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Vertical Gender Segregation in Managerial Employment in Kazakhstan

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Abstract

Vertical gender segregation remains an important dimension of labour market inequality, reflecting differences in women's and men's representation across occupational hierarchies and access to managerial positions. This study assesses vertical gender segregation in managerial employment in Kazakhstan and identifies potential barriers to women's career advancement. The empirical analysis draws on official statistics from the Bureau of National Statistics of Kazakhstan on women's representation among managers in 2019–2024, data on the gender composition of the civil service as of January 1, 2025, and gender-disaggregated wage indicators for 2021–2025. The methodology combines descriptive statistical analysis, comparative assessment of gender representation, calculation of structural disparities, and synthesis of academic literature on career advancement. The findings indicate that women's representation among managers across all sectors declined from 43.0% in 2019 to 41.3% in 2024, despite a partial recovery after 2021. In the civil service, women accounted for 55.82% of total employment but only 39.10% of managerial positions, compared with 62.43% among non-managerial employees. These differences provide evidence of vertical gender segregation but do not independently establish the existence of a glass ceiling. Literature identifies professional specialisation, family responsibility, organisational practices, leadership evaluation, and access to career development opportunities as potential barriers that require further empirical investigation.

Keywords: Glass Ceiling, Gender Segregation, Career Advancement, Gender Inequality, Managerial Employment, Leadership Position, Occupational Inequality

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1. INTRODUCTION

Gender inequality in managerial employment remains a significant challenge for labour market development, organisational governance, and effective human capital utilisation. Although women's participation in professional employment has expanded in many economies, their representation in managerial and decision-making positions does not always correspond to their overall share in the workforce. This discrepancy highlights the importance of examining not only access to employment but also how career opportunities, managerial responsibilities, and organisational authority are distributed between women and men. Vertical gender segregation is particularly relevant in this context because it reflects gender differences in the distribution of employees across occupational hierarchies.

In Kazakhstan, gender representation in managerial employment is closely linked to broader processes of labour market transformation, institutional modernisation, and human capital development. Women's participation in public administration, education, professional services, and other areas of economic activity creates an important foundation for leadership development. Nevertheless, a substantial presence of women in the workforce does not necessarily translate into proportional representation in managerial positions. Differences between the overall gender composition of employment and the structure of managerial personnel therefore require systematic examination using comparable statistical indicators.

The theoretical interpretation of such differences requires a clear distinction between vertical gender segregation and the glass ceiling phenomenon. Vertical segregation describes the unequal distribution of women and men across hierarchical positions. In contrast, the glass ceiling refers to a more specific situation in which relative barriers to women's advancement become stronger at higher organisational levels. Baxter and Wright (2000) and Cotter et al. (2001) emphasise that women's underrepresentation in managerial positions alone cannot confirm the existence of a glass ceiling. Such a conclusion requires information on career transitions, promotion opportunities, and the relative likelihood of advancement across successive levels of management.

Existing research identifies several potential explanations for gender disparities in managerial employment. These include differences in professional specialisation, access to managerial experience, organisational promotion practices, professional networks, family responsibilities, and evaluations of leadership potential (Acker, 1990; Eagly & Karau, 2002; Gorman & Kmec, 2009). Studies conducted in Kazakhstan also highlight the significance of institutional conditions and sociocultural expectations in shaping women's leadership experiences (Kuzhabekova & Almukhambetova, 2017; Kuzhabekova et al., 2018; Kenzheali et al., 2024). However, these mechanisms should not be interpreted as empirically established determinants of managerial segregation without appropriate individual-level observations and statistical testing.

An important methodological challenge is that aggregate employment statistics generally describe the existing distribution of employees rather than the processes through which individuals enter managerial positions. Comparing women's representation in total employment and management can reveal structural disparities. Still, it cannot establish whether these disparities result from differences in qualifications, professional experience, promotion decisions, career interruptions, or other circumstances. Consequently, an empirical assessment of vertical segregation should be distinguished from a causal explanation of career advancement barriers.

This study aims to assess vertical gender segregation in managerial employment in Kazakhstan and identify potential barriers to women’s career advancement. To achieve this aim, the study examines changes in women’s representation among managers across

economic sectors, compares the gender composition of managerial and non-managerial employment in the civil service, and analyses gender wage inequality as a broader indicator of labour market disparities. The study identifies potential barriers to career advancement through a systematic review of existing academic literature. Still, it does not empirically estimate their direct effects because available statistical data are limited.

The study's scientific contribution lies in applying a comparative approach to assessing managerial gender representation in Kazakhstan and distinguishing observable structural disparities from the mechanisms that may generate them. Particular attention is given to comparing women's representation among managers and non-managerial employees within the same institutional population. This approach provides a clearer empirical basis for identifying vertical segregation while recognising the limitations of aggregate statistics for testing the glass ceiling hypothesis. The findings may support the development of more detailed gender-disaggregated personnel statistics and inform further research on equality of career opportunities in Kazakhstan.

