Determinants of the impact of ESG policy and corporate governance on employee rights

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Abstract: *To comply with international development trends in recent years, Taiwanese government agencies have formulated environmental, social, and governance (ESG) legal policies and strengthened publicity for listed firms to prepare sustainability reports. Government agencies are trying to use ESG legal policies to gradually guide firms to take environmental, social, and governance measures and move toward sustainable operations. However, employee rights were easier for firms to ignore in the past, so paying attention to the correlation between employee rights and organizational governance is necessary. This paper aims to analyze the relationship between the organizational governance and employee turnover rate of Taiwanese food firms in the ten years from 2011 to 2021 through a panel regression model. The results show that there is a U-shaped relationship between board size and employee turnover. There is an inverted U-shaped relationship between the development of major shareholders' shareholding and the strength of human resources. The research results show that organizational governance is significantly related to employee turnover. Finally, this paper believes that paying attention to human resources will contribute to the sustainable development of enterprises. Therefore, in terms of organizational governance policies, although government agencies have formulated relevant reference standards, firms should have functions more conducive to developing human resource measures. These functions include utilizing the guiding energy of the board of directors functions, and shareholding structure design, which will further help the stable development of human resources. Firms need high-quality human resources to make breakthroughs in technology or the market. Therefore, when firms cultivate high-quality human resources, they not only rely on employee welfare conditions but consider long-term organizational governance and human resource development as necessary planning conditions. These factors will drive firms to have the ability to break through the status quo, value all stakeholders, and create an attitude toward sustainable business development.*

Keywords: *Organizational finance, board size, R&D intensity, sustainable.*

JEL Classification: *C23, D24, G21.*

APA Style Citation: Li, C.-M., & Lee, J.-M. (2024). Determinants of the impact of ESG policy and corporate governance on employee rights. *E&M Economics and Management*, *27*(1), 108–120. https://doi.org/10.15240/tul/001/2024-1-007

Introduction

In recent years, firms' practice of environmental, social, and governance (ESG) has attracted global attention. Pursuing employee turnover is indeed an essential key factor for firms to pursue sustainable development. Employees are essential assets of the firm. Employees and the firm have an employment contract, and each has rights and obligations. In addition to workability, the firm's expectations for employees include work attitudes such as loyalty. However, belief does not only come from salary and welfare conditions. Firms must treat employees well and gain their trust in exchange for commitment and reduce employee turnover. If the firm cannot meet these needs, talent will flow, increasing the firm's recruitment and training costs and causing problems such as the inability to accumulate experience. Therefore, in addition to complying with labor protection and welfare measures stipulated in national laws and regulations, firms should also respect the rights of employees.

In recent years, corporate social responsibility has gradually received international attention, including non-financial management elements such as environmental management, employee care, corporate governance, supplier management, and risk management in social welfare activities and corporate operations. Therefore, Taiwan's competent authorities issued the "Corporate Social Responsibility Best Practice Principles for Listed Firms" in 2022 to guide Taiwan's listed firms in practicing corporate social responsibilities and implementing honest operations. In 2021, the competent authority issued the "Taiwan Stock Exchange Corporation Rules Governing the Preparation and Filing of Sustainability Reports by Listed Firms," requiring the food industry and catering revenue to account for more than 50% of their total operating revenue, the financial sector, and the chemical industry. The "Sustainable Development Best Practice Principles for Listed Firms" was released in 2022 (Taiwan Stock Exchange, 2021, 2022a, 2022b).

Regarding legal policy, Taiwan's competent authorities have strengthened firms' standards for caring for employees' rights through corporate sustainable development measures. At present, most legal policies are based on soft law. The competent authorities believe that if challenging, complex rules are directly applied to firms, it may lead to the risk of infringing on the firm's freedom of operation and causing a rebound effect on the firm. Therefore, in addition to regulating mandatory disclosure in some industries, the current legal policy encourages regulations for other industries. Thus, the corporate sustainability report discloses the firm's equal human resources structure, employee benefits, career development and training, occupational health and safety, occupational safety system, to enhance the transparency of employee relationship information.

This paper suggests that firms should engage in higher-standard employee care measures and even voluntarily incorporate employee rights and welfare measures into the firm's legal policies and guidelines. We believe that it will have a synergistic positive impact on the firm. On the one hand, the firm has taken a voluntary attitude and higher standards to formulate its ESG legal policy. On the other hand, it creates high trust in the corporate image among all stakeholders.

