societal pressure to decrease gender inequalities. Removing women from management positions might cause social dissatisfaction, negative publicity, and legitimacy loss. Thus, one can expect a lower turnover of female directors or longer tenure of women in leadership positions (Saeed & Riaz, 2023).

These two contrasting perspectives, along with the financial standing of companies, serve to investigate the glass cliff phenomenon. The occurrence of the glass cliff phenomenon would be confirmed if female directors' risk of dismissal was greater than that of their male counterparts during challenging situations. For instance, poor performance decreases the length of the tenure of female directors more than that of male directors or increases the risk of dismissal for women more than for men in similar positions.

Existing research on female director turnover provides inconclusive results. Some studies provide evidence supporting the glass cliff phenomenon and congruity theory. Becker-Blease *et al.* (2016) showed that the likelihood of leaving the board is greater for female executives than for their male counterparts. They also reported that the probability of dismissal is lower for women than for men if firm performance measured by accounting and market measures is higher. Research on Chinese firms supports the congruity theory, with Saeed and Riaz (2023) reporting a higher turnover of female directors in companies accused of financial misrepresentation. Meanwhile, Jiang *et al.*'s (2024) study of public Chinese companies documented that risk-taking behaviors of new female CEOs increase their dismissal during the post-succession period, indicating that risky situations lead to harsher evaluations of female directors and, thus, their dismissal.

Conversely, some research presents mixed results regarding the glass cliff phenomenon. Elsaid and Ursel (2018) provided arguments supporting both the congruity perspective and immunity perspective results. They investigated 193 female CEOs and 193 male CEOs between 1992 and 2014 in North American companies and showed that compared to male CEOs, organization appoints female CEOs during less stable situations. This suggests the presence of the glass cliff. However, they also reported that the risk of turnover of female CEOs is lower than for male CEOs, indicating longer tenure of women in these roles. This finding supports the immunity perspective. Furthermore, they reported that firm performance does not affect the risk of CEO turnover. Other research for large US public companies reveals that firm performance has no influence on the risk of dismissal of female CEOs, but if the company is well-performing, the rate of dismissal for male CEOs is lower than for female CEOs (Gupta, Mortal, Silveri, Sun, & Turban, 2020).

Another strand of the literature indicates that the minority status of executives (i.e. gender, ethnicity) or firm performance might affect the length of the director's tenure, but it does not support or confirm the existence of the glass cliff phenomenon. Hill *et al.* (2015) investigated whether ethnic minorities and female CEOs experience discrimination based on gender and ethnicity or receive more favorable treatment regarding remuneration and removal from CEO positions. Their findings support both resource-based arguments and biased perspectives. They showed the negative effect of being a female CEO on the likelihood of job exit, indicating that women taking CEO positions benefit from minority status. This result supports the resource-based arguments. Nevertheless, regarding ethnic minorities, they found a higher risk of removal for these individuals, which supports the bias and stereotype theories (Hill *et al.*, 2015).

Firm performance is expected to have a positive impact on the length of executive tenure and a negative relationship with CEO or executive turnover. Hill *et al.* (2015) confirmed this relationship. They reported that the risk of CEO exit increases as firm performance declines.

Buchwald and Hottenrott (2019) found that in companies facing low performance, the risk of executive turnover is higher. Moreover, Bohdanowicz (2019) reported a negative association between firm performance and CEO turnover in Polish companies.

Buchwald and Hottenrott (2019) reported that the risk of dismissal is not higher for female executives than for male executives, indicating that companies facing poor performance are more likely to dismiss members of the board, regardless of gender. Main and Gregory-Smith (2018) found that female executives and non-executives in UK companies have shorter tenure than their male counterparts, and the risk of dismissal for female non-executives is much greater nine years after their appointment. They also reported that better performance positively affects the length of the tenure of all directors but concluded that the shorter tenure of women cannot be explained by the glass cliff effect during appointments. Instead, they argue that women are appointed to non-executive positions for symbolic reasons.

Later research by Schmid and Mitterreiter (2021) on FTSE 100 companies reported a positive effect of performance on the length of the tenure of executives. However, unlike Main and Gregory-Smith (2018), they did not observe a significant relationship between executives' gender and their tenure. The literature also documents the negative link between CEO turnover and financial performance for family-owned Taiwanese public companies (Li, 2018) and US companies (Jenter & Kanaan, 2015). Nevertheless, neither of those studies analyzes the role of the director's gender in its dismissal risk.

The study of the glass cliff phenomenon aligns with research on the determinants of board tenure, which include board-specific and firm-specific characteristics (Sun & Bhuiyan, 2020). Board-specific factors, such as director age, ownership, gender, and career variety, influence tenure, with older directors and those with diverse careers having shorter tenures (Schmid & Mitterreiter, 2021). Ownership positively affects tenure, as agency theory suggests that directors with ownership reduce agency problems and are less likely to be dismissed, especially during crises (Jenter & Kanaan, 2015). Firm-specific factors like company size and leverage also play a role, with larger firms and lower leverage associated with longer tenures (Jia, 2017; Buchwald & Hottenrott, 2019). Moreover, ownership structure influences tenure decisions. For example, family ownership affects CEO turnover (Visintin, Pittino, & Minichilli, 2017), while state ownership can reduce top management turnover underperformance (Shen & Lin, 2009).

The literature review leads to the conclusion that determinants of board tenure or the risk of director exit have not been extensively studied. However, a significant portion of research is devoted to the glass cliff phenomenon. In the Polish context, characterized by low female representation on management and supervisory boards and no mandatory board gender quotas, it is reasonable to expect the presence of gender bias. Based on this, we formulated the following two hypotheses:

- H1. Men have longer board tenures compared to women in similar positions, indicating that women experience a higher risk of early dismissal from corporate boards.
- H2. Female board members' tenure is more sensitive to changes in the company's financial condition compared to their male counterparts.