2. LITERATURE REVIEW

Women's career advancement occupies a special place in research on gender inequality, since women's relatively high representation in employment does not necessarily mean equal access to managerial positions. When analysing this phenomenon, it is fundamentally important to distinguish between horizontal segregation, vertical segregation, and the "glass ceiling" itself. These concepts describe related but not identical processes. Horizontal segregation reflects the concentration of men and women in different professions and industries, while vertical segregation refers to the unequal distribution across levels of the job hierarchy; the glass ceiling, in turn, implies a specific intensification of relative obstacles as one approaches the upper levels of management.

One of the most rigorous methodological interpretations of the glass ceiling was proposed by Baxter and Wright (2000). The authors emphasise that the smaller number of women among managers is not, by itself, sufficient evidence of such a barrier. To identify it, it is necessary to examine the relative chances of men and women of moving between successive levels of the organisational hierarchy. In other words, the object of analysis should be not only the accumulated workforce, but also the career advancement process itself.

Cotter et al. (2001) formalised this approach even more clearly. According to them, the glass ceiling implies gender inequality that is not fully explained by employees' professionally relevant characteristics, manifests more strongly at higher levels of the career structure, and intensifies as one moves up the career ladder. The authors specifically warn against using the "glass ceiling" metaphor to describe any gender difference in pay or job status. For this study, this distinction is fundamental: the observed underrepresentation of women among Kazakhstani leaders is interpreted primarily as vertical segregation, whereas proving the existence of a glass ceiling requires data on career transitions.

Research on organisational mobility shows that gender-based constraints can arise at different stages of the career ladder. Yap and Konrad (2009), analysing more than 22,000 employees of a large organisation, found that unfavourable differences for women may be particularly pronounced not necessarily at the highest level. The authors distinguish between the "sticky floor," mid-level barriers, and the glass ceiling. This result has methodological significance: if women face limitations already at the first transition from specialist to department head, the subsequent low representation in senior positions is partly the result of an early reduction in the talent pool.

Gorman and Kmec (2009) studied organisational mobility in law firms. They found that, in internal promotions, the gender gap can increase as hierarchical level rises. However, a similar pattern did not manifest

itself equally in external hiring. Consequently, the source of gender inequality must be sought not only in the overall structure of the labour market but also in specific organisational procedures: internal promotion criteria, appointment mechanisms, the composition of the talent pool, and the distribution of career-relevant experience.

Acker (1990) proposed a broader theoretical approach through the concept of gendered organisations. The author shows that a formally neutral organisational structure may in fact contain assumptions about a "normal" worker who is constantly available for work, does not bear a significant care burden, and can adapt their personal life to the organisation's requirements. Under such an arrangement, gender inequality does not necessarily arise from a direct ban on women's advancement. It can be reproduced through requirements regarding schedule, mobility, typical career trajectory, availability after working hours, and informal rules for identifying "promising" employees.

Eagly and Karau's (2002) theory of social role congruity explains the psychological mechanism behind these processes. According to this approach, traditional ideas about women are more often associated with cooperation, care, and support. In contrast, the managerial role is associated with decisiveness, dominance, and a focus on results. The emerging discrepancy between the gender stereotype and the image of a leader can influence both the decision to appoint a woman and the subsequent assessment of the already appointed woman.

Heilman (2001) shows that the problem has both a descriptive and a prescriptive character. Stereotypes affect not only expectations about what women "are," but also perceptions of what they "should be." As a result, high competence in itself does not guarantee the same career outcomes for men and women. A woman's success in a stereotypically male domain may be explained differently; her contribution may receive less credit, and the behaviours required for a leadership position may be evaluated more critically.

Experimental results by Rudman and Glick (2001) complement this logic with the so-called backlash effect. The authors show that a woman who demonstrates agentic characteristics — assertiveness, independence, and a focus on power — may meet the requirements of a leadership role while simultaneously violating prescriptive gender expectations. A dual requirement arises: the candidate must demonstrate leadership qualities, but expressing them may itself become a reason for negative social assessment. This creates a potentially narrower range of acceptable behaviour when assessing women's leadership potential.

Lyness and Heilman (2006), using personnel data on high-level executives, demonstrate the significance of the match between an employee's gender and the type of management position. Women in line management positions, traditionally perceived as more "masculine," received less favourable assessments, and the relationship between assessment results and subsequent promotion differed for different groups. This is especially important for Kazakhstan: a single indicator of the share of women among managers may conceal differences between functional, administrative, financial, production, and strategic positions.

Consequently, one key mechanism of vertical segregation relates to the evaluation procedure. Even organisations that officially declare meritocracy are not necessarily free from gender asymmetry. Castilla and Benard (2010) experimentally demonstrated the "meritocracy paradox". In strongly meritocratic organisational cultures, managers in certain situations gave men higher remuneration, despite identical performance indicators. This result shows that a formally neutral assessment policy is not enough; it is necessary to analyse real decisions about bonuses, projects, and promotions.