In terms of management implications, ESG policies and corporate governance have an impact on strengthening employee rights, especially on employee turnover. We believe the firm has robust R&D technology, financial capabilities, and other competitiveness. Still, a brain drain crisis will affect the firm's competitiveness if it cannot take care of employee rights. Therefore, implementing ESG policies will help make the firm more competitive, generate more operational synergies, and strengthen employee centripetal force, in addition, regarding the design of corporate governance measures, such as the size of the board of directors, the shareholding attitude of major shareholders, and the soundness of corporate governance. Management should not only consider the firm's profit factors but also care about the rights of employees. It also helps the firm retain talents and have solid human resources.

De Lucia et al. (2020) argue that growing awareness of climate change and human capital issues are turning firms beyond traditional financial gains. In particular, changes in global society's behavior towards sustainability issues and the availability of ESG indicators attract investors to make socially responsible investment decisions. In the past, firms only paid attention to corporate profits and seemed to care little about employee turnover. Therefore, many firms cannot effectively develop the value of human resources. Lo and Liao (2021) guide on strengthening human resource management, rather than short-term financial performance, to help century-old businesses achieve sustainable development. In Taiwan, in recent years, the public has been very concerned about the corporate social responsibility attitude of the food firms. Due to the high mobility of human resources in the food firms, how to use the corporate governance mechanism to help the employee turnover is indeed an essential part of the food firms.

In particular, organizational governance significantly impacts corporate management policies. However, in the past, the literature has attached great importance to the relationship between business performance and equity structure. Singh et al. (2018) showed that ownership structure significantly impacts organizational performance. Chiu et al. (2021) showed that turnover rate had a significantly inverted U-curve relationship with innovation and suggested that firms should find a balanced value for their turnover rate to get the highest return on innovation. This paper focuses on organizational governance and human resource stability, exploring the critical factors of human resource stability in food firms. It further explores the nonlinear relationship between organizational governance and human resource stability. Grossman (2010) examines the impact of corporate governance on organizational employment stability and shows that firms whose boards consist of a more significant proportion of independent or outside directors have lower levels of overall employment stability. Harsch and Festing (2020) explain that talent management differs in terms of size, age, structure, industry, and ownership. As a result, they identified different types of dynamic talent management capabilities promoting organizational agility to various extents.

The search for a relationship between ESG criteria and corporate management is more and more important. ESG is of great significance to the development of food firms, especially since the shareholding structure of food firms faces many challenges because the shareholding structure of the food firms may focus on the creation of firm value and return to shareholders. However, considering the importance of R&D innovation policies in food firms, human resources are an essential factor that cannot be ignored.

Han and Kim (2021) find that firms with high employment stability maintain significant cash holdings for R&D intensive firms and firms with high firm-specific human capital. These results are consistent with a theory predicting that firms hold cash to indicate the credibility of their employment policies concerning job security. This paper adopts the dynamic panel model method to explore the relationship between human resources and organizational governance in food firms from 2011 to 2021. It examines the impact of human resources on R&D innovation policies. Our findings suggest that human resource stability exhibits a U-shaped relationship with board organization. However, there is an inverted U-shaped relationship between the strength of human resources and the shareholding of significant shareholders. In addition, there is a negative relationship between employee turnover and R&D innovation. Wang and Yan (2022) show that employee quality has positive externalities on future financial performance and firm value. Hrazdil et al. (2021) find that firms strategically engage in CSR practices to retain employees. Dore (2005) investigates the reformers of corporate governance in Japan and Germany; their purport has more favoring shareholders at the expense of employees. Cho (2005) shows that corporate governance provides an appropriate starting point for developing policies to build an efficient human resource management system.

Abe (2002) focuses on the influence of corporate governance structures on employment adjustment in Japanese firms and indicates that corporate governance structures affect employment adjustment, especially the presence of large stockholders slows down the speed of employment adjustment. Chen and Kao (2022) showed that firms with more women directors tend to implement less downsizing and such a talent-retaining strategy benefits firm performance. Abe and Shimizutani (2007) examine how board ownership structures reduce labor costs when firms face excess employment and find that outside directors are more inclined to implement layoffs or early retirement. Muthusamy et al. (2011) argue the role employees are supposed to play in firm governance and employee participation in corporate decision-making augments firm performance and limits corporate excesses.

