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Gender promotion gaps across business units in a multiunit organization: Supply- and demand-side drivers

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Abstract

Drawing on gender role and gender queuing theories, we employ a multi-stage process model to investigate demand- and supply-side drivers of gender promotion gaps and to explore variations in these gaps across different business units within an organization. Analyzing 9 years of personnel records from a multiunit European bank, we find that the gender promotion gap is influenced by both supply-side and demand-side factors. Specifically, women are less likely than men to express a motivation to change to a new job or move to a different unit within the bank. Those who do express such motivation are as likely as men to be reassigned to new roles, but their moves are less likely to constitute promotions than are men's moves. Furthermore, gender promotion gaps vary significantly within the organization itself. Business units with the most significant gaps are in regions that have fewer available organizational positions to move into, diminishing women's motivation to seek such moves, and have jobs with numerous incumbents, decreasing women's chances to get a new job or secure a promotion upon doing so. This study extends gender role theory by creating a unified theoretical model that incorporates both employee and employer gender role perceptions as drivers of promotions. It contributes to gender queuing theory by demonstrating the theory's relevance to promotion outcomes.

KEYWORDS
careers, gender inequality, gender queuing theory, gender role theory, promotion

1 | INTRODUCTION

Despite the important scholarly interest (Kossek & Buzzanell, 2018; Triana et al., 2021) and substantial investment in human resource initiatives that aim to attain career equality for women, the gender gap in managerial and executive positions persists. In the United States, for example, women hold 47% of all jobs, but only 27% of the executive-level jobs of large corporations, and a mere 6% of CEO positions (Hamori et al., 2022). In France, the source of our sample, women make up 49% of the labor force (World Bank, 2022) but hold only 21% of executive-level jobs and 8% of CEO positions (European Women on Boards, 2022).

Organizational promotion practices match employees to positions that are key determinants of the earnings and status individuals enjoy in society (Amis et al., 2020; Baron & Bielby, 1980), making organizations "important engines of social inequality" (Gorman, 2015, p. 122). A large body of empirical work has explored intraorganizational promotion gaps between men and women and shown that women faced

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more difficulty in climbing corporate hierarchies than men (see, for example, Pichler et al., 2008). Extant work, however, has presented different explanations for the existence of these gaps. Conceptually, this literature has embraced two perspectives: one focused on variations in the demand for women's and men's skills, often driven by employers' gender role beliefs and gender stereotypes (e.g., Eagly & Wood, 2012; Ellemers, 2018; Reid, 2015). The other, on supply-side drivers, examined differences in skill sets (Smith et al., 2013) and preferences regarding matters like working hours (e.g., Javdani & McGee, 2019) or family-friendly work arrangements (Barbulescu & Bidwell, 2013), shaped by employees' own gender role beliefs.

To identify the sources of inequality in career advancement, researchers must account for both demand-side and supply-side factors and compare their importance in promotion decisions (Ding et al., 2013; Fernandez-Mateo & Fernandez, 2016). Yet these two sets of drivers have been primarily analyzed in isolation because most of the empirical work had difficulty simultaneously collecting supply-side and demand-side data.[1] The fact that most papers examined promotions as an outcome rather than a process—either employing a binary promotion measure (e.g., Cohen et al., 1998; Gorman & Kmec, 2009) or looking at the proportions of men and women among the incumbents of a given position (e.g., Dezső et al., 2016)—also contributed to the difficulty of disentangling the two sets of drivers.[2]

We advance the literature on the drivers of gender promotion gaps by creating a multi-stage process model—shown in Figure 1—that includes both supply- and demand-side drivers. Drawing on gender role theory, we formulate hypotheses about three steps of the promotion process. Specifically, we propose that (1) women are less motivated to move to a new job or business unit (BU) within the organization than men (supply-side driver); (2) net of their motivations, women are less likely to change jobs or BUs than men (demand-side driver); and (3) among those who change jobs or BUs, women are less likely to receive a promotion than men (demand-side driver).