Research design: sample and methodology

The empirical study investigated the tenure of individuals serving on the management or supervisory boards of publicly listed companies and examined the factors that influence this tenure. To test the research hypotheses, we analyzed data related to the corporate governance bodies of companies listed on the main market of the WSE, the leading stock market in Central and Eastern Europe. In the initial phase of the research, the sample included all 415 companies whose shares were traded on the regulated market at the end of 2022. To mitigate the impact of institutional heterogeneity on board composition, we excluded 44 foreign companies.

Furthermore, we removed 11 banks and three insurance companies due to the distinct nature of financial reporting in these sectors. We also excluded two companies due to substantial deficiencies in reporting the boards' composition. The final research sample comprised 355 companies listed on the main market of the WSE as of the end of 2022.

In the subsequent phase of structuring the research sample, we gathered detailed information on the composition of the management and supervisory boards of the companies identified in the first phase. We sourced data from the publicly accessible website Bankier.pl, which aggregates information that listed companies are required to report through the Electronic System for Information Transmission, i.e. the system used by issuers listed on the WSE to communicate announcements mandated by regulations and laws. We hand-collected data on the appointment and departure dates of board members by conducting a comprehensive analysis of both current and historical compositions of the companies' boards.

This information pertains to past tenures and the current composition of corporate boards as of December 31, 2022. The upper limit was set at 2022 because it was the most recent year for which other company characteristics, particularly financial data, were available for the empirical study. In cases where we identified errors or missing information, we excluded the corresponding dataset from the analysis.

Ultimately, the dataset consisted of 11,223 board member-company observations. Of these, 3,639 were individual observations of management board members, with 1,003 serving as active board members as of December 31, 2022. Moreover, there were 7,585 observations of supervisory board members, of whom 2,002 were still serving as of December 31, 2022.

Table 1 provides a detailed breakdown of the final study sample, organized by corporate board type and the industries covered.

This study focuses on the duration of tenure, specifically measuring the number of days each individual served on management and supervisory boards. The primary research method employed is survival analysis, which allows for the estimation of lifespan distributions within specific populations and examines the dependence of survival functions on explanatory variables. This method is particularly robust as it accounts for truncated observations, including both individuals who have completed their tenure and those who are currently in office, making it a more comprehensive approach than traditional regression analysis. Consequently, the survival analysis framework is highly valuable in studying the tenure of management and supervisory board members (Brookman & Thistle, 2009; Becker-Blease *et al.*, 2016; Elsaid & Ursel, 2018; Buchwald & Hottenrott, 2019).

Initially, we applied one of the most widely used methods for describing and estimating survival probability in right-censored data: the nonparametric Kaplan–Meier estimator. We

Table 1. Industry distribution of board member-company observations in the sample

| Sectoral classification | Management board | | Supervisory board | | Management and supervisory board | |
|--|------------------|----------|-------------------|----------|----------------------------------|----------|
| | Share | <i>N</i> | Share | <i>N</i> | Share | <i>N</i> |
| Finances (I_1XX) | 0.1701 | 619 | 0.2016 | 1,529 | 0.1914 | 2,148 |
| Fuels and energy (I_2XX) | 0.0767 | 279 | 0.0651 | 494 | 0.0689 | 773 |
| Chemicals and raw materials (I_3XX) | 0.1055 | 384 | 0.1010 | 766 | 0.1025 | 1,150 |
| Industrial and construction production (I_4XX) | 0.2569 | 935 | 0.2612 | 1,981 | 0.2597 | 2,915 |
| Consumer goods (I_5XX) | 0.1088 | 396 | 0.1023 | 776 | 0.1044 | 1,172 |
| Trade and services (I_6XX) | 0.1198 | 436 | 0.1158 | 878 | 0.1171 | 1,314 |
| Health care (I_7XX) | 0.0580 | 211 | 0.0592 | 449 | 0.0588 | 660 |
| Technologies (I_8XX) | 0.1041 | 379 | 0.0939 | 712 | 0.0972 | 1,091 |
| Total | 1.0000 | 3,639 | 1.0000 | 7,585 | 1.0000 | 11,223 |

Source(s): Authors' elaboration

employed this method to assess tenure and identify potential differences between specific groups of board members. The Kaplan–Meier estimator, $\widehat{S}(t)$, which determines the probability that the tenure will extend beyond a specified time t , is as follows:

$$\widehat{S}(t) = \prod_{t_i \leq t} \left(1 - \frac{d_i}{r_i}\right)$$

in which r_i represents the number of individuals at risk (i.e. those still serving on the board) just before time t_i , and d_i denotes the number of individuals whose tenure ends at time t_i .

Following the Kaplan–Meier analysis, we employed a semi-parametric Cox proportional hazards model to identify the risk factors that influence tenure. In this model, we defined the event of interest as the departure from a management or supervisory board position. The hazard function $h(t|x_1, \dots, x_p)$, which represents the marginal probability of an event occurring within an infinitesimally short time interval (given that the event has not yet occurred), is as follows:

$$h(t|x_1, \dots, x_p) = h_0(t)e^{\eta_i}$$

$$\eta_i = \beta_1 x_1 + \beta_2 x_2 + \dots + \beta_p x_p$$

In this model, the baseline hazard function $h_0(t)$ corresponds to the probability of the event occurring when all explanatory variables are omitted, serving as a reference point. The function e^{η_i} represents the vector of explanatory variable values. The coefficients $\beta_{1,\dots,p}$ assigned to each variable $x_{1,\dots,p}$ quantify the effect of each factor on the hazard rate, reflecting how the presence or absence of each variable influences the likelihood of the event occurring.

To conduct our analysis, we utilized a specific set of variables. The dependent variable TENURE represents the number of days a given member has served on the board. Moreover, we used three key explanatory variables to test the formulated research hypothesis. GENDER is a dummy variable that takes the value of 1 if the board member is a woman, and 0 otherwise. To assess the financial standing of the company, we used the variable ALTMAN-Z, which is the Altman Z-Score (Reinwald *et al.*, 2023). This metric synthesizes the company's financial condition at a specific point in time based on financial statement data. The primary focus of this analysis was the interaction term CLIFF, defined as GENDER \times ALTMAN-Z, where ALTMAN-Z was previously mean centered. If the parameter for this variable is statistically significant, it indicates that the gender of the corporate board member moderates the effect of the company's financial standing on tenure. Specifically, if the coefficient for this interaction term is positive, it supports H2, suggesting that the likelihood of tenure changes for female board members is more influenced by the company's financial condition compared to their male counterparts, which we can interpret as evidence of the glass cliff phenomenon in the Polish capital market.