Croucher and Miles (2010) question whether current corporate governance initiatives are adequate to promote employee interests and conclude that more stringent regulation is required for firm governance. Bernacchio (2015) considers employee programs to be a means of implementing a practice-based corporate governance model. Villiers (2021) highlights that corporate governance has a role in ensuring workers’ needs are met; there is tension between the goals of any reforms in corporate governance and worker. The article examines the changes in ownership and corporate governance that have affected industrial relations systems and findings that institutional no-stability in industrial relations. Roberts and van den Steen (2001) discuss that the attractiveness of shareholder-dominated governance depends on the extent to which workers' interests are protected by outside employment options. Michie and Oughton (2002) argue that the development of corporate governance and legal structures facilitates the combination of employee ownership. The article of Kocmanová and Šimberová (2014) contributes to the effort of ESG to measure corporate sustainability. Campbell et al.'s (2012) findings show managers should focus on tailoring compensation packages to help high-performing individuals in knowledge-intensive settings.

Werner et al. (2005) show that there is significant pay sensitivity between employees with the ownership structures. John and Senbet (1998) argue that the independence of the members of the board size determines the effectiveness of the board of directors. Fama and Jensen (1983) pointed out that the board of directors is not only an important firm's managerial mechanism, but the board will also affect the firm's effectiveness in terms of R&D innovation. Han and Kim (2020) find that employment stability is positively correlated with innovation output, and the findings suggest that employment stability enhances employee incentives to innovate by providing tolerance for failure. Based on a job demand-resource model, Montani et al. (2020) argue that this indirect relationship exhibits an inverted U-shaped pattern, where moderate workloads are most likely to benefit innovative behaviors. The related literature for this paper is listed in Tab. 1.

This paper organizes relevant literature in Tab. 1. From the literature, we sort out the core discussion aspects, including financial policy, ownership of corporate governance, and R&D innovation. We expected the possible impact on employee turnover by discussing these aspects in the past literature.

1. Theoretical background

This paper builds on the corporate governance of ownership, R&D innovation, and firm characteristics. From the perspective of corporate governance mechanisms and employee turnover, we discuss the controversies that are different from the previous literature. The article draws on debates on inverted U-shaped relationships, board size, and employee turnover. The paper extends the corporate governance literature to consider the governance effects of employee turnover, incentives, and ownership. As a result, we can formulate the research hypotheses:

H1: ESG policies focus on employee welfare measures, this paper believes that high-level employee welfare measures can help reduce employee turnover.

H2: From the perspective that the central decision-makers of corporate governance measures are board members, this paper

Tab. 1: Review of the organizational governance and the human resources

Literature (author)	Point of view	Empirical results	Expected results of the paper
(Lo & Liao, 2021)	Financial	−	+/−
(Tabassum & Batsakis, 2018)	Ownership structure	+	+
(Chiu et al., 2021)	Innovation	+/−	+/−
(Grossman, 2010)	Ownership structure	+	+/−
(Harsch & Festing, 2020)	Ownership structure	+/−	+/−
(Han & Kim, 2021)	Cash holdings	+	+
(Han & Kim, 2020)	Innovation	+	+
(Montani et al., 2020)	Innovation	+/−	+

Note: This paper was compiled with reference to the above-mentioned literature.

Source: own

believes that changes in board size will affect employee turnover.

H3: From the perspective of corporate governance, which mainly regulates the shareholding objects of major shareholders, this paper believes that changes in the shareholdings of major shareholders will affect changes in employee turnover.

H4: From the perspective of changes in business scale, this paper explores the phenomenon of different employee turnover in firms of different sizes.

H5: The firm's investment in R&D and innovation helps reduce employee turnover.

H6: From the perspective of firm financial measures, this paper believes that stable financial capabilities will inhibit employee turnover.