The great variation in the location, operational area, and size of our case organization's 350 BUs allows us to examine how the importance of demand- and supply-side drivers varies in the different units of the bank, other things being equal. We draw on gender queuing theory (Reskin & Roos, 1990) to propose that the organizational structure—the geographical dispersion of BUs, and the types of jobs within these units—significantly affects employees' promotion prospects. We predict that gender promotion gaps are greater in BUs located in regions where there are fewer jobs within the organization to move to, and in units where a greater number of employees hold the same type of job and are thus potential rivals for an open position.

We test our hypotheses using 9 years of personnel data (2011–2019) from "Bebank" (pseudonym), a multiunit bank headquartered in France. We find large differences between men and women at two stages of the promotion process. Women have a lower motivation to change jobs and move to a different BU than men. There are no differences in men's and women's actual likelihood of changing jobs or units, whether we account for their different motivations or not. Yet women who do change jobs or move between units are less likely to receive a promotion than their male counterparts. Overall, even after we account for differences in motivation, women still suffer a sizeable promotion penalty.

We also find that the size of the gender promotion gap varies across different parts of the bank because of the spatial distribution of bank jobs. BUs with the most significant gender promotion gaps are in regions that have fewer available positions for intraorganizational job changes, a sparsity that diminishes women's motivation to seek such changes, and in those that have jobs with numerous incumbents, decreasing women's chances to get a new job or secure a promotion when they do.

This study extends gender role theory by creating a unified theoretical model that incorporates both employee and employer gender role perceptions as drivers of promotions, facilitating a comparison of their respective importance, and also by advancing the empirical research grounded in gender role theory, which has tended to focus on one or the other. By showing that women's likelihood of promotions is determined by both, and distinguishing their relative contributions, we also add to the limited empirical literature that has integrated the demand- and supply-side drivers of promotions (Azmat et al., 2023; Bosquet et al., 2019; Hospido et al., 2022).

We extend queuing theory by applying it to the domain of HRM, and by demonstrating its relevance not only to gender- and race-based disparities in hiring or the prevalence of occupational gender segregation, as was done in seminal papers (Reskin & Roos, 1990;

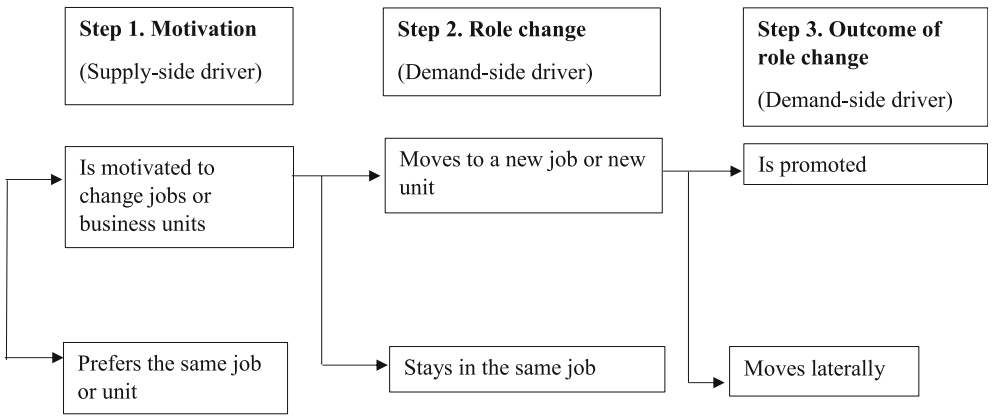

FIGURE 1 Promotion process model.

Roos & Jones, 1993; Roos & Reskin, 1992), but also to individual-level outcomes of intraorganizational promotion and transfer processes.

By showing that women suffer different promotion penalties in different parts of Bebank, we answer the call by Nishii and colleagues (Nishii et al., 2018; Nishii & Wright, 2008) to pay more attention to variability within organizations, and extend research showing variations in gender diversity within the same organization (Badal & Harter, 2014; Infantes & Pascual-Fuster, 2020; Joshi et al., 2006; Kemper et al., 2019; Lauring, 2013; Sippola & Smale, 2007). Explanations of such variance have focused on the gender of the units' decision-makers (e.g., Joshi et al., 2006; Kemper et al., 2019) and the difficulty of transferring diversity policies from the headquarters to all BUs (Ferner et al., 2005; Infantes & Pascual-Fuster, 2020). In contrast, our results highlight a mostly overlooked driver: organizational structure, specifically the size and location of the various BUs.