Following previous studies on corporate board tenure (Jenter & Kanaan, 2015; Becker-Blease *et al.*, 2016; Jia, 2017; Buchwald & Hottenrott, 2019; Schmid & Mitterreiter, 2021), we included a set of control variables in the model to account for company characteristics, ownership structure, and selected institutional conditions relevant to the research sample. STATE is a dummy variable with a value of 1 if the State Treasury is an indirect or direct shareholder of the company, and 0 otherwise. FAMILY is a dummy variable that takes the value of 1 if the company is classified as a family business by the WSE, and 0 otherwise. CODE is a dummy variable that takes the value of 1 if the board membership ended in 2016 or later, coinciding with the implementation of the 2016 Corporate Governance Code at the WSE. SIZE is the natural logarithm of total assets at the end of the year in which an individual's board tenure ended. DEBT represents the debt ratio of the company during the corresponding period.

We obtained all financial data from the Notoria Serwis database, which provides standardized financial information for all companies listed on the WSE. Moreover, we

included industry dummy variables I_1XX to I_8XX (as detailed in Table 1) in accordance with the sectoral classification of companies on the WSE.

Results

Statistical data on tenure within the management and supervisory boards of stock companies offer valuable insights into the various factors that can impact tenure in corporate governance bodies. Table 2 provides descriptive statistics of the variables used in the empirical study, categorized into three groups: Management Board (Panel A), Supervisory Board (Panel B), and a combined analysis of both bodies (Panel C). The joint examination of the Management and Supervisory Boards may serve as a reference to studies conducted in markets with a one-tier corporate governance system.

The study of the tenure of individuals serving on corporate governance bodies found that the average duration of service for management board members was 1,635 days, with a standard deviation of 1,804 days, indicating significant variability. The median tenure was 967 days, suggesting that most board members serve shorter terms. For the supervisory board, the average tenure was slightly shorter, at 1,432 days, with a standard deviation of 1,419 days, also reflecting high variability. The median tenure was 942 days. Overall, when analyzing both corporate governance bodies together, the average observed tenure was 1,498 days, with a median of 948 days.

In the sample, women were clearly underrepresented in corporate governance bodies, indicating a male-dominated governance structure in companies listed on the WSE. On average, women accounted for less than 14% of all tenures. Specifically, women held only

Table 2. Descriptive statistics

| Variable | Mean | Std. dev. | Q1 | Median | Q3 | N |
|---|---------|-----------|---------|---------|---------|--------|
| Panel A. Management board | | | | | | |
| TENURE | 1,635 | 1,804 | 399 | 967 | 2,181 | 3,639 |
| GENDER | 0.1107 | 0.3139 | 0.0000 | 0.0000 | 0.0000 | 3,639 |
| ALTMAN-Z | 5.0595 | 97.7095 | 3.9764 | 5.8831 | 7.9680 | 3,227 |
| DEBT | 0.6434 | 2.5963 | 0.3519 | 0.4891 | 0.6406 | 3,215 |
| FAMILY | 0.3493 | 0.4768 | 0.0000 | 0.0000 | 0.0000 | 3,639 |
| STATE | 0.1572 | 0.3640 | 0.0000 | 0.0000 | 0.0000 | 3,639 |
| CODE | 0.6579 | 0.4745 | 0.0000 | 1.0000 | 1.0000 | 3,639 |
| SIZE | 13.1225 | 2.1792 | 11.6217 | 12.9972 | 14.4955 | 3,226 |
| Panel B. Supervisory board | | | | | | |
| TENURE | 1,432 | 1,419 | 395 | 942 | 2,013 | 7,585 |
| GENDER | 0.1533 | 0.3603 | 0.0000 | 0.0000 | 0.0000 | 7,585 |
| ALTMAN-Z | 2.0053 | 115.6234 | 4.2621 | 6.0819 | 8.3264 | 6,592 |
| DEBT | 0.7758 | 6.2031 | 0.3236 | 0.4743 | 0.6208 | 6,560 |
| FAMILY | 0.3591 | 0.4798 | 0.0000 | 0.0000 | 0.0000 | 7,585 |
| STATE | 0.1303 | 0.3366 | 0.0000 | 0.0000 | 0.0000 | 7,585 |
| CODE | 0.6295 | 0.4830 | 0.0000 | 1.0000 | 1.0000 | 7,585 |
| SIZE | 12.7171 | 2.1749 | 11.2729 | 12.4392 | 14.0742 | 6,591 |
| Panel C. Management and supervisory board | | | | | | |
| TENURE | 1,498 | 1,557 | 397 | 948 | 2,033 | 11,223 |
| GENDER | 0.1395 | 0.3465 | 0.0000 | 0.0000 | 0.0000 | 11,223 |
| ALTMAN-Z | 3.0091 | 110.0625 | 4.1704 | 6.0393 | 8.2156 | 9,819 |
| DEBT | 0.7323 | 5.2954 | 0.3346 | 0.4808 | 0.6282 | 9,775 |
| FAMILY | 0.3560 | 0.4788 | 0.0000 | 0.0000 | 1.0000 | 11,223 |
| STATE | 0.1390 | 0.3460 | 0.0000 | 0.0000 | 0.0000 | 11,223 |
| CODE | 0.6387 | 0.4804 | 0.0000 | 1.0000 | 1.0000 | 11,223 |
| SIZE | 12.8503 | 2.1846 | 11.3799 | 12.6158 | 14.1921 | 9,817 |

Source(s): Authors' elaboration

about 11% of positions on the management board. The representation was slightly higher on the supervisory boards, where women held approximately 15% of the positions. Other researchers analyzing the board tenure also detected the disparity between female and male directors (Main & Gregory-Smith, 2018).