Therefore, to diagnose career barriers, it is essential to know not only the employee's final position but also how the experience needed to move to the next level was shaped. Lyness and Thompson (2000), comparing the career

trajectories of women and men who are high-level executives, found differences in perceived barriers and access to certain developmental assignments. Women more often reported being excluded from informal networks and having to prove their alignment with organisational culture. At the same time, the breadth of professional experience and the completion of developmental tasks were associated with career success for representatives of both genders.

Professional networks play a special role. Ibarra (1993) shows that the structure of managers' informal contacts forms within the organisational context and that women and members of minority groups may have limited access to relationships that provide information, influence, and career support. Therefore, formally, equal opportunity to apply for a vacancy does not mean equal access to the prerequisites that make a candidate visible to management.

This gives rise to a distinction between mentoring and more active career support. Ely et al. (2011) show that women's leadership development should not be reduced to individual training in management competencies. The transition to a leadership role involves forming a professional identity, expanding networks, receiving feedback, and gaining opportunities to perform leadership functions. Therefore, the training program may have little to no impact on career outcomes if, after completing it, the participant does not gain access to budgets, major projects, negotiations, team management, or other assignments that signal readiness for a promotion.

Thus, a career barrier may arise long before a formal competition for a leadership position. If employees are not equally involved in projects, temporarily take on managerial duties, represent the department to senior management, or are given budget responsibility, their resumes will already differ by the time the vacancy is announced. In this case, formally identical selection criteria apply to an unevenly formed personnel reserve.

The second major body of literature concerns family burden and the organisation of working time. Bertrand (2018) highlights the non-linear returns to long working hours in high-paying professions. When promotion and earnings depend disproportionately on an employee's constant availability, ability to work beyond the standard schedule, and capacity to respond quickly to the organisation's requests, workers with a greater family burden are in a less favourable position.

Kleven et al. (2019), using Danish administrative data, show long-term changes in women's labour market outcomes after the birth of their first child. The effect manifests itself through employment, working hours, earnings, and professional trajectory. This conclusion is particularly important for career advancement, as a career break can affect not only current work volume but also access to the next cycle of projects and assignments.

The experiment by Correll et al. (2007) demonstrates that marital status can also influence outcomes through an evaluative mechanism. With comparable characteristics, mothers received less favourable assessments of competence and recommended pay, whereas fatherhood did not create a similar penalty. Thus, the impact of parenthood may arise not only through actual hours worked or breaks, but also through the employer's expectations regarding the employee's future engagement.

Williams et al. (2013) develop the concept of "flexibility stigma." Formally available flexible work arrangements do not guarantee the absence of career consequences. If remote work, flexible schedules, or reduced hours are perceived as a sign of lower organisational commitment, employees may avoid using these tools or suffer informal losses after using them. For Kazakhstan, this means that when assessing family-oriented HR practices, it is necessary to consider not only the presence of such programs but also the outcomes for their users.

Special attention should be paid to the issue that the mere appointment of a woman to a high-level position does not yet indicate the elimination of gender barriers. Ryan and

Haslam (2005) formulated the concept of the "glass cliff," which shows that women may more often attain leadership positions in conditions of increased risk, crisis, or an unfavourable organisational environment.

For Kazakhstan, international theoretical models need to be supplemented with research on the national institutional and sociocultural context. Kuzhabekova and Almukhambetova (2017) produced some of the most insightful findings in their analysis of women in leadership positions at Kazakhstani universities. The authors show that their career experience is shaped simultaneously by traditional, Soviet, and modern market-based ideas about a woman's role. This overlap of norms creates conflicting expectations: professional success must be combined with fulfilling traditional family responsibilities.

In their study of public service, Kuzhabekova et al. (2018) also reveal the tension between the economic necessity of professional employment, modern ideas about equal career participation, and traditional expectations regarding a woman's family role. The authors analyse the direct experiences of women leaders in Kazakhstan's public service and show that career advancement depends not only on formal qualifications but also on the ability to operate within a specific organisational and cultural environment.

The study by Kuzhabekova and Almukhambetova (2021) closely aligns with this article's logic; it focuses on how women navigate career chains in universities in Kazakhstan and Kyrgyzstan. The authors highlight the role of informal networks and rules governing resource exchange, which can create barriers to women's advancement. Their findings confirm the need to move from analysing the overall number of women to studying a specific "leadership pipeline": who is part of the initial professional group, who receives the necessary appointments, who becomes a candidate, and who ultimately moves to the next level.

Kakabadse et al. (2018) extend the national discussion to entrepreneurial leadership. Based on interviews with women entrepreneurs in Kazakhstan, the authors show that the interaction of demands, constraints, and opportunities for choice shapes the leadership role. This allows us to view career not only as the result of individual abilities but also as a process shaped by the social and organisational context.