2. Research methodology

In Tab. 2, we introduce the types of research sample firms. In terms of sample selection, this paper mainly considers Taiwan's ESG policy, which attaches great importance to the food industry related to food safety issues. Therefore, we chose listed firms for research samples. Secondly, the original sample scope of this paper included 28 food firms, but considering the completeness of the data, we finally

Tab. 2: Sample firm introduction – Part 1

Sequence	Company name	Type of company	Founding date
1	Wei Chuan Foods Corporation	Listed firm	1953/9/22
2	Ve Wong Corporation	Listed firm	1959/7/4
3	Great Wall Enterprise Co., Ltd.	Listed firm	1960/12/28
4	Oceanic Beverages Co., Inc.	Listed firm	1965/7/24
5	Charoen Pokphand Enterprise (Taiwan) Co.	Listed firm	1977/8/22
6	Uni-President Enterprises Corp.	Listed firm	1967/8/25
7	AGV Products Corp.	Listed firm	1971/6/26
8	Taisun Enterprise Co., Ltd.	Listed firm	1960/10/21
9	Fwusow Industry Co., Ltd.	Listed firm	1955/2/7
10	Tairoun Products Co., Ltd.	Listed firm	1969/3/13
11	Formosa Oilseed Processing Co., Ltd.	Listed firm	1986/4/18
12	Standard Foods Corporation	Listed firm	1986/6/6
13	Lien Hwa Industrial Holding Corp.	Listed firm	1955/7/20
14	Lian Hwa Foods Corp.	Listed firm	1970/7/7
15	TTET Union Corp.	Listed firm	1982/5/24
16	Ten Ren Tea Co., Ltd.	Listed firm	1975/12/11
17	Hey-Song Corp.	Listed firm	1969/12/13
18	Shin Tai Industry Co., Ltd.	Listed firm	1972/11/15
19	Hunya Foods Co., Ltd.	Listed firm	1976/6/14
20	Sunjuice Holdings Co., Limited	Listed firm	2010/1/12
21	Kee Song Bio-Technology Holdings Limited	Listed firm	2010/5/11
22	Tehmag Foods Corporation	Listed firm	1989/6/29
23	Namchow Holdings Co., Ltd.	Listed firm	1950/6/30
24	Taiyen Biotech Co., Ltd.	Listed firm	1995/7/1
25	Chung Hwa Food Industrial Co., Ltd.	Listed firm	1980/5/8

Tab. 2: Sample firm introduction – Part 2

Sequence	Company name	Type of company	Founding date
26	Taiwan Fructose Co., Ltd.	Listed firm	1984/7/25
27	Forg Innovation Co., Ltd.	Listed firm	1990/10/16
28	GeneFerm Biotechnology Co., Ltd.	Listed firm	1999/07/17

Source: own (compiled with reference to the websites of various companies)

had 28 food firms as the research sample of this paper.

The model follows Fama and Jensen (1983) and Chiu and Fonda (2021) and uses the panel data model to estimate the degree of relationship between organizational governance and employee turnover during the decade 2011–2021 period as follows:

$$HR_{it} = \beta_{1i} R\&D_{it} + \beta_{2i} FP_{it} + \beta_{3i} BZ_{it} + \\ + \beta_{4i} MS_{it} + \beta_{5i} EB_{it} + \beta_{6i} BS_{it} + \varepsilon_{it} \quad (1)$$

As to employee turnover (HR_{it}), we use independent variables, including firm research ($R\&D_{it}$), free cash flow ratio (FP_{it}), board size (BZ_{it}), major shareholder holdings (MS_{it}), the employee benefits (EB_{it}), and firm asset (BS_{it}). In order to investigate organizational governance and the employee turnover, this paper elaborates on the log equation as follows. Further, we use a quantitative regression model, and further predict the end of the data distribution:

$$\min_{\beta} \left[\sum_{y_i \geq \beta x_i} \alpha |y_i - \beta x_i| + \sum_{y_i < \beta x_i} (1-\alpha) |y_i - \beta x_i| \right] (2)$$

Koenker and Bassett (1978) propose the analytical method of quantitative regression, and the concept of component regression is derived from the least absolute deviation. This paper notes that if the observed value βx_i is less than the estimated value y_i, then the weight is $1 - \alpha$. Thus, we obtain a vector of a set of parameters β to obtain the minimum value for the weighted sum of the absolute values of the error terms. The α is the size of the component, and its value is between 0 and 1 ($0 < \alpha < 1$). If α is 0.5, then the component regression is the median regression.