For managers and HR professionals, our research identifies the reasons why gender promotion gaps persist and the stages at which organizational interventions are the most needed. It also sheds light on why promotion outcomes may vary within an organization despite uniform HR policies. Our results imply that practitioners are best off when using two sets of HRM practices: those that enhance women's job-change motivation (such as training, mentoring, and coaching interventions or feedback on rejections from previous intraorganizational applications) and those that reduce the demand-side hurdles (such as internal job boards or practices that increase decision-makers' accountability for promotion decisions). Our findings caution that gender promotion gaps may be insidious or less visible than other, overt barriers because women are less motivated to change jobs and units, and those who do express such motivation are not blocked from changing roles. Finally, the results remind practitioners to be mindful of cross-unit differences in gender promotion gaps, as seemingly gender-neutral factors (such as the size of units or the types of jobs they have) may inadvertently screen women out of certain roles.

2 | THEORY AND HYPOTHESES

We first build on gender role theory and the literature on the demand- and supply-side drivers to elaborate hypotheses on gender differences at the three stages of our promotion process model. Next, we draw on gender queuing theory to hypothesize variations in promotion patterns across BUs.

2.1 | Gender gaps in three steps of the promotion process

2.1.1 | Gender role theory

People hold gender role beliefs: consensual, socially shared perceptions of the social roles fulfilled by men and women (Anglin et al., 2022; Eagly & Wood, 2012). Since women commonly engage in activities such as homemaking and child-rearing, they often exhibit communal, domestic, and supportive behaviors. Consequently, observers tend to associate these behaviors with inherent aspects of women's nature, leading to stereotypical perceptions of women as communal, caring, or warm. In contrast, men frequently assume the role of primary earner within families. They are more likely to be employed than women, particularly in positions of authority, and consequently, they exhibit agentic, resource acquisition, and dominant behaviors (Eagly & Wood, 2012). As a result, they are often stereotyped as agentic: masterful, assertive, competitive, and dominant (Eagly & Wood, 2012).

Gender role beliefs are an important driver of gender-based behavioral differences at the workplace: Male and female employees attempt to conform to their gender role to gain their colleagues' approval and to avoid sanctions for role-inconsistent behaviors (Eagly & Wood, 2012). Experiences at the workplace may even reinforce these beliefs. Gender role beliefs also affect those who make organizational career-related decisions. Decision-makers' gender stereotypes of women are often incongruent with the attributes they consider necessary for success in certain jobs, especially in managerial and leadership positions (Eagly & Karau, 2002). This perceived incongruence, in turn, leads decision makers to assess women less favorably for certain jobs than men. We expect gender role beliefs and gender stereotypes to be present in every step of our promotion process model, affecting both the supply-side drivers of promotion outcomes (women's lower motivation to change jobs or units) and the demand-side drivers (decision-makers' perceptions of employees).

2.1.2 | Supply-side drivers: Employees' *motivation to change jobs and BUs*

Moves to a new job or BU are important for career advancement: While in large organizations not all job changes represent a promotion, all promotions do change job responsibilities. Relocation is often coupled with a promotion and may also signal the employee's commitment to the employer (Markham et al., 1983), making unequal access to relocation one of the drivers of gender gaps in career advancement (Eby et al., 1999).

Gender role theory predicts that women will be less motivated to change jobs or BUs than their male counterparts. The theory holds that individuals internalize gender roles as personal standards and strive to behave consistently with them (Eagly & Wood, 2012). The societal expectation that women will serve as primary family caregivers frequently makes them reduce their work involvement: limit working hours, avoid work that encroaches on home time, or decline work-related travel (Becker & Moen, 1999). Women align not only their behavior, but also their career-related motivations with these societal expectations (Eagly & Wood, 2012). Their role as family caregiver lessens their motivation to improve their career prospects or economic wellbeing and to put themselves forward for a new position (Cao & Hu, 2007). In contrast, men prioritize careers and tend to contribute more to the household income than women do. As a result, they may gain more from job changes and relocation, giving them

more leverage at home to impose relocation on the family and boosting their motivation to undertake these moves (Bielby & Bielby, 1992; Hanson & Pratt, 1991; Sorenson & Dahl, 2016).