Modern quantitative studies confirm the persistence of structural differences. Kenzheali et al. (2024) simultaneously examine representation in managerial roles, wages, education and soft skills in Kazakhstan. The authors show that women's high level of educational capital does not eliminate gender differences in managerial representation and labour outcomes. This is significant for the present study, as it calls into question explaining vertical segregation solely as a result of a human capital deficit.

The review of Kazakhstani literature conducted by Lipovka and Buzády (2024) further demonstrates the limitations of the national research base on gender and leadership. Although research on leadership styles in Kazakhstan is expanding, the gender dimension remains relatively underdeveloped and is often treated as merely an additional sample characteristic. The authors highlight the need for further study of barriers to advancement, leadership competencies, and the institutional environment.

Yeskerova et al. (2025) present more recent findings on public service. Analysing women's participation in public administration in Kazakhstan for 2010–2025, the authors point to a gap between women's relatively high representation in line and support positions and their more limited participation in strategic management. This result is directly consistent with the premise of this article: the high overall share of women in the workforce should not be automatically interpreted as equality of career opportunities.

Prouska et al. (2026) studied women managers' experiences in Kazakhstani small and medium-sized enterprises. Based on in-depth interviews, the authors identify barriers to accessing training and development, differences in career opportunities, insufficient

involvement in decision-making, and rigid organisational norms around flexibility. The data were obtained from women who have already reached managerial positions: holding managerial status does not eliminate further limitations on professional development.

Another important area is related to leadership in science. Iskindirova et al. (2026), having examined the distribution of state scientific grants in Kazakhstan for 2018–2024, record an increase in women's participation in project leadership. However, they also identify pronounced disciplinary differences and women's limited access to larger funding volumes. This result shows why the share of women in leadership positions should be analysed alongside the scale of resources provided and the quality of management capabilities.

Taken together, Kazakhstani studies provide a fairly consistent picture. Women have a significant presence in professional employment, public service, higher education, entrepreneurship, and science, but the transition from presence to control over resources and the highest levels of decision-making remains uneven. At the same time, the existing national literature is mainly based on aggregated statistics.

3. METHODOLOGY

The study is based on open official publications. The first source is the collection "Women and Men of Kazakhstan. 2019–2024," which contains data on the share of women among leaders in all sectors and the quasi-public sector (Bureau of National Statistics, 2025). The second source is information from the Ministry of Culture and Information about the composition of the civil service as of January 1, 2025 (MKI RK, 2025). The third is an annual publication on labour indicators for 2025, including trends in the average monthly wage for men and women (Bureau of National Statistics, 2025). The observation and publication dates are delimited. The data as of January 1, 2025, represent a snapshot of the personnel structure, not the total of appointments for the entire year of 2025. For the nationwide dynamics of managerial positions, the series up to 2024 is used. Public service indicators are not combined with indicators from all sectors into a single time series: their aggregates differ.

In the article, professional employment is defined as performing qualified expert and specialised tasks. In contrast, managerial employment is defined as performing leadership functions and making organisational decisions. These concepts are used to discuss career transitions, not to create their own statistical classification. The available sources do not identify a single pool of specialists who are potentially eligible for promotion. Therefore, a quantitative assessment of the "specialist–manager" transition is not carried out.

These indicators describe the staffing composition as of a single date and do not represent the likelihood of promotion. For wages, the standard expression is used: gap = (1 − average female salary / average male salary) × 100%. The indicator is not adjusted for profession, working hours, length of service, and industry.

Methodological limitations include the lack of longitudinal individual-level observations, disaggregated information on managerial hierarchy, and data on candidates for managerial vacancies. The empirical analysis focuses on observable differences in gender representation across managerial and non-managerial employment categories. The academic literature identifies professional specialisation, family responsibilities, organisational practices, leadership evaluation, and access to career development opportunities as potential explanatory mechanisms. Their individual effects are not estimated in the present study because the available aggregate statistics do not contain the necessary individual-level information. Accordingly, these factors are discussed as theoretically grounded explanations and directions for future research rather than empirically verified

determinants of women's career advancement in Kazakhstan.

4. RESULTS

This study conducts an empirical analysis of women's career prospects in Kazakhstan in three stages. In the first stage, the study examines the overall dynamics of women's representation among managers, enabling identification of the direction of change and comparison across all sectors of the economy and the quasi-public sector. In the second stage, the civil service is analysed, allowing comparison of women's share in the total workforce and among managers on the same date. This approach makes it possible to assess indicators of vertical gender segregation more accurately. At the third stage, the dynamics of the gender wage gap are examined as an economic context for the differences in the professional and job positions of men and women.

At the same time, the indicators used have different analytical loads. The share of women among managers reflects the existing personnel structure, but it does not represent an immediate probability of promotion. Similarly, the gender wage gap in average wages captures differences in average labour income. However, it does not isolate the effect of managerial status from the influence of profession, industry, working hours, length of service, and other characteristics.

