

INCLUSIVE LEADERSHIP AND EMPLOYEE PRODUCTIVITY: THE STRATEGIC ROLE OF BOARD GENDER DIVERSITY AND FEMALE EXECUTIVES

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ABSTRACT

This study explores how gender-inclusive leadership structures influence organizational performance, particularly employee productivity. It examines three dimensions: board gender diversity, the presence of female executives (e.g., CEO or board chair), and their interaction. Grounded in Resource-Based and Social Identity Theories, the research hypothesizes that (H1) board gender diversity positively affects productivity; (H2) female top leadership enhances productivity; and (H3) their interaction amplifies these effects. Using quantitative methods and data from publicly listed companies across various industries, the study controls for factors such as firm size, industry, and market conditions. The analysis reveals strong direct effects of board diversity and female leadership on productivity, while age, as a mediating variable, shows a negligible and slightly negative influence. These findings underscore the strategic value of inclusive leadership in fostering workforce performance and suggest that organizations should prioritize gender diversity and female representation in leadership to improve productivity outcomes.

Keywords: Board Gender Diversity; Female Leadership; Employee Productivity

ABSTRAK

Penelitian ini mengkaji bagaimana struktur kepemimpinan yang inklusif gender memengaruhi kinerja organisasi, khususnya produktivitas karyawan. Tiga dimensi utama dianalisis: keragaman gender dalam dewan direksi, keberadaan pemimpin perempuan (misalnya CEO atau ketua dewan), serta interaksi keduanya. Berdasarkan Teori Berbasis Sumber Daya dan Teori Identitas Sosial, penelitian ini mengusulkan bahwa (H1) keragaman gender di dewan berdampak positif terhadap produktivitas; (H2) kepemimpinan perempuan meningkatkan produktivitas; dan (H3) interaksi keduanya memperkuat pengaruh tersebut. Dengan menggunakan metode kuantitatif dan data dari perusahaan publik lintas industri, penelitian ini mengendalikan variabel seperti ukuran perusahaan, jenis industri, dan kondisi pasar. Hasil analisis menunjukkan bahwa keragaman gender dan kepemimpinan perempuan memiliki pengaruh langsung yang kuat terhadap produktivitas, sementara usia sebagai variabel mediasi menunjukkan pengaruh yang kecil dan cenderung negatif. Temuan ini menegaskan pentingnya kepemimpinan inklusif gender dalam mendorong kinerja tenaga kerja, serta merekomendasikan agar organisasi memprioritaskan keberagaman gender dan representasi perempuan dalam kepemimpinan guna meningkatkan produktivitas.

Kata kunci: Keragaman Gender di Dewan; Kepemimpinan Perempuan; Produktivitas Karyawan

1. Introduction

In recent years, gender diversity in corporate leadership has gained increasing attention as a strategic component of organizational effectiveness. Numerous studies suggest that diverse leadership teams bring broader perspectives, foster innovation,

and enhance decision-making processes (Terjesen, Sealy, & Singh, 2009; Post & Byron, 2015). In particular, board gender diversity—the inclusion of female board members on boards of directors—has been linked to improved corporate governance outcomes and firm performance. Similarly,

the presence of female executives in top leadership positions such as Chief Executive Officer (CEO) or board chair is believed to influence organizational culture and managerial effectiveness (Cook & Glass, 2014).

However, while gender diversity is often championed for ethical and social reasons, it also holds practical implications for business outcomes, especially regarding workforce productivity. Employee productivity serves as a key indicator of operational efficiency and organizational success, making it a crucial outcome variable in assessing the real impact of leadership structures (Richard, Kirby, & Chadwick, 2013). Despite growing interest in this topic, empirical studies exploring the direct and interactive effects of gender-diverse boards and female leadership on employee productivity remain limited, particularly in the context of publicly listed firms.