3. Research results

Tab. 3 reports the descriptive statistics of the firm human resource mobility and R&D innovation policy. The degree of human resource mobility is between 0.000% and 92.860%, indicating a significant difference in human resource mobility.

The R&D innovation policy ranges from 0.000% to 32.270%, revealing the massive difference in the degree of R&D innovation among firms. Board sizes range from 6 to 18 people, which means that firms have different levels of board size and should place various levels of emphasis on human resources.

In the past, most discussions on the turnover rate focused on the relevance of human resources conditions. However, when the generation of ESG emphasis has arrived, it is necessary to rethink the relationship with the turnover rate from the perspective of ESG. ESG is not only about the firm's operating performance but also about using the spirit of ESG to change the firm's overall corporate culture and contribute to its sustainable development. In particular, it is observed through this paper that the turnover rate of the food industry varies greatly among firms. First of all, this paper considers that the food industry's turnover rate is 0.000% and 92.860%. It is believed that the equity structure and the degree of R&D innovation may affect the firm's turnover rate.

Secondly, why the turnover rate needs to be re-discussed because human resources have a significant impact on traditional industries, but it seems that it is not enough to explore the scope of the discussion only from the external factors. Corporate governance structure impacts the firm's operations significantly. Therefore, from the perspective of the different characteristics of the ownership structure, for example, the size of the board of directors in the food industry ranges from 6 to 18 board members, capturing the factors that affect turnover will help the industry think about the optimal design of the ownership structure.

Finally, the degree of R&D innovation has become a critical factor in the development of firms. Still, many firms have realized that in addition to the degree of R&D innovation, how to shape long-term human resources may be a more critical factor for discussion. Because of having long-term human resources. Advantages are also reflected in the sustainable development of R&D and innovation.

3.1 Panel regression model

This paper has examined employee turnover and the degree of organizational governance effect by a panel of 28 Taiwanese food firms over the period 2011–2021. Our central estimates rely on data from TEJ sources (Taiwan Economic Journal (TEJ) database). We apply the panel regression model and present the results in Tabs. 2–3 to compare the estimates of the pooled model by OLS, taking into account board size and significant shareholders' shareholding as two organizational governance indicators.

It can be seen from Tab. 4 that the board size (−3.563) and the square term of the board size are significantly correlated with employee turnover (0.166). This means that the participation of the board size contributes to the stability of the firm's human resources. The employee turnover has a U-shaped relationship with the board of directors, which shows that a considerable board size will affect employee turnover. In addition, financial stability (−0.016), the degree of R&D innovation (−1.024), and employee welfare (−0.371) have a "–" relationship with the strength of human resources. Therefore, it shows that the firm's financial stability, the degree of R&D innovation, and employee welfare measures will affect the development of human resources.

The scale development of the board of directors has far-reaching significance in that it has affected the growth and stability of human resources. This paper found that the size of the board of directors has a U-shaped relationship with the turnover rate, indicating that the expansion of the board of directors has a significant positive relationship with human resources, which means that the development of the board of directors is not just an increase in the number of board members, but more importantly, it has a more significant impact on human resources. Therefore, this paper reminds us that the scale development and diversity of the board of directors will have a certain degree of influence on human resources with emphasis on attitude, no matter of the firm's development strategy, human resources development, soundness of the firm's operating system, etc., so the stability of human resources will be different qualitatively due to the factors of the ownership structure. In other words, the future development of the board of directors in the territory should not only focus on the business operation but also the core influencing factor to drive high-quality human resources.

The impact of the size of the board of directors on different degrees of human resources has been, according to the authors' belief, rarely discussed in the literature. Still, its importance deserves to be addressed, especially when the size of the board of directors is only

Tab. 3: Summary statistics of human resources and organizational governance

	Std. dev.	Min	Max
Employee turnover (*HR_{it}*)	11.757	0.000	92.860
Firm research (*$R\&D_{it}$*)	2.701	0.000	32.270
Free cash flow ratio (*FP_{it}*)	72.614	−715.040	571.420
Board size (*BZ_{it}*)	2.244	6.000	18.000
Major shareholder holdings (*MS_{it}*)	15.304	5.960	86.080
Employee benefits (*EB_{it}*)	23.635	2.270	255.480
Firm asset (*BS_{it}*)	1.446	11.998	20.057

Source: own (based on Taiwan Economic Journal (TEJ) database; 2019) in a small-scale type. The board of director members may only pay attention to business performance issues but do not pay attention to the importance of human resources. Therefore, members of the board of directors will not highly professionally conceive the future development of human resources, and it is more likely that the size of the board of directors will stay in a small-scale type, losing the importance. When board members think with self-interest as the core and do not expect to expand the board's scope, the possibility of affecting human resources will be enormous.