First, consider how women's representation in leadership positions in Kazakhstan changed between 2019 and 2024. The relevant data are presented in Table 1.

Table 1. The share of women among leaders in Kazakhstan, %

Year	All sectors	Quasi-public sector
2019	43,0	No value
2020	41,1	No value
2021	39,0	46,4
2022	40,8	48,3
2023	41,2	47,3
2024	41,3	46,8

Note: compiled by the authors

The dynamics show that during the period under consideration, no stable trend towards an increase in the share of women among managers emerged. In 2019, the figure for all sectors was 43.0%, then fell to 41.1% in 2020 and reached a low of 39.0% in 2021. Subsequently, it gradually recovered to 40.8% in 2022, 41.2% in 2023, and 41.3% in 2024.

Thus, between 2021 and 2024, the share of women among managers increased by 2.3 percentage points. However, the level achieved by the end of the period remained 1.7 percentage points below the 2019 value. Consequently, the recovery after the 2020–2021 decline has not yet returned to the original level.

The quasi-public sector shows a different picture. In 2021, women made up 46.4% of managers there, and in 2022 that figure rose to 48.3%. Over the next two years, the figure dropped slightly — to 47.3% in 2023 and 46.8% in 2024. Despite this, over the entire available period, women's representation in quasi-public sector leadership remained higher than in all other sectors of the economy.

The differences in women's representation among managers across the two statistical aggregates varied over the observed period. In 2021, the gap between the quasi-public sector and the overall economy amounted to 7.4 percentage points, increasing slightly to 7.5 percentage points in 2022. Subsequently, the difference decreased to 6.1 percentage points in 2023 and 5.5 percentage points in 2024. Therefore, although the gap narrowed overall, this change was not continuous. Furthermore, the quasi-public sector is included in the aggregate indicator for all sectors, meaning

that the comparison does not represent two mutually exclusive employment groups. These results indicate differences in women's managerial representation across statistical aggregates but do not provide sufficient evidence of differences in promotion opportunities or the absence of vertical gender segregation within individual sectors.

Thus, Table 1 allows us to establish two important results. First, women's representation in management in Kazakhstan remains significant and exceeds 40%, but its dynamics over 2019–2024 do not indicate a consistent reduction in the vertical gender imbalance. Second, the noticeable differences between sectors suggest that the organisational and institutional environment may be linked to women's career outcomes. For a more meaningful diagnosis, it is necessary to move from cross-sectoral comparison to the analysis of a single personnel population, where it is possible to compare the overall share of women with their representation directly among managers.

The statistics of the civil service provide this opportunity as of January 1, 2025. Here, women make up the majority of employees, so comparing the overall personnel composition with the structure of management positions makes it possible to identify the nature of vertical redistribution within a single institutional system. Table 2 shows the gender structure of the civil service of Kazakhstan.

Table 2. Gender structure of managerial and non-managerial employment in the civil service of Kazakhstan as of January 1, 2025

Indicator	Women	Men	Share of women, %
All employees	47,158	37,324	55.82
Managers	9,363	14,584	39.10
Non-managerial employees	37,795	22,740	62.43
Managers within their own gender group, %	19.85	39.07	—

Note: compiled by the authors

The gender composition of managerial and non-managerial employment in Kazakhstan's civil service reveals substantial differences in women's representation across occupational categories. As of January 1, 2025, women accounted for 55.82% of all civil servants, indicating their numerical predominance in the overall workforce. However, their representation varied considerably depending on managerial status. Women made up 62.43% of employees in non-managerial positions, compared with only 39.10% of those in managerial positions. Consequently, the difference in women's representation between these two employment categories reached 23.33 percentage points.

The comparison demonstrates that women are predominantly represented in non-managerial employment, while men account for the majority of managerial personnel. This imbalance is also reflected in the proportion of managers within each gender group. Among female civil servants, 19.85% occupied managerial positions, compared with 39.07% of male civil servants. Thus, the observed proportion of managers among men was approximately twice as high as among women.

These findings provide empirical evidence of vertical gender segregation within the civil service, as managerial and non-managerial positions exhibit markedly different gender compositions. Nevertheless, the identified differences should not be interpreted as individual promotion probabilities or as direct evidence of discriminatory appointment practices. The aggregated data do not account for differences in education, professional specialisation, length of service, eligibility for managerial appointments, or career interruptions. Furthermore, the available statistics do not distinguish between successive levels of management, which prevents a rigorous empirical test of whether gender

barriers intensify at higher hierarchical positions.

Therefore, comparing managerial and non-managerial employment provides a more precise description of structural gender disparities than comparing the share of women among managers with overall workforce representation alone. The results establish vertical segregation while highlighting the need for longitudinal personnel data to identify the mechanisms underlying these differences.