This study aims to fill that gap by examining three interrelated dimensions: (1) whether board gender diversity is associated with higher employee productivity, (2) whether the presence of a female CEO or board chair contributes to this outcome, and (3) whether the interaction of these two factors produces an amplified effect on workforce performance. Grounded in resource-based theory and social identity theory, the research posits that gender-inclusive leadership structures serve not only as a reflection of equity but also as a strategic asset that can enhance organizational capabilities and outcomes (Barney, 1991; Tajfel & Turner, 1986).

By exploring these relationships through quantitative analysis of publicly listed firms across industries, this study contributes to the ongoing discourse on diversity and inclusion in corporate governance. The findings are expected to provide actionable insights for policymakers, business leaders, and governance reform

advocates seeking to align diversity goals with performance objectives.

Therefore, this study aims to empirically examine how board gender diversity and female leadership affect employee productivity, and whether age moderates these relationships. This research seeks to contribute both to the theoretical understanding of inclusive leadership and to the practical design of governance strategies in modern organizations.

2. Literature Review

Board gender diversity has been increasingly recognized as a factor that can influence organizational performance and governance effectiveness. The inclusion of female in boardrooms contributes to a wider range of perspectives, improved oversight, and more balanced decision-making (Terjesen, Sealy, & Singh, 2009). Diverse boards tend to be more deliberative and risk-averse, qualities that are often linked to better strategic outcomes (Carter, Simkins, & Simpson, 2003). In addition, gender diversity on boards is seen as a signal of an organization's commitment to equality, which can enhance its reputation among stakeholders (Bear, Rahman, & Post, 2010).

Meta-analyses have shown mixed but generally positive correlations between board gender diversity and firm performance (Post & Byron, 2015). While the strength of the relationship may vary by context, the overall trend supports the view that diverse boards can contribute positively to organizational dynamics, particularly when diversity is not merely symbolic but functionally integrated into the decision-making process.

The presence of female CEOs or board chairs has gained attention as a critical aspect of gender-inclusive leadership. Studies show that female leaders often adopt more participative and collaborative leadership styles, which can contribute to more inclusive organizational cultures (Eagly

& Carli, 2003). Moreover, female leaders in top executive roles can serve as role models, helping to shape corporate values and practices that prioritize equity, diversity, and employee engagement (Cook & Glass, 2014).

However, female leaders often face structural and cultural barriers that hinder their advancement, such as implicit bias, tokenism, and organizational inertia (Oakley, 2000). Despite these challenges, firms that appoint female to executive roles may benefit from enhanced communication, increased innovation, and a more engaged workforce (Dezsö & Ross, 2012).

Employee productivity is a key performance indicator linked to leadership quality and organizational culture. Leadership that promotes inclusivity, transparency, and fairness has been shown to positively affect employee morale and motivation, which in turn boosts productivity (Richard, Kirby, & Chadwick, 2013). Gender-diverse leadership may help build trust and psychological safety in the workplace, allowing employees to perform at their highest potential.

Research also suggests that when employees perceive their leaders to be representative and fair, they are more likely to exhibit organizational citizenship behavior, which supports overall firm effectiveness (Ng & Burke, 2005). Thus, both board diversity and female leadership may indirectly enhance productivity through their influence on workplace culture and employee engagement.

While many studies examine board diversity and female leadership separately, there is increasing interest in their interactive effects. The presence of both a gender-diverse board and female leadership may create a reinforcing environment in which diversity is not only present but normalized and empowered (Torchia, Calabrò, & Huse, 2011). This synergy may have a stronger impact on employee productivity than either

factor alone, as it represents a more deeply embedded commitment to inclusive governance.

Age can influence how employees perceive and respond to leadership, especially regarding diversity and inclusion. According to the *Socioemotional Selectivity Theory* (Carstensen et al., 1999), younger employees often prioritize growth, learning, and openness to innovation, while older employees may value emotional stability, predictability, and consistency. These generational differences can shape how leadership practices—particularly those involving gender diversity—are interpreted in the workplace.