Most observed board tenures occurred under the 2016 Corporate Code, with 35% of cases involving family-owned companies and the State Treasury holding stakes in 15.72% of management board tenures and 13.03% of supervisory board tenures. The average debt ratio for management board tenures was 0.6434 (median 0.4891), while for supervisory boards, it was 0.7758 (median 0.4743). Company assets at the end of tenure averaged 13.00 (logarithmic scale). Financial health, measured by the Altman Z-score, was higher for management board tenures (mean 5.0595) compared to supervisory board tenures (mean 2.0053), indicating that the latter often concluded during financial distress, though the differences in overall metrics between boards were less pronounced.

Table 3 displays the potential differences in the values of the variables by gender.

An analysis of tenure on corporate boards revealed that the average tenure for management board members was 1,641 days for men and 1,583 days for women, while on supervisory boards, the averages were 1,436 days for men and 1,410 days for women. Although men tend to spend slightly more time in these positions, statistical tests indicated that these differences were not significant. The median tenures were also quite similar for both genders. Overall, the results suggest no significant gender-based differences in the length of time served on corporate governance bodies. These findings contrast with results from a study of UK public companies, which reported a significant difference in mean tenure between female and male directors, with tenures of 4.61 years for women and 6.75 years for men (Main & Gregory-

Table 3. Tests for equality of means and medians by gender

| Variable | Mean | | t-test Value | p-value | Median | | Wilcoxon/ Mann-Whitney | |
|---|---------|---------|-----------------|---------|---------|---------|---------------------------|---------|
| | Male | Female | | | Male | Female | Value | p-value |
| Panel A. Management board | | | | | | | | |
| TENURE | 1,641 | 1,583 | 0.6147 | 0.5388 | 974 | 958 | 0.1000 | 0.9203 |
| ALTMAN-Z | 4.8524 | 6.7454 | -0.3435 | 0.7313 | 5.8708 | 5.9714 | 1.0743 | 0.2827 |
| DEBT | 0.6557 | 0.5433 | 0.7660 | 0.4438 | 0.4921 | 0.4744 | 2.2400 | 0.0251 |
| FAMILY | 0.3409 | 0.4169 | -3.0216 | 0.0025 | 0.0000 | 0.0000 | 2.4923 | 0.0127 |
| STATE | 0.1588 | 0.1439 | 0.7757 | 0.4380 | 0.0000 | 0.0000 | 0.4890 | 0.6248 |
| CODE | 0.6530 | 0.6973 | -1.7681 | 0.0771 | 1.0000 | 1.0000 | 1.4524 | 0.1464 |
| SIZE | 13.1425 | 12.9596 | 1.4884 | 0.1367 | 13.0053 | 12.9237 | 1.4226 | 0.1548 |
| Panel B. Supervisory board | | | | | | | | |
| TENURE | 1,436 | 1,410 | 0.5834 | 0.5596 | 939 | 952 | 0.2799 | 0.7795 |
| ALTMAN-Z | 3.8880 | -8.5974 | 3.1394 | 0.0017 | 6.0819 | 6.0803 | 0.0204 | 0.9837 |
| DEBT | 0.7164 | 1.1101 | -1.8404 | 0.0658 | 0.4751 | 0.4725 | 0.7724 | 0.4399 |
| FAMILY | 0.3530 | 0.3929 | -2.6135 | 0.0090 | 0.0000 | 0.0000 | 2.1708 | 0.0299 |
| STATE | 0.1300 | 0.1316 | -0.1430 | 0.8863 | 0.0000 | 0.0000 | 0.0834 | 0.9335 |
| CODE | 0.6185 | 0.6905 | -4.6817 | 0.0000 | 1.0000 | 1.0000 | 3.9107 | 0.0001 |
| SIZE | 12.7499 | 12.5322 | 2.9097 | 0.0036 | 12.4856 | 12.2284 | 2.9723 | 0.0030 |
| Panel C. Management and supervisory board | | | | | | | | |
| TENURE | 1,505 | 1,455 | 1.1964 | 0.2316 | 947 | 954 | 0.1951 | 0.8453 |
| ALTMAN-Z | 4.2151 | -4.5766 | 2.7241 | 0.0065 | 6.0268 | 6.0642 | 0.8036 | 0.4216 |
| DEBT | 0.6958 | 0.9614 | -1.7071 | 0.0878 | 0.4822 | 0.4728 | 2.0363 | 0.0417 |
| FAMILY | 0.3490 | 0.3991 | -3.8460 | 0.0001 | 0.0000 | 0.0000 | 3.1875 | 0.0014 |
| STATE | 0.1397 | 0.1347 | 0.5255 | 0.5992 | 0.0000 | 0.0000 | 0.3149 | 0.7528 |
| CODE | 0.6300 | 0.6922 | -4.7574 | 0.0000 | 1.0000 | 1.0000 | 3.9545 | 0.0001 |
| SIZE | 12.8831 | 12.6442 | 3.7300 | 0.0002 | 12.6592 | 12.3679 | 3.6590 | 0.0003 |

Source(s): Authors' elaboration

Smith, 2018). Conversely, [Elsaid and Ursel \(2018\)](#) found the opposite trend, reporting a mean tenure of 4.31 years for female CEOs compared to 3.44 years for male CEOs.

The analysis of debt ratios revealed gender differences: companies led by men on management boards had higher average debt ratios than those led by women, while the reverse was true for supervisory boards, though median debt ratios showed no significant gender differences. Women were more frequently associated with family businesses on both boards, with higher indices of association compared to men. On management boards, we observed no significant gender differences in other variables, but for supervisory boards, men were more likely to oversee larger companies ($p = 0.0036$), while women were more often associated with companies facing financial instability, as indicated by lower Altman Z-scores. We also noted significant differences in the applicability of the 2016 Corporate Code.