The next important aspect is the economic dimension of career inequality. Managerial status is associated not only with the scope of authority and participation in decision-making but also with income. At the same time, the available open data do not allow us to separately track the wages of men and women at the same managerial levels. Therefore, the dynamics of average wages are used in the article as a general context of gender economic inequality, rather than as a direct measure of the glass ceiling. Table 3 shows average monthly wages of men and women and the gender gap in Kazakhstan.

Table 3. Average monthly wages of men and women and the gender gap in Kazakhstan

Year	Men, tenge	Women, tenge	Gender gap, %
2021	281 239	220 160	21,72
2022	355 072	265 643	25,19
2023	418 788	311 217	25,69
2024	468 914	344 496	26,53
2025	518 259	372 232	28,18

Note: compiled by the authors

In nominal terms, the average salary increased for both men and women. Between 2021 and 2025, men's salaries rose from 281,239 to 518,259 tenge, an increase of 84.28%. For women, the figure rose from 220,160 to 372,232 tenge, an increase of 69.07%. Thus, both groups saw positive income growth, but men's wages grew faster.

This difference in dynamics led to an expansion of the unadjusted gender gap. In 2021, women's average salary was 21.72% lower than men's. In 2022, the gap increased to 25.19%; in 2023, to 25.69%; in 2024, to 26.53%; and in 2025, it reached 28.18%. Over the period under consideration, its value increased by 6.46 percentage points.

The absolute monetary gap also increased. In 2021, the difference between the average monthly salary of men and women was 61,079 tenge, whereas in 2025 it reached 146,027 tenge. Thus, the absolute difference more than doubled.

However, these indicators do not allow us to determine what portion of the observed gap is directly related to access to leadership positions. The average values combine workers from different industries, professions, age groups, and job levels. The magnitude of the gap can be simultaneously influenced by occupational and sectoral segregation, working hours, differences in length of service, the nature of employment, and the distribution of men and women across managerial and non-managerial positions. Consequently, an increase in the average wage gap should not be interpreted as direct evidence of a strengthening glass ceiling.

At the same time, comparing the three sets of results reveals a general pattern. First, women make up a significant part of the country's leadership corps, yet their representation among managers in 2024 remained below the 2019 level. Second, a particularly pronounced discrepancy appears in the civil service, where women account for 62.43% of non-managerial employees but only 39.10% of managers, indicating a difference of 23.33 percentage points between the two employment categories.

These results allow us to speak not of a proven causal effect of gender on promotion, but of persistent structural differences that

require explanation. Open statistics show the distribution of employees across positions, but they do not reveal the mechanism that produces it. The study does not observe the initial personnel reserve, the number of potential candidates, the frequency of applications, participation in competitions, the acquisition of significant projects, promotion decisions, or subsequent retention in leadership.

It is this limitation that determines the next stage of the study. If women are widely represented in professional employment, but their share decreases when they move into leadership positions, it is necessary to determine at which stages of the career trajectory this difference emerges. Potential mechanisms may be related to the structure of professional specialisation, access to managerially significant tasks, criteria for assessing leadership potential, family and time constraints, professional networks, and training opportunities.

Therefore, after a quantitative diagnosis of vertical segregation, the analysis moves from the question "how well-represented are women among managers?" to the question "what mechanisms may influence women's transition from professional to managerial employment?" To answer this question, the main factors influencing career advancement are systematised; these factors were identified from the reviewed scientific literature and are suitable for subsequent empirical testing in the context of Kazakhstan.

5. DISCUSSION

The findings provide empirical evidence of vertical gender segregation in managerial employment in Kazakhstan, particularly within the civil service, where women's representation among non-managerial employees substantially exceeds their share among managers. However, the observed structural disparities do not establish the causal mechanisms underlying these differences. Therefore, the discussion distinguishes between empirical findings derived from official statistical data and potential barriers identified in previous theoretical and empirical research. Professional specialisation, family responsibilities, organisational practices, access to managerial assignments, and leadership evaluation are considered possible explanations rather than statistically verified determinants of the gender differences observed in this study.

The study's first significant conclusion concerns the lack of sustainable growth in women's representation among managers. After the indicator declined from 43.0% in 2019 to 39.0% in 2021, it partially recovered; however, by 2024, the share of women among managers had reached only 41.3% and remained below the level observed at the beginning of the period under consideration. This dynamic shows that high levels of women's participation in economic and professional activities do not, by themselves, ensure linear progress toward gender balance in management.

The higher share of women among leaders in the quasi-public sector also requires cautious interpretation. In 2024, it stood at 46.8%, exceeding the figure for all sectors. However, the aggregated figure does not reveal the distribution of women across management levels. Theoretically, this growth may occur mainly at the expense of mid- and lower-level managers, while women's representation in senior strategic positions remains limited. That is why Gorman and Kmec (2009) and Yap and Konrad (2009) recommend examining the career structure in terms of individual stages rather than using a single "manager" category.