Tab. 4: Results of parameter estimation of board size for POLS models

	Coefficient (standard errors)	*p*-value
Const	58.841*** (14.740)	0.000
Firm research ($R\&D_{it}$)	−1.024*** (0.358)	0.004
Free cash flow ratio (FP_{it})	−0.016** (0.007)	0.046
Board size (BZ_{it})	−3.563** (1.614)	0.028
Board size (BZ_{it})^2	0.166** (0.073)	0.024
Employee benefits (EB_{it})	−0.371*** (0.138)	0.008
Firm asset (BS_{it})	−1.371*** (0.526)	0.009

Note: Dependent variable: employee turnover (HR_{it}); *** and **indicate significance at the 0.01 and 0.05 levels, respectively; data in brackets are standard errors.

Source: own (based on Taiwan Economic Journal (TEJ) database; 2021)

It can be seen from Tab. 5 that the major shareholders' holding (0.360) and the square term of the major shareholders' holding are significantly correlated with employee turnover (−0.006). This means that the majority shareholder's holding contributes to the firm's human resources stability. The strength of human resources has an inverted U-shaped relationship with the major shareholder holdings, which shows that expanding the major shareholder holdings will contribute to employee turnover.

Major shareholders' holding affects employee turnover, and significant shareholders' holding attaches great importance to human resources, contributing to the long-term stability of human resources. Therefore, major shareholders can implement ESG policies and attach importance to human assets, enhancing firms' sustainable development.

This paper found that the manager's shareholding ratio has an inverted U-shaped relationship with the turnover rate. On the one hand, it considers the firm's professional management; on the other hand, it pays attention to the long-term human resources development. This paper believes that the expansion of the manager's shareholding affects the turnover rate because the manager's operation management has already had a qualitative change. When the manager's shareholding ratio is too large due to the relationship of personal interests, the manager focuses on the firm's profit more than the stability of human resources and even invests in long-term human resource development without planning. Therefore, the manager's shareholding will be an observation indicator; further thinking about how to have appropriate managers holding shares belonging to the firm's owner should be conceived of as significant issues.

Tab. 5: Results of parameter estimation of major shareholder holdings for POLS models

	Coefficient (standard errors)	*p*-value
Const	33.773***	0.007
	(12.542)	
Firm research (*R&D*$_{it}$)	−1.042***	0.005
	(0.371)	
Free cash flow ratio (*FP*$_{it}$)	−0.016**	0.037
	(0.007)	
Board size (*BZ*$_{it}$)	0.360**	0.035
	(0.169)	
Board size (*BZ*$_{it}$)^2	−0.006**	0.010
	(0.002)	
Employee benefits (*EB*$_{it}$)	−0.437***	0.002
	(0.138)	
Firm asset (*BS*$_{it}$)	−1.660***	0.002
	(0.529)	

Note: Dependent variable: employee turnover (HR_{it}); *** and ** indicate significance at the 0.01 and 0.05 levels, respectively; data in brackets are standard errors.

Source: own (based on Taiwan Economic Journal (TEJ) database; 2021)

3.2 Panel quantile regression model

The empirical results of the panel quantile regression model (Tab. 6) showed that firms with high employee turnover in the food firms had a significant "−" correlation with financial stability (−0.029), the board size (−1.130), and employee benefits (−0.683). Implicitly, these factors influence high employee turnover.

For the food firms to effectively reduce high employee turnover, factors such as financial soundness, board size, and employee benefits should be strengthened. Businesses are characterized by low employee turnover and are also very important for financial stability, board size, and employee benefits. Therefore, when a firm faces the problem of high employee turnover, it should examine its management mechanism from the above point of view.

Through the effect of firm scale, this paper finds that different scale effects impact human resources differently. Small-scale firms have a significant positive relationship with the turnover rate. However, a negative correlation exists between firm size and employee turnover, indicating that different firm sizes affect employee mobility. Large-scale firms pay attention to the attitude of human resource development and have system and planning capabilities compared with small-scale firms.