Consistently with gender role theory predictions, women were shown to be less likely to ask (Artz et al., 2018) or apply (Bosquet et al., 2019; Hospido et al., 2022) for a promotion within their organization, especially if they had lower productivity and worked in fields where performance was not easily measurable or other women had not been promoted in the past (De Paola et al., 2017). More generally, even highly educated women had lower career aspirations (Azmat et al., 2023) than men. They expected to wait longer for their first promotion (Schweitzer et al., 2011) or perceived themselves to have lower chances of attaining higher-level positions (Azmat et al., 2023). They were more likely to prioritize a balance between personal life and career, and less likely to focus on building a sound financial base or reaching a managerial level (Schweitzer et al., 2011).

Female employees were also found to be less willing to relocate for career advancement than males (Markham et al., 1983; Markham & Pleck, 1986), especially if they had more traditional gender role orientations (Markham et al., 1983), were in dual-earner marriages, or had children (Markham & Pleck, 1986; Powell & Mainiero, 1992).[3] They were likelier than men to constrain job searches geographically and to consider employment opportunities closer to their home as more important (Hanson & Pratt, 1991).

2.1.3 | Demand-side drivers: Moves conditional upon motivation

Gender role beliefs also influence those making organizational transfer and promotion decisions. When decision-makers' gender stereotypes do not align with the attributes they perceive as necessary for specific career moves, the incongruity reduces their favorable assessment of women's suitability for new positions (Eagly & Karau, 2002). Specifically, even if women indicate motivation to move to a new job or unit, employers may be less likely to move them, on the assumption that they are less agentic, instrumental, competent, or status-worthy than their male counterparts and therefore would have a harder time adjusting to the requirements of a new job and a greater likelihood of failure (Ridgeway & Correll, 2004).[4] Employers are also less likely to relocate women because they fear that relocating women will face more resistance from their family, as couples prioritize men's careers (Eby et al., 1999).

Studies that tested whether employer decisions accounted for women's lower job change and relocation rates supported gender role theory propositions: Women were less likely than men to receive new challenging job opportunities that involved moves across jobs or units because their managers perceived them to have lower career motivation and therefore to be less worthy of such investments (Hoobler et al., 2014). Employers were less likely to offer women relocation opportunities even if the women demonstrated equal willingness to relocate (Eby et al., 1999). Female managers who had relocated within their Fortune 500 organization within the past 2 years were less likely to receive new opportunities entailing geographic mobility than similar men (Stroh et al., 1992).

2.1.4 | Promotions upon relocation or job change

Jobs vary greatly in the extent to which they favor masculine (agentic) or feminine (communal) qualities (Eagly & Wood, 2012). The female gender role is perceived to be especially incongruent with managerial and leadership jobs, jobs with authority, and those with fewer female incumbents and therefore even stronger gender stereotypes (Eagly & Karau, 2002). Organizational decision makers tend to construe these jobs in agentic terms and prefer candidates with agentic attributes for these positions, whereas they expect female employees to exhibit communal characteristics. This perception of incongruity often results in prejudice toward women aspiring for these positions and contributes to stricter promotion standards for women than for men (Lyness & Heilman, 2006; Ridgeway & Correll, 2004).

Consistent with the predictions of gender role theory, Cox and Harquail (1991) found that midcareer women did not differ significantly from similarly qualified men in the number of promotions they received but had significantly fewer promotions to management positions and were at a lower hierarchical level overall. Lyness and Schrader (2006) showed that female executives were half as likely as men to receive greater responsibilities upon moving to a new position. They were also much less likely to move to jobs at a higher management level, and one and a half times more likely to receive "within-level promotions"—moves to jobs with greater responsibility within the same management level. Women were also shown to receive smaller pay increases from promotions (Barnett et al., 2000; Booth et al., 2003; Cassidy et al., 2016) and relocations (Stroh et al., 1992), suggesting that these moves might not represent much career advancement.[5] The arguments above lead to the following hypotheses:

> **Hypothesis 1.** Women are less likely to receive a promotion than their male counterparts. Specifically, women are (1a) less motivated than men to move to a new job or new business unit within the organization, (1b) less likely than men to move to a new job or to a new business unit, net of their motivations, (1c) less likely than men to receive a promotion upon changing jobs or moving to a new business unit.