To further analyze tenure in corporate governance bodies, we employed survival analysis using the Kaplan–Meier method to estimate the length of tenure. [Figure 1](#) presents three Kaplan–Meier survival plots, showing estimates for men and women separately for the management board, the supervisory board, and both corporate bodies combined.

The first plot shows survival estimates for management board members over time. As time progresses, both survival curves decrease, reflecting a reduction in the number of individuals remaining in their positions. When gender is considered, the proximity of the lines for men and women suggests no significant differences in tenure between genders within this subsample.

The second plot pertains to supervisory board members. Similar to the management board, the survival curves for men and women are close, indicating that gender generally does not play a significant role in board tenure. However, in the first half of the chart, the line for women is slightly above that for men, suggesting that women may be somewhat more likely to remain on the board during this period. This could imply that women are less likely to resign or be dismissed from these roles. Several factors could explain this observation. Women who attain such positions might be more determined to retain them, or they may benefit from better organizational support, enabling them to remain in the role longer. Moreover, some companies are implementing policies or fostering organizational cultures that promote longer retention of women in key positions, potentially contributing to higher board survival estimates for women. Although the difference is small, it may indicate subtle variations in career dynamics between genders.

All three charts indicate that the differences in survival estimates between men and women are minimal, suggesting that gender is unlikely to be a significant factor in determining tenure on corporate boards within the Polish stock market environment. The decline in the survival curves over time is gradual, reflecting a staggered departure from these roles by both male and female board members rather than abrupt exits. The lack of pronounced gender differences suggests that persistence in corporate governance structures is similar for both genders.

[Table 4](#) presents the results of three tests – Mantel–Cox, Wilcoxon, and Tarone–Ware – that we used to assess statistically significant differences in survival times between groups, specifically between men and women. We segmented the data into three panels: management board, supervisory board, and a combination of both. We performed a comparative analysis both for all observations in the subsample as well as by dividing the data into four quartiles based on tenure length. Dividing into quartiles allows for a more nuanced understanding of how differences in survival times change over different time intervals.

The results in Panel A suggest that the effect of gender on tenure in the management board was negligible. There were no significant differences in survival rates between groups, both in the full data set and when analyzed by quartile. Only the Mantel–Cox test in the third quartile indicated a trend toward differences at a p -value of 0.06. However, the other tests did not confirm this.

In contrast, the summary results for the supervisory board in Panel B indicated that, in this case, there may be statistically significant gender differences in the length of tenure. All three tests detected a statistically significant difference in survival between genders, showing that women tend to have longer tenures compared to men. The quartile analysis revealed that the second quartile is the key here, as the results from the Mantel–Cox, Wilcoxon, and

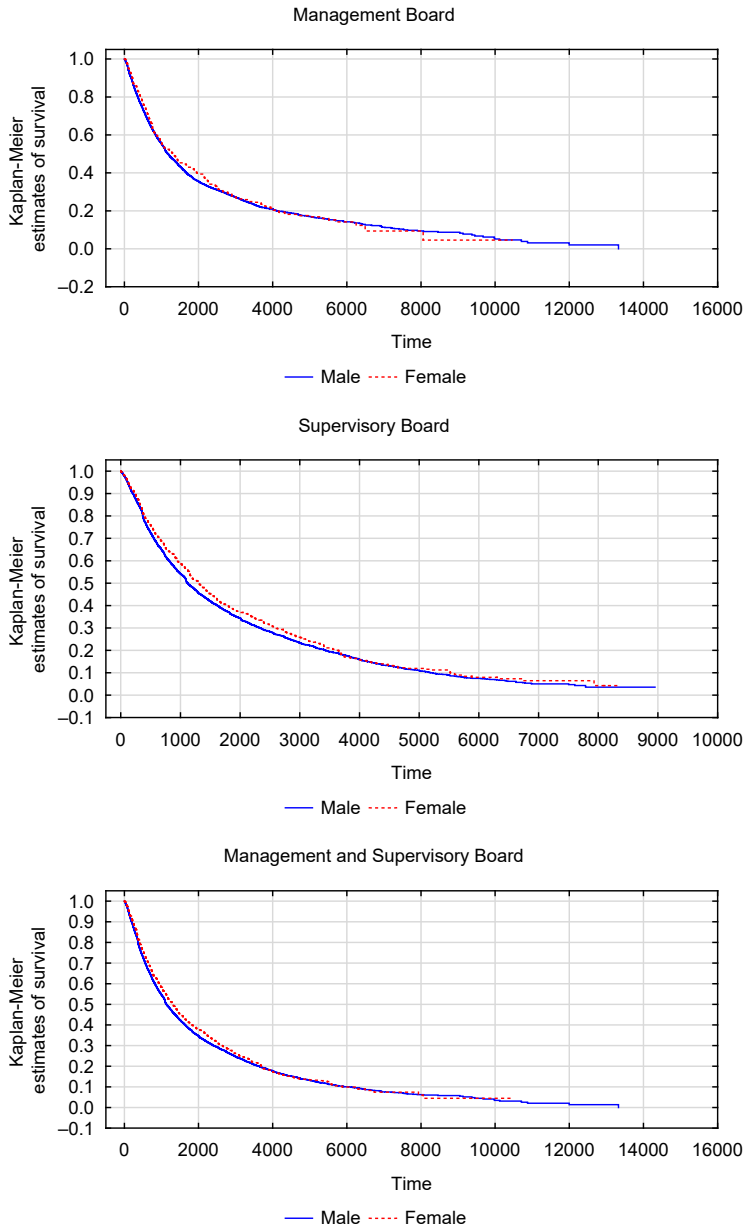


Figure 1. Kaplan–Meier survival function estimates. Source: Authors’ elaboration

Tarone–Ware tests were statistically significant at the 1% level. This may indicate specific differences in survival behavior during this period of board membership.

Table 5 presents the results of the next analytical step, where we applied the Cox proportional hazards model to assess potential determinants of tenure on corporate boards and to explore certain interactions between variables.