Vertical segregation is particularly evident in the civil service. Women account for 62.43% of non-managerial employees but only 39.10% of managers, revealing a substantial disparity between occupational categories within the same institutional system. This difference aligns with previous research by Kuzhabekova et al. (2018), which highlights the interaction of formal professional requirements, organisational norms, and traditional expectations about women's family responsibilities in Kazakhstan's civil service. Nevertheless, the present study does not

directly measure the contribution of these mechanisms to the observed disparity.

At the same time, a single factor cannot explain the gap between women's overall representation and their share among leaders. The observed structure results from a combination of processes, including initial hiring, professional specialisation, length of service, participation in the talent pool, access to developmental assignments, the likelihood of submitting an application, selection committee decisions, retention in a leadership position, and career breaks. In the absence of individual longitudinal data, the contribution of each of these processes cannot be quantitatively separated.

The results are consistent with Acker's (1990) concept of a gendered organisation. According to this approach, inequality can be reproduced even under formally identical rules if the "ideal worker" model assumes constant availability, high spatial mobility, a continuous career trajectory, and minimal workload outside of work. Such requirements appear gender-neutral at first glance, but they may affect men and women differently because family responsibilities are distributed differently.

This mechanism is especially relevant for managerial positions. Bertrand (2018) shows that in high-paying professions and managerial employment, career and financial returns often increase disproportionately with the willingness to work long hours, be available outside the standard schedule, and respond promptly to the organisation's demands. If such requirements are used as informal criteria for determining "readiness for leadership," they can influence the composition of the talent pool even before a formal job posting is announced.

The family factor should also not be reduced solely to the duration of parental leave. Kleven et al. (2019) showed that having children can have a long-term impact on women's employment, working hours, earnings, and subsequent professional trajectory. Correll et al. (2007), in turn, found that motherhood can also affect assessments of professional competence, even when candidates' actual characteristics are comparable. Thus, the career effect may arise simultaneously through an objective interruption in work and through managers' expectations regarding the employee's future availability.

In Kazakhstan, studies by Kuzhabekova and Almukhambetova (2017, 2021) reinforce the significance of this mechanism. The authors show that women's professional trajectories in organisations in Kazakhstan and Central Asia are shaped by the intersection of professional requirements and persistent social expectations regarding their family role. Therefore, career advancement cannot be viewed solely as a function of education, work experience, and individual motivation.

Another important mechanism is related to access to tasks that build managerial capital. A leadership position usually requires prior experience in managing projects, budgets, employees, negotiations, and strategic processes. If such experience is distributed unevenly, differences arise before the formal selection process. Lyness and Thompson (2000) show that career success is linked not only to formal qualifications but also to developmental assignments, professional contacts, and accumulated managerial experience.

Ibarra's (1993) findings complement this view by highlighting the importance of informal professional networks. Information about opportunities, recommendations, and inclusion in projects often spreads through relationships not reflected in official personnel regulations. Consequently, formal equality of the right to apply for a position does not guarantee equality of conditions for becoming a competitive candidate.

In this regard, it is crucial to distinguish between mentoring and actual career sponsorship. A mentor can provide advice and professional information, whereas an influential leader can directly recommend an employee, involve them in a significant project, or support their candidacy for a promotion. Ely et al. (2011) emphasise that

women's leadership development programs have limited effect if the training is not accompanied by access to real management tasks and opportunities to develop a leadership identity through practice.

Another mechanism is how leadership potential is assessed. Eagly and Karau's (2002) social role congruity theory shows that the female gender role and the traditional conception of a leader may be perceived as less compatible. As a result, men and women may interpret the same behaviour differently.

Heilman (2001) and Rudman and Glick (2001) highlight an additional complexity: women may face conflicting expectations. Insufficiently assertive behaviour can be perceived as a lack of leadership potential, whereas pronounced assertiveness and dominance can be seen as violating the expected gender role. Thus, the range of behaviour that is assessed as both competent and socially acceptable may be narrower for women.

From a practical standpoint, this conclusion points to the need to formalise promotion criteria. Categories such as "leadership potential," "readiness to take on responsibility," "strategic thinking," or "organisational maturity" only make sense if there are predetermined, measurable indicators. Otherwise, the significant freedom of interpretation increases the role of subjective decision-making. Castilla and Benard (2010) show that even a declared meritocratic culture does not in itself exclude gender asymmetry in personnel decisions.

The results of a study on Kazakhstan confirm the need for such an approach. Kenzheali et al. (2024) show that women's relatively high human capital does not eliminate differences in managerial representation. Consequently, explaining the insufficient share of women among leaders solely by differences in education or skills is incomplete. The important question becomes whether women could convert these characteristics into managerial status.

Prouska et al.'s (2026) conclusion is particularly important; it draws on the experiences of women managers at Kazakhstani enterprises. The authors show that even women who have already reached a managerial level face limitations in accessing development opportunities, training, decision-making participation, and flexible working conditions. Consequently, the career challenge does not end with the first appointment to a leadership position. Further analysis is needed on advancement, the quality of the managerial role, available resources, and the likelihood of moving to a higher level.