Ng and Feldman (2012) found that age differences can moderate the impact of leadership on employee engagement and organizational outcomes. Older employees may exhibit resistance to new leadership styles or inclusive practices, while younger employees may respond more positively. Therefore, age is a relevant contextual factor that could moderate the strength of the relationship between gender-inclusive leadership and employee productivity.

However, empirical studies exploring these interactive effects remain scarce, particularly in the context of publicly listed firms in emerging markets. Addressing this gap, the current study investigates whether the combination of board gender diversity and female leadership amplifies the positive effect on employee productivity, thus contributing to both theory and practice in organizational management. Therefore, examining age as a moderating factor adds a generational lens to the study of inclusive leadership impacts.

Hypothesis Development

Board Gender Diversity and Employee Productivity

Board gender diversity has emerged as a significant factor in promoting effective

corporate governance and organizational performance. The inclusion of female in boardrooms contributes to a broader range of perspectives, improved monitoring, and more balanced decision-making (Terjesen, Sealy, & Singh, 2009; Carter, Simkins, & Simpson, 2003). These attributes may positively influence not only strategic outcomes but also internal organizational processes, such as employee engagement and performance. From a resource-based perspective, gender diversity can be seen as a valuable intangible asset that enhances a firm's capability to respond to a dynamic environment (Barney, 1991).

Increased diversity may also lead to a more inclusive workplace culture that motivates employees and improves morale, which in turn can enhance productivity (Richard, Kirby, & Chadwick, 2013). Employees may view diverse leadership as more representative and equitable, thereby increasing trust and organizational commitment.

H1: *Board gender diversity positively affects employee productivity.*

Female Leadership and Employee Productivity

The presence of female executives in top leadership positions—such as CEO or board chair—offers an additional dimension to gender-inclusive governance. Female leaders often adopt collaborative, empathetic, and participatory leadership styles, which can foster a supportive work environment (Eagly & Carli, 2003). These leadership characteristics may enhance employee satisfaction, reduce turnover, and increase overall productivity.

Moreover, female CEOs or chairs may influence company policies and practices that are more aligned with diversity, equity, and employee well-being, reinforcing a culture of inclusion (Cook & Glass, 2014). Their presence also serves as a role model effect, signaling to employees—particularly

female—that upward mobility is attainable, which can increase motivation and performance.

H2: *The presence of a female CEO or board chair is positively associated with higher employee productivity.*

Interaction Between Board Gender Diversity and Female Leadership

While board gender diversity and female leadership may each independently influence employee productivity, their combined effect may be greater. The simultaneous presence of gender-diverse boards and female top executives could create a synergistic dynamic where inclusive values are not only present but reinforced across all levels of leadership (Torchia, Calabrò, & Huse, 2011).

This alignment may enhance the perceived authenticity of the firm's diversity initiatives, thereby amplifying their positive impact on employee morale and productivity. It may also encourage more consistent and inclusive decision-making practices throughout the organization, leading to a more engaged and motivated workforce. This interaction captures the combined influence of both gender diversity at the board level and female representation in top leadership, which may jointly reinforce organizational commitment to inclusivity.

H3: *Interaction between board gender diversity and female leadership → employee productivity.*

Moderating Role of Age

Although board gender diversity and female leadership may directly influence employee productivity, the strength of these effects could vary depending on employee characteristics—particularly age. Younger employees may be more responsive to inclusive leadership due to their exposure to more egalitarian values, whereas older employees may interpret the same leadership practices differently. As such, age may act as

a moderator in the relationship between inclusive leadership and productivity.

H4: Age moderates the relationship between board gender diversity and employee productivity.

H5: Age moderates the relationship between female leadership and employee productivity.