Table 4. Differences in survival times between men (M) and women (F) by corporate board and length of tenure

| Test | All tenures | | Min – Q1 | | Q1 – Q2 | | Q2 – Q3 | | Q3 – Max | |
|---|----------------------|--------------------------------|--------------------|--------------------------------|--------------------|--------------------------------|--------------------|--------------------------------|--------------------|--------------------------------|
| | <i>N</i> | χ^2 (<i>p</i> -value) | <i>N</i> | χ^2 (<i>p</i> -value) | <i>N</i> | χ^2 (<i>p</i> -value) | <i>N</i> | χ^2 (<i>p</i> -value) | <i>N</i> | χ^2 (<i>p</i> -value) |
| Panel A. Management board | | | | | | | | | | |
| Mantel–Cox | M: 3,236 F: 403 | 0.60 (0.40) | M: 819 F: 92 | 0.00 (1.00) | M: 799 F: 112 | 0.20 (0.70) | M: 817 F: 93 | 3.40 (0.06) | M: 804 F: 106 | 1.50 (0.20) |
| Wilcoxon | | 1.30 (0.30) | | 0.10 (0.80) | | 0.00 (0.80) | | 1.20 (0.30) | | 1.90 (0.20) |
| Tarone–Ware | | 1.00 (0.30) | | 0.00 (0.80) | | 0.10 (0.80) | | 2.10 (0.10) | | 1.70 (0.20) |
| Panel B. Supervisory board | | | | | | | | | | |
| Mantel–Cox | M: 6,422 F: 1,163 | 4.30 (0.04) | M: 1,619 F: 281 | 0.80 (0.40) | M: 1,604 F: 293 | 9.60 (0.00) | M: 1,593 F: 308 | 1.80 (0.20) | M: 1,619 F: 283 | 2.10 (0.20) |
| Wilcoxon | | 7.50 (0.01) | | 1.60 (0.20) | | 6.30 (0.01) | | 1.10 (0.30) | | 2.40 (0.10) |
| Tarone–Ware | | 6.20 (0.01) | | 1.30 (0.30) | | 7.60 (0.01) | | 1.20 (0.30) | | 2.30 (0.10) |
| Panel C. Management and supervisory board | | | | | | | | | | |
| Mantel–Cox | M: 9,657 F: 1,566 | 4.30 (0.04) | M: 2,435 F: 374 | 0.80 (0.40) | M: 2,405 F: 408 | 9.60 (0.00) | M: 2,411 F: 399 | 1.80 (0.20) | M: 2,422 F: 389 | 2.10 (0.20) |
| Wilcoxon | | 7.50 (0.01) | | 1.60 (0.20) | | 6.30 (0.01) | | 1.10 (0.30) | | 2.40 (0.10) |
| Tarone–Ware | | 6.20 (0.01) | | 1.30 (0.30) | | 7.60 (0.01) | | 1.20 (0.30) | | 2.30 (0.10) |

Source(s): Authors' elaboration

Table 5. Cox proportional hazards model estimates: management board and supervisory board

| Variable | Management board | | | Supervisory board | | |
|-----------------------------|------------------|----------------|-----------------|-------------------|----------------|-----------------|
| | Coefficient | Standard error | <i>p</i> -value | Coefficient | Standard error | <i>p</i> -value |
| GENDER | −0.0515 | 0.0661 | 0.4356 | −0.0552 | 0.0397 | 0.1638 |
| ALTMAN-Z | 0.0005 | 0.0003 | 0.0859 | 0.0003 | 0.0002 | 0.0959 |
| CLIFF | −0.0075 | 0.0037 | 0.0446 | −0.0004 | 0.0002 | 0.0806 |
| DEBT | 0.0145 | 0.0055 | 0.0081 | 0.0061 | 0.0024 | 0.0112 |
| SIZE | −0.0804 | 0.0120 | 0.0000 | −0.0865 | 0.0082 | 0.0000 |
| FAMILY | −0.1410 | 0.0452 | 0.0018 | −0.1290 | 0.0310 | 0.0000 |
| STATE | 0.4786 | 0.0761 | 0.0000 | 0.3682 | 0.0538 | 0.0000 |
| CODE | −0.8693 | 0.0417 | 0.0000 | −1.0760 | 0.0294 | 0.0000 |
| I_2XX | 0.0480 | 0.0998 | 0.6304 | −0.0071 | 0.0686 | 0.9171 |
| I_3XX | 0.0122 | 0.0806 | 0.8794 | 0.0148 | 0.0540 | 0.7843 |
| I_4XX | −0.1198 | 0.0646 | 0.0639 | −0.1194 | 0.0421 | 0.0046 |
| I_5XX | 0.0259 | 0.0799 | 0.7459 | −0.0499 | 0.0546 | 0.3602 |
| I_6XX | −0.0797 | 0.0792 | 0.3142 | −0.0857 | 0.0534 | 0.1087 |
| I_7XX | −0.1790 | 0.1012 | 0.0770 | −0.1964 | 0.0674 | 0.0036 |
| I_8XX | −0.2928 | 0.0823 | 0.0004 | −0.1346 | 0.0559 | 0.0160 |
| Likelihood ratio test | | 605.1 | 0.0000 | | 1,617 | 0.0000 |
| Wald test | | 622.2 | 0.0000 | | 1,644 | 0.0000 |
| Score (logrank) test | | 657 | 0.0000 | | 1,781 | 0.0000 |
| <i>R</i> -squared Cox–Snell | | | 0.1532 | | | 0.1920 |
| Concordance | | | 0.6410 | | | 0.6590 |
| Number of observations | | | 3,215 | | | 6,560 |