A similar conclusion follows from Iskindirova et al. (2026) on women's leadership in Kazakhstani science. The growth in the number of women leading scientific projects does not eliminate disparities in access to larger funding and distribution across disciplines. This confirms that quantitative representation is only one dimension of managerial equality. Responsibility, access to resources, and strategic influence matter just as much.

The economic context, represented by wage dynamics, underscores the significance of the problem. Between 2021 and 2025, women's nominal wages increased, but more slowly than men's, so the unadjusted gender gap grew from 21.72% to 28.18%. However, it would be incorrect to interpret this increase as a direct effect of women's limited access to leadership positions.

Average wages are shaped by many factors: industry, profession, level of qualification, working hours, length of service, region, ownership of the organisation, and job title. Therefore, earnings data are used in this study as a characteristic of broader economic inequality. To determine the direct contribution of vertical segregation, it is necessary to compare men and women within comparable professions and management levels.

6. CONCLUSION

The study assessed vertical gender segregation in managerial employment in Kazakhstan and identified potential barriers to

women's career advancement based on existing theoretical and empirical literature. The analysis of official statistics revealed substantial disparities in women's representation across managerial and non-managerial employment, particularly within the civil service. These findings demonstrate the persistence of structural gender differences in managerial representation. However, the study does not establish the causal effects of professional specialisation, family responsibilities, organisational practices, or leadership evaluation on individual career outcomes. Instead, these mechanisms are considered potential explanations requiring further investigation using longitudinal and individual-level personnel data.

An analysis of official statistics shows that the dynamics of women's representation among managers in 2019–2024 are not characterised by steady growth. After declining to 39.0% in 2021, the figure recovered to 41.3% in 2024, but it remained below the 2019 level. The quasi-public sector has a higher share of women among managers. However, the aggregated statistics do not allow us to determine at which specific management levels this advantage emerges.

The most pronounced evidence of vertical gender segregation was identified in the civil service. As of January 1, 2025, women represented 55.82% of all civil servants, 62.43% of non-managerial employees, and only 39.10% of managers. The difference in women's representation between managerial and non-managerial employment amounted to 23.33 percentage points. In addition, 19.85% of female civil servants held managerial positions, compared with 39.07% of male civil servants. These structural differences indicate unequal gender representation across employment categories but do not establish individual promotion probabilities or independently confirm a glass ceiling.

Significant gender inequality also persists in the economic context. From 2021 to 2025, wages increased for both sexes, but faster growth in men's earnings widened the unadjusted gap from 21.72 to 28.18%. At the same time, the aggregated data do not allow us to determine the extent to which this difference is directly related to job status and the extent to which it relates to the sectoral, professional, and temporal structure of employment.

The synthesis of previous research identifies several potential barriers to women's career advancement, including professional specialisation, access to managerial experience, organisational promotion practices, leadership evaluation, professional networks, family responsibilities, and career interruptions. These factors provide a theoretical framework for interpreting vertical gender segregation but were not directly measured or statistically tested in the present study. Consequently, their explanatory significance for Kazakhstan requires further empirical investigation.

The study's scientific contribution lies in distinguishing between static representation and the dynamics of career transitions. The share of women among managers is an important indicator, but it does not tell exactly where the barrier arises. To diagnose the glass ceiling, one needs to analyse the sequence: meeting job requirements → access to developmental assignments → inclusion in the talent pool → participation in selection → appointment → retention → transition to the next level.

The practical conclusion is that we need to move from monitoring a single overall share to personnel analytics of the entire career process. Organisations should formalise requirements for leadership positions, document promotion decisions, analyse employees' access to career-relevant projects, and separately track professional trajectories after long breaks and the use of flexible employment forms.

For government policy, a priority area is to increase the granularity of gender statistics. It is necessary to divide leaders into at least senior, middle, and line levels, and to publish data by industry, profession, and sector. This granularity will make it possible to distinguish women's overall presence in management from their access to positions with the greatest authority and resources.

Further research should use anonymised individual longitudinal data. The most informative approach will be to assess the likelihood of promotion for men and women with comparable characteristics, taking into account their initial position, education, work experience, profession, performance, working hours, family breaks, and managerial experience. The increase in unexplained gender differences at higher levels will provide a basis for a more rigorous empirical test of the glass ceiling hypothesis.

Thus, the results show that the problem of women's leadership in Kazakhstan is not limited to the insufficient number of women in leadership positions. The central issue becomes the quality and structure of career opportunities. Women are widely represented in professional employment and in many institutional areas, making up a significant part of the workforce, but the transition to managerial positions remains uneven. Therefore, further progress toward gender equality requires not only increased representation but also greater transparency in the mechanisms for accessing leadership, resources, and higher levels of the career hierarchy.

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