2.2 | Differences across BUs

BUs within the same organization vary widely in their levels of gender diversity (Badal & Harter, 2014; Infantes & Pascual-Fuster, 2020; Kemper et al., 2019; Lauring, 2013; Sippola & Smale, 2007) and in the gender-based differences in their reward allocation (Joshi et al., 2006; Kochan et al., 2003). These differences are determined, in part, by the gender role beliefs prevalent in the countries where the BUs are

located (Kemper et al., 2019; Lauring, 2013; Sippola & Smale, 2007). For example, Ganguli et al. (2021), analyzing the careers of the employees of a large multinational law firm based in 20 countries, show cross-country differences in male and female employees' promotion likelihood within the same firm, driven by differences in national institutions and culture. The differences across BUs are also determined by the effort that headquarters managers, who are typically tasked with devising diversity policies and practices, invest in pushing the policies to be implemented in the BUs, and in checking that implementation (Ferner et al., 2005, Infantes & Pascual-Fuster, 2020; Monks & McMackin, 2001). And they are shaped by the gender composition of decision makers in the BUs (Joshi et al., 2006; Kemper et al., 2019). Joshi et al. (2006), for example, found that gender-based inequalities were smaller in work units that had a higher proportion of female managers. Interviews by Kemper et al. (2019) revealed that the gender of the executives in BUs of multinational corporations was a major source of variation in their commitment to gender diversity issues and in promoting diversity in their unit.

Interestingly, the organizational structure of the multiunit organization and some of the most noticeable differences among its BUs—such as their size, their location, or the types of jobs they encompass—have seldom been considered as potential drivers of the gender promotion gaps across units. Yet Spilerman and Petersen (1999) argued that in vacancy-driven career systems where promotions occur only if there is a job opening and employees compete for open jobs, organizational structure influences career opportunity, and male and female employees differ in their "vulnerability" to particular organizational structures (Spilerman & Petersen, 1999, p. 225).

We examine whether the organizational structure of the multiunit firm contributes to explaining the variations in gender promotion gaps across units. We turn to gender queuing theory (Reskin & Roos, 1990) to identify the characteristics of BUs that most significantly affect employees' promotion prospects. We extend this theory—originally used to explain gender- or race-based disparities in hiring and the prevalence of occupational sex segregation—to inform organizational promotion and transfer decisions. Gender queuing theory posits that employee-job matches result from two ranking processes: first, employees rank available jobs in the organization according to their preferences and create job queues. Men and women rank jobs similarly (Reskin & Roos, 1990). Besides the intention to maximize their lifetime earnings, they also look for jobs that offer attractive working conditions such as job security, task diversity and autonomy, social standing and prestige, as well as career opportunities (Reskin & Roos, 1990). Second, employers rank employees according to the qualifications and skills they bring to the job and create labor queues. Employers prefer and reward only specific employee characteristics, particularly those related to employees' productivity or ability to fit in (Reskin & Roos, 1990). Since employers have difficulty identifying productive workers, they often resort to signals of ability such as educational credentials or group membership. As a result, their ranking decisions reflect gender-stereotypical expectations and tend to favor male workers over female workers (Reskin & Roos, 1990; Roos & Jones, 1993). Top-ranked employees get the most attractive jobs, while the lowest-ranked ones end up in jobs that others have rejected. Employer preferences represent only one of the determinants of employees' career advancement prospects within organizations. Another determinant relates to structural features, specifically the size of job and labor queues. According to queuing theory, larger job queues (a higher number of available jobs in the organization) increase employees' career prospects, while larger labor queues (a larger labor pool available for certain positions) decrease them.