Source(s): Authors' elaboration

The *p*-value for the variable GENDER was 0.4356, suggesting that there were no statistically significant differences between men and women in terms of the hazard of exiting the board. Hence, we did not find support for H1. This implies that gender does not have a significant impact on board tenure, with other factors, such as experience, competence, or organizational structure, potentially playing a more decisive role. Schmid and Mitterreiter (2021) also reported on the insignificance of director gender on tenure for UK executives. Moreover, the coefficient for ALTMAN-Z, with a value of 0.0005 and a *p*-value of 0.0859, suggests that a higher Altman Z-Score is associated with a slightly increased hazard of leaving the board. Crucially, the interaction between gender and the company's financial situation played a significant role in the verification of the research H2. The coefficient for CLIFF was −0.0075, indicating that the effect of financial standing on the hazard of leaving the management board varies by gender. The *p*-value for this interaction was 0.0446, signifying a statistically significant effect. Specifically, the results suggest that women may be less responsive to changes in a company's financial condition when deciding whether to leave or remain on the board. This finding could reflect gender differences in risk attitudes or management strategies. In practice, due to varying motivations or management strategies, women may be more likely to remain on the board even when the company's financial standing deteriorates. Prior research confirms the role of psychological factors in female directors' decisions to take risky positions (Darouei & Pluut, 2018).

The analysis of control variables highlights key factors influencing board turnover. Higher debt levels (coefficient 0.0145, *p* = 0.0081) significantly increase the risk of early board exits, likely due to elevated financial and operational risks, consistent with findings by Jia (2017). State Treasury involvement also raises turnover risk (coefficient 0.4786, *p* = 0.0000), possibly due to specific pressures linked to state participation, a trend also observed in Chinese companies, where the State Treasury fulfills the role of "Strict Judge" (Shen & Lin, 2009). Conversely, association with family businesses reduces turnover risk (coefficient −0.1410,

$p = 0.0018$), likely due to strong interpersonal ties, similar to the stabilizing effect of managerial ownership (Bohdanowicz, 2019). Larger company assets and post-2016 Corporate Code regulations further enhance board stability, with coefficients of -0.8693 ($p = 0.0000$) and consistent findings in Polish studies. Industry-specific characteristics also contribute to lower turnover hazards, as reflected in variables related to specific sectors.

The Cox proportional hazards model applied to the management board subsample demonstrates a moderate level of predictive accuracy. The Cox–Snell R -square coefficient indicates that our model explains approximately 15.32% more variation over the baseline null model. Furthermore, the concordance index of 0.6410 reflects a moderate level of predictive accuracy, suggesting that the model is reasonably effective in differentiating between higher and lower risks of board termination.

Table 5 also presents the results of the Cox proportional hazards model for the supervisory board, based on a sample of 6,560 observations. Similar to the findings for the management board, gender does not appear to be a significant factor that influences board tenure under Polish capital market conditions. The p -value for the variable GENDER was 0.1638, indicating that there were no statistically significant differences in the hazards of leaving the supervisory board based on gender. In contrast, the Altman Z-Score coefficient, with a value of 0.0003 and a p -value of 0.0959, suggests that a company's financial condition may have some influence on the duration of board tenure. A positive coefficient indicates that an improvement in the company's financial condition is associated with a slightly higher risk of leaving the board. The coefficient for CLIFF, which directly relates to H2, was negative and amounted to -0.0004 . This suggests that for women, a higher Altman Z-Score may have a smaller impact on the hazard of leaving the board compared to men. The p -value for this interaction was 0.0806, indicating a statistically significant effect. In practice, women on supervisory boards may have different priorities, or motivations compared to their male counterparts, which in turn influences their decisions to stay on or leave the board.

In assessing the hazard of supervisory board tenure, we found several control variables to be significant. A positive and statistically significant coefficient for DEBT suggests that a higher debt ratio was associated with an increased hazard of leaving the board. Moreover, the presence of the State Treasury as a shareholder significantly increased the hazard of leaving the board, reflecting the unique risks associated with corporate governance in companies with State participation. Conversely, family ties, post-2016 Corporate Governance Code tenures, and larger company size were associated with reduced turnover risk, indicating greater stability. Industry effects also emerged, with lower turnover hazards observed in Industrial and construction production, healthcare, and technologies sectors, suggesting sector-specific stability factors.

Overall, the model explained approximately 19.2% of the variability in survival time, or the hazard of leaving the supervisory board. The values of the Likelihood Ratio Test, Wald Test, and Score Test confirmed that the variables used in the model were significant within the study context. The concordance index of 0.6590 indicated a moderate ability of the model to predict which observations have a higher hazard. Therefore, we can conclude that the model was efficient and well-suited to the data.

To further analyze the factors that influence the hazard of ending tenure as an executive or board member, we conducted a combined analysis using all observations. Table 6 presents the results based on 9,775 observations.

The findings were consistent with the results in Table 5. The gender of board members in Polish-listed companies does not have a significant impact on their decision to continue or leave the board. However, a better financial condition may lead to greater confidence in decision-making, which can influence board members' decisions to stay or leave the board. Additionally, the interaction between gender and the Altman Z-Score indicates that financial standing impacts decisions to continue on a corporate board differently depending on gender.

The previous analyses highlighted that certain industries, specifically Industrial and construction production, Health care, and Technologies, exhibit different hazards of leaving

Table 6. Cox proportional hazards model estimates for combined management and supervisory board

| Variable | Coefficient | Standard error | p-value |
|------------------------|-------------|----------------|---------|
| GENDER | -0.0520 | 0.0339 | 0.1251 |
| ALTMAN-Z | 0.0004 | 0.0002 | 0.0203 |
| CLIFF | -0.0004 | 0.0002 | 0.0496 |
| DEBT | 0.0072 | 0.0022 | 0.0009 |
| SIZE | -0.0856 | 0.0068 | 0.0000 |
| FAMILY | -0.1359 | 0.0255 | 0.0000 |
| STATE | 0.4136 | 0.0438 | 0.0000 |
| CODE | -0.9952 | 0.0239 | 0.0000 |
| I_2XX | 0.0145 | 0.0564 | 0.7976 |
| I_3XX | 0.0141 | 0.0448 | 0.7532 |
| I_4XX | -0.1150 | 0.0353 | 0.0011 |
| I_5XX | -0.0232 | 0.0450 | 0.6064 |
| I_6XX | -0.0894 | 0.0442 | 0.0432 |
| I_7XX | -0.1871 | 0.0560 | 0.0008 |
| I_8XX | -0.2006 | 0.0462 | 0.0000 |
| Likelihood ratio test | | 2,173 | 0.0000 |
| Wald test | | 2,225 | 0.0000 |
| Score (logrank) test | | 2,383 | 0.0000 |
| R-squared Cox-Snell | | | 0.1760 |
| Concordance | | | 0.6530 |
| Number of observations | | | 9,775 |