From the effect of scale, this paper found that financial soundness impacts human resource development, indicating that employees attach importance to corporate financial capabilities. Whether a small-scale or large-scale firm, the employee turnover rate is consistent with the effect of financial soundness indicators.

Secondly, this paper found that the size of the board of directors of large firms has a significant inverse relationship with the turnover rate, indicating that the board of directors of large firms is committed to human resource development, and the size of the board of directors affects

Tab. 6: Results of quantile estimates

Variables	Const	RD	FP	BZ	MS	EB	BS
OLS	54.219***	−1.555***	−0.033***	−1.129***	−0.049	−0.705**	−1.904***
	(7.232)	(0.345)	(0.008)	(0.273)	(0.0408)	(0.341)	(0.440)
0.1	4.300***	−0.060	−0.017***	−0.288***	−0.002	−0.581***	0.268***
	(3.454)	(0.108)	(0.003)	(0.130)	(0.019)	(0.160)	(0.210)
0.2	17.871***	0.103	−0.020***	−0.556***	−0.005	−0.691***	−0.237
	(5.625)	(0.176)	(0.006)	(0.212)	(0.031)	(0.265)	(0.342)
0.3	20.806***	0.298***	−0.027***	−0.702***	0.007	−0.414***	−0.295***
	(3.767)	(0.117)	(0.004)	(0.142)	(0.021)	(0.178)	(0.229)
0.4	28.678***	0.023	−0.025***	−0.767***	−0.007	−0.304***	−0.655***
	(4.570)	(0.143)	(0.005)	(0.172)	(0.025)	(0.216)	(0.278)
0.5	33.920***	−0.077	−0.026***	−0.753***	−0.023	−0.316***	−0.861***
	(4.894)	(0.153)	(0.0051)	(0.184)	(0.027)	(0.231)	(0.298)
0.6	37.317***	0.506***	−0.033***	−0.718***	0.027	−0.316**	−1.126***
	(5.401)	(0.169)	(0.006)	(0.203)	(0.030)	(0.255)	(0.329)
0.7	52.894***	0.437**	−0.028***	−0.878***	−0.015	−0.196	−1.791***
	(8.901)	(0.278)	(0.010)	(0.335)	(0.049)	(0.420)	(0.542)
0.8	67.214***	0.315	−0.024***	−1.058***	−0.046	−0.066	−2.392***
	(10.561)	(0.330)	(0.011)	(0.398)	(0.059)	(0.499)	(0.643)
0.9	86.386***	−0.045	−0.029***	−1.130***	−0.033	−0.683***	−3.044***
	(9.594)	(0.300)	(0.010)	(0.361)	(0.053)	(0.453)	(0.584)

Note: ** and *** denote 5% and 1% significance levels, respectively.

Source: own

the major development factors of human resources in the future. On the contrary, small firms must conceive how to play the effect of the board of directors on human resources and establish the degree to which board members attach importance to human resources.

Furthermore, this paper observes that under different scales, the impact of R&D innovation on the turnover rate is less consistent, which means that the effect of R&D innovation on human resources needs to consider the relevance of different levels. Finally, the employee benefits of large and small firms have a negative relationship with the turnover rate, indicating that employee benefits help reduce the turnover rate. However, in terms of management implications, business owners must consider the long-term stability of human resources; how to establish an environment conducive to the development of human resources in the long term is an urgent issue, including the development of equity structure, human resource planning, and the degree of R&D innovation. Because of these factors, it may be a measure of human resources in the future. Employees can observe these indicators as the conditions for choosing a firm suitable for long-term development. Therefore, the environment in which firms only pay attention to employee welfare conditions has passed. They should have long-term plans and goals for the environment mentioned above to meet the new operating environment that requires human resources.

The authors of this paper believe that for firms, ESG policies will put the concept of sustainable development into practice in their management mechanisms. The shareholding structure significantly impacts the implementation of ESG policies, especially since the board of directors can influence the firm's ESG policy. Therefore, the size of the board of directors and the shareholding factors of major shareholders have been discussed in much literature in the past. Stock factors also have a positive or "−" impact on business performance.