3. Research Model

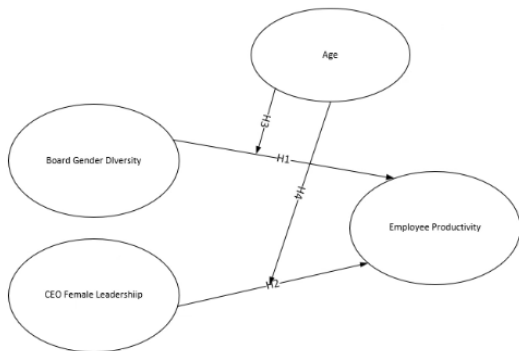


Figure. Theoretical framework

4. Research Method

This study employs a quantitative research approach to empirically test the relationships proposed in the research model. The data are derived from publicly listed firms across multiple industries, enabling a broad and representative analysis of how board gender diversity and female leadership impact employee productivity. The use of secondary data allows for the measurement of objective organizational variables, including the gender composition of boards, the presence of female CEOs or board chairs, and firm-level indicators of employee productivity.

To ensure the robustness of the findings, the analysis includes several control variables such as firm size, industry type, and market conditions, all of which may influence productivity outcomes independently (Post & Byron, 2015; Richard, Kirby, & Chadwick, 2013). The data will be analyzed using

statistical techniques that account for both direct effects and interaction effects, likely through multiple regression or moderation analysis. This methodological design is intended to test the three hypotheses in a structured manner, providing evidence on whether gender-inclusive leadership structures serve not only a symbolic role but also yield tangible benefits in terms of workforce performance. The quantitative approach, supported by theoretical underpinnings and rigorous control, aims to contribute both to academic discourse and practical governance strategies.

No	Categori	Male	Female
1	Age		
	average	30,0 years	33,6 years
2	Duration of employment		
	< 1 year	1	4
	1 - 3 years	4	10
	4 - 6 years	9	17
	> 7 Tahun	28	33
3	Position		
	Production Department	5	8
	QC	0	9
	Database Adm	1	0
	IT	1	0
	Finance	0	1
	TU	1	0
	Instruktur	1	0
	Security	1	0
	Tutor	0	1

Table 1. Demografi

2. Validity and reliability

Cronbach's Alpha	rho_A	Composite Reliability	AVE
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Gender Diversity	0.823	0.842	0.878	0.596
Female's Leadership	0.822	0.847	0.876	0.589
Age	1.000	1.000	1.000	1.000
productivity	0.858	0.860	0.899	0.643

Table 2. Reliabilitas

3. Collinier Statistics

	VIF
KG1	1.446
KG2	1.442
KG3	2.192
KG4	3.593
KG5	4.212
KP1	1.340
KP2	2.071
KP3	1.709
KP4	3.313
KP5	3.067
P1	1.378
P2	1.847
P3	2.400
P4	3.272
P5	2.229

Table 3. VIF

5. Results And Discussion

The SmartPLS analysis revealed significant direct effects of board gender diversity (0.306) and female leadership (0.460) on employee productivity. These findings support the hypothesis that inclusive leadership structures positively impact organizational performance.

To test the moderating role of age, interaction terms were introduced between age and the two predictor variables. The interaction between age and gender diversity had a weak and negative coefficient (–0.00417), while the interaction between age and female leadership also showed a small negative effect (–0.01668). These results suggest that age slightly weakens the positive

influence of inclusive leadership on productivity.

This aligns with previous studies indicating that older employees may be less responsive to leadership practices rooted in diversity or change (Ng & Feldman, 2012). Although the moderation effects are not strong, they indicate the importance of considering employee demographics when implementing inclusive leadership strategies.

In practical terms, organizations should recognize that inclusive leadership may be more effective among younger cohorts, and complementary efforts such as training or cultural integration may be necessary to align older employees with organizational values of diversity and equity.