Source(s): Authors' elaboration

the corporate board, suggesting greater stability in these sectors. To account for these differences, we conducted an additional analysis with stratification by industry affiliation for each company. This approach provided a clearer picture of how the variables of interest affect the hazard of exiting the corporate board within each sector, helping to eliminate potential distortions due to differences in baseline hazard between industries. The results of this stratified analysis are summarized in [Table 7](#).

In the context of tenure analysis of management and supervisory boards, the estimated coefficients indicate that gender does not appear to be a significant decision-making factor. However, for combined boards, a *p*-value of 0.0846 suggests that with a larger sample size, the effect of gender could become more pronounced.

As the number of women in executive positions and other board roles increases, their influence on the dynamics of these bodies may change, which is worth tracking in future studies. This could be the subject of further research to better understand the reasons for this difference and its relevance in the context of long-term governance and gender equality in board structures. Moreover, the company's financial condition is associated with a slightly higher hazard of leaving the management board. For the supervisory board, this relationship is no longer statistically significant. However, when considering the two boards together, the results indicate a significant effect on the hazard of exiting the company's corporate boards. Furthermore, an assessment of the combined impact of gender and the company's financial condition reveals that the hazard of leaving the management board, supervisory board, or both varies by gender. Specifically, women's decisions to stay or leave the board may be less sensitive to changes in the company's financial condition.

Conclusions

This paper presents empirical evidence on the factors that influence the tenure of corporate board members in Poland. The research shows that there are no notable disparities in board tenure or the likelihood of departing from corporate boards based on gender. However, the

Table 7. Cox proportional hazards model estimates with stratification by sector

| Variable | Management board | | | Supervisory board | | | Management and supervisory board | | |
|-----------------------|------------------|----------------|-----------------|-------------------|----------------|-----------------|----------------------------------|----------------|-----------------|
| | Coefficient | Standard error | <i>p</i> -value | Coefficient | Standard error | <i>p</i> -value | Coefficient | Standard error | <i>p</i> -value |
| GENDER | -0.0705 | 0.0667 | 0.2905 | -0.0579 | 0.0398 | 0.1459 | -0.0586 | 0.0340 | 0.0846 |
| ALTMAN-Z | 0.0005 | 0.0003 | 0.0825 | 0.0003 | 0.0002 | 0.1071 | 0.0004 | 0.0002 | 0.0219 |
| CLIFF | -0.0072 | 0.0038 | 0.0559 | -0.0004 | 0.0002 | 0.0846 | -0.0004 | 0.0002 | 0.0556 |
| DEBT | 0.0144 | 0.0055 | 0.0087 | 0.0060 | 0.0024 | 0.0126 | 0.0070 | 0.0022 | 0.0013 |
| SIZE | -0.0813 | 0.0121 | 0.0000 | -0.0877 | 0.0083 | 0.0000 | -0.0868 | 0.0068 | 0.0000 |
| FAMILY | -0.1524 | 0.0455 | 0.0008 | -0.1335 | 0.0310 | 0.0000 | -0.1438 | 0.0256 | 0.0000 |
| STATE | 0.4914 | 0.0770 | 0.0000 | 0.3739 | 0.0541 | 0.0000 | 0.4196 | 0.0441 | 0.0000 |
| CODE | -0.8612 | 0.0419 | 0.0000 | -1.0769 | 0.0295 | 0.0000 | -0.9916 | 0.0239 | 0.0000 |
| Likelihood ratio test | | 536.9 | 0.0000 | | 1,575 | 0.0000 | | 2,071 | 0.0000 |
| Wald test | | 547.8 | 0.0000 | | 1,593 | 0.0000 | | 2,111 | 0.0000 |
| Score (logrank) test | | 577.8 | 0.0000 | | 1,731 | 0.0000 | | 2,264 | 0.0000 |
| R-squared Cox-Snell | | | 0.1372 | | | 0.1875 | | | 0.1685 |
| Concordance | | | 0.6270 | | | 0.656 | | | 0.646 |

Source(s): Authors' elaboration

results indicate that women seem to be less influenced by a company's financial standing when deciding whether to remain on or leave the board. This suggests potential gender-based differences in risk perception, as the financial status of a company appears to have a reduced effect on women's likelihood of board departure compared to their male counterparts, which calls into question the glass cliff theory. Thus, our hypotheses regarding differences in board tenure between men and women were not supported by the empirical findings. However, the study identifies other significant factors that influence board tenure, such as regulations, company size, and shareholder ownership.

The study has several implications for research and practice. It suggests that while the glass cliff phenomenon may not be present in the Polish capital market, the dynamics of board member tenure are complex and influenced by a variety of factors, necessitating further research to understand these mechanisms. Knowledge about these factors has implications for the development of recruitment policies. Our research provides arguments in the discussion about gender equality in leadership positions. The results might be useful for policymakers who promote gender-board diversity. The study might contribute to overcoming stereotypes about women in top management positions and fostering more inclusive attitudes in society.

Our research has several important limitations. First, the sample consists solely of observations from Polish companies, which may limit the generalizability of the findings to an international context. Additionally, our analysis did not account for factors such as board culture, leadership style, or interpersonal relationships, all of which could significantly influence board tenure. We also did not examine individual characteristics of board members, such as education, age, work experience, or specific roles held on the board. Furthermore, the study does not explore the circumstances surrounding board members' departures from corporate governance boards. While these limitations may affect the results and their interpretation, they also highlight appealing areas for future research.

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Further reading

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