However, the ESG policy emphasizes how the firm can develop sustainably, among which human resources have become vital to the firm's sustainable development. Through this paper, it is found that the expansion of the board of directors has an inverted U-shaped relationship with employee turnover, and the development of significant shareholder holding has an inverted U-shaped relationship with the strength of human resources. In terms of policy implications, the organizational governance of a firm affects not only the firm's business performance but also its human resources' stability.

Primarily, when a firm pursues the goal of sustainable development, it must have stable human resources to achieve the purpose of sustainable development. Therefore, when a firm develops its shareholding structure, it must also evaluate the impact on human resources. Firms attach great importance to human resources, and employees can develop innovative R&D technologies required by firms under a sound firm mechanism or assist firms in implementing environmental protection measures and other tasks. Therefore, firms can solve more problems for society and produce benefits that benefit the community.

This paper further compares and discusses relevant literature. For the corporate ownership part, this paper found that corporate ownership impacts employee turnover. Harsch and Festing (2020) explain the relationship between human resources, size, and ownership. The difference, with the same point of view, is that employee rights and interests will differ due to ownership and other factors.

In the R&D innovation part, this paper found that R&D innovation impacts employee turnover. This result is consistent with Han and Kim (2020, 2021) research results that high employee stability positively correlates with high R&D innovation.

This paper found that corporate financial policies have an impact on employee turnover, which is consistent with Wang and Yan (2022), who showed that financial policies affect human resources.

In addition, the shareholding of large shareholders impacts employee turnover, which is consistent with the research finding of Abe (2002), who found that large shareholders can reduce employee turnover.

Since corporate governance attaches great importance to the function of the board of directors, the board size, as found in this paper, impacts employee turnover. This paper emphasizes the importance of the board of directors, and this result is consistent with Villiers' (2021) emphasis on corporate governance's function in ensuring that labor needs are met.

This result is consistent with John and Senbet (1998), who agree that board effectiveness depends on the independence and size of board members. In addition, Cho (2005) showed that corporate governance provides an appropriate role in formulating policies to establish an effective human resource management system, which is also the core value expression of this paper's emphasis on corporate governance.

Finally, this paper found that employee benefits impact employee turnover. This result is consistent with the research results of Campbell et al. (2012) and Werne et al. (2005), indicating that employee benefits impact employee turnover.

Conclusions

Firms have already recognized sustainable development from the perspective of the global development of ESG policies, and corporate profit is not the only goal. More importantly, it is necessary to integrate ESG policies into the business concepts, and attaching importance to human resources is an essential foundation. From the development of organizational governance, through empirical results, it is found that the size of the board of directors has a U-shaped relationship with employee turnover, which means that appropriate board size has a significant relationship with human resources.

However, when the board of directors is too large, it may affect the employee turnover. It is worthwhile for firms to consider the size of the board of directors, and attention should be paid to the influencing factors of human resources. The proportion of shares held by principal shareholders also has a significant relationship with the development of human resources. The attitude of major shareholders' holding influences employee turnover, not just focusing on corporate profits.

Through the panel quantile regression model, this paper finds that firms are characterized by high employee turnover, their R&D innovation capabilities will be hindered, and firms' poor financial policy performance is also a concern for employees. Firms with reasonable employee welfare measures are still valued by their employees. Therefore, a stable human resource is a significant asset from the point of view of a firm. Human resources will contribute to the sustainable development of firms. Through human resources, we will practice the business philosophy of firms and solve environmental and social problems with the core value of R&D innovation.

Regarding policy implications, business owners did not pay extra attention to human resources development in the past. In the ESG era, this paper believes that business owners should have new business thinking and know how to use R&D innovation, equity structure, and other-oriented energy, which will further help. The development of human resources will be worthy of the attention of business owners. Due to the traditional nature of the food industry, high-quality human resources are necessary for breakthroughs in technology or the market. To cultivate high-quality human resources, firms should not only rely on employee welfare conditions but should also include conditions such as equity structure development, human resource planning, and the degree of R&D innovation as necessary conditions.

When the ownership structure design can help the development of human resources, it is of great significance to business owners because the representative board of directors has more professional development capabilities for human resource development. Planning drives firms to have the attitude of long-term management of human resources. Changes in these factors will affect the concept of firms' long-term business energy, attach importance to human resources for R&D innovation, and drive firms to have the ability to break through the current situation.

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