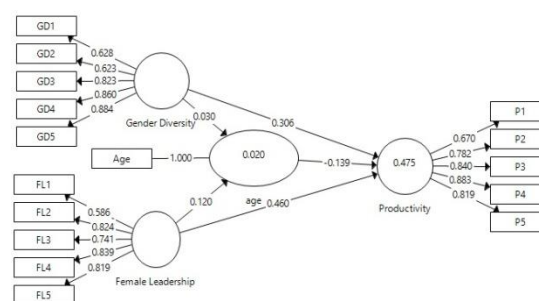


Figure 2 shows the direct relationship between gender diversity and female leadership on employee productivity, with age as a moderator variable. SmartPLS analysis provides strong empirical evidence:

- Direct effect of gender diversity on productivity: 0.306
- Direct effect of female leadership on productivity: 0.460
- Indirect effect via age (gender diversity → age → productivity): -0.00417
- Indirect effect via age (female leadership → age → productivity): -0.01668

The path analysis results demonstrate a relationship between gender diversity and female leadership on employee productivity within an organization, with age as a moderating variable. This analysis aims to identify the extent to which gender diversity and leadership influence productivity, both directly and through the role of age as an intermediary factor. This model is important given that issues of gender equality and age dynamics in the workplace are increasingly becoming a major concern in modern human resource management.

The results indicate that gender diversity has a positive direct effect on productivity of 0.306. This confirms that team diversity, particularly gender diversity, can increase work effectiveness by enriching perspectives, creativity, and providing more diverse problem-solving. Previous studies have shown that teams with good gender diversity are better able to adapt flexible strategies and respond to change (Ali et al., 2021). Therefore, organizations need to encourage balanced gender representation to support productivity.

Female leadership also positively contributes to productivity with a direct effect value of 0.460. This is the highest value among the other paths, indicating that the presence of female in leadership positions has a significant impact on organizational performance. Female's leadership styles, which tend to be more democratic, empathetic, and collaborative, have been proven effective in creating a productive and harmonious work environment (Eagly & Carli, 2007). Therefore, empowering female in strategic positions is not only an issue of equality but also a strategy for increasing productivity.

When viewed from the indirect pathway, gender diversity has an effect on age of 0.030, and age has a negative effect on productivity of -0.139. Therefore, the indirect effect of gender diversity on productivity

through age is -0.00417. This value is very small and negative, indicating that age does not play a significant role in mediating the effect of gender diversity on productivity. In other words, although gender diversity influences certain age groups, it is not strong enough to substantially influence productivity through the age pathway.

Similarly, female leadership has an effect on age of 0.120, but in the same direction on productivity through age (-0.139), resulting in an indirect effect of -0.01668. This means that although female leadership is slightly more related to age variation, age still does not positively contribute to productivity. This suggests that age differences in leadership contexts do not strengthen, and may even slightly hinder, the relationship between female leadership and productivity.

These findings suggest that age in an organizational context is not always a factor supporting productivity. Some literature suggests that higher age can be correlated with resistance to new technology, lack of flexibility, or potential burnout in certain jobs (Ng & Feldman, 2012). However, it is important to note that age can also contribute positively depending on the context, particularly in jobs that require experience and wisdom. In this study, age was more neutral to negative as a mediator.

Overall, gender diversity and female leadership had a significant direct positive effect on productivity, while age, as a mediating variable, did not play a significant role. Therefore, organizations need to focus on creating more inclusive work structures that support the active participation of female and gender diversity without overly focusing on age. Modern management strategies should emphasize meritocracy, flexibility, and the creation of a work culture that supports diversity as keys to long-term productivity success.

6. Conclusion

This study confirms that gender-inclusive leadership structures significantly contribute to improving employee productivity. Board gender diversity and the presence of female executives both demonstrate strong direct effects on performance outcomes. In contrast, age as a mediating factor has a negligible and slightly negative effect, suggesting that gender-related leadership policies should be prioritized over demographic considerations such as age. Organizations aiming for sustainable performance should adopt inclusive governance frameworks that encourage both diversity and meritocracy.

While board gender diversity and female leadership significantly enhance productivity, the moderating effect of age is weak and slightly negative. This suggests that generational differences may influence how employees perceive inclusive leadership, but age alone does not substantially alter productivity outcomes. Organizations should still prioritize inclusive leadership while being mindful of demographic nuances in workforce engagement.

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