BUs differ markedly with respect to the size of labor and job queues. The headquarters, larger units, units with similar numbers of jobs at higher and lower hierarchical levels, and units in regions where several other units are co-located, offer employees a greater number of jobs to move to. BUs that are small, have a steeply pyramidal job structure, or are located far from other units will offer fewer job opportunities. Jobs in different units will also differ in the number of employees who hold the same type of jobs and therefore are in the same consideration set for open positions. Units that perform a limited number of business activities will have fewer different jobs and more jobholders in each one. Units such as the headquarters, which comprise several different operational areas and job functions and therefore many different jobs, will have fewer people in each.

We predict that female employees in BUs located in regions with a higher number of available jobs will experience a smaller gender promotion gap than women in other BUs. Gender queuing theory argues that employers prefer promoting employees from more highly ranked groups (Reskin & Roos, 1990). While more jobs in the job queue enhance all employees' prospects for both job changes and promotions, they particularly benefit lower-ranked groups such as women. This is because as job growth makes employees in top-ranked groups scarce, employers resort to filling jobs with lower-ranked workers (Reskin & Roos, 1990). As a result, women's value rises with increased labor demand (Roos & Jones, 1993; Spalter-Roth & Deitch, 1999). For example, employers were shown to turn to women when they faced a shortage of male workers due to the growth of certain occupations or men leaving occupations that were no longer rewarding (Spalter-Roth & Deitch, 1999). With more jobs to move to and the likelihood of greater rewards for these moves, women's motivation to put themselves forward for new positions may also increase. This is because the chances of advancement are higher, and job transitions are less likely to involve relocation due to the larger number of jobs available in the region where the BU is located (Spilerman & Petersen, 1999).

> **Hypothesis 2.** Women in BUs located in regions with a higher job concentration are more likely to receive promotions than women in BUs situated in regions with lower job concentrations. Specifically, (2a) in BUs in higher-job-concentration regions, women exhibit greater motivation to move to a new job within the organization, (2b) a higher likelihood of making such moves, net of their motivations, and (2c) an increased probability of promotion when changing jobs or moving to a new business unit than do their counterparts in other business units.

At the same time, we expect that women will face a greater promotion penalty if they work in jobs with many jobholders and have more coworkers to compete against. Queuing theory suggests that an increase in the number of employees in the labor queue decreases the promotion probability for all, especially for traditionally disadvantaged groups such as women. These groups are assigned the lowest spots in labor queues due to unfavorable employer perceptions of their productivity (Reskin & Roos, 1990). As a result, they face stricter promotion standards than their higher-ranked male counterparts (Roos & Jones, 1993; Spalter-Roth & Deitch, 1999). Therefore, in jobs with many jobholders, we expect that women will be less likely to be offered new opportunities, and these opportunities will be less likely to represent a promotion. Confronted with more competitive settings and less attractive career prospects in such BUs, women may also be less likely to want to change jobs or units compared to women in other parts of the organization.

> **Hypothesis 3.** Women in business units that encompass jobs with more jobholders are less likely to be promoted than women in other BUs. Specifically, in these BUs, (3a) women are less motivated to change jobs or move to a new business unit, (3b) less likely to do so, and (3c) less likely to receive a promotion upon doing so than women in other BUs.

3 | METHODS

3.1 | The data

We rely on an anonymized proprietary dataset that contains the personnel records of the employees in France of a large, multiunit European bank (Bebank) between 2011 and 2019.[6]

Bebank is an especially appropriate setting to test our hypotheses: We believe that it is representative of the larger population of banks in the French banking sector with respect to the gender composition of the workforce and the representation of women in senior positions.[7] Furthermore, while women account for almost 70% of entry-level and lower-ranked positions at Bebank, they hold 43% of mid-ranked jobs and only 19% of leadership positions, potentially indicating the presence of gender promotion gaps.

This dataset presents several advantages. First, data from a single organization allow us to rule out any unobserved heterogeneity across firms or industries that might bias the results. Second, the dataset has very detailed information on employees' demographic attributes (age, gender, marital status, and number of children) and human capital (years of education, education related to finance or participation in continuing education, job and organizational tenure, and performance ratings). It specifies their jobs, hierarchical levels, and BUs with unique codes, allowing us to measure career moves and promotions very accurately and objectively. Finally, for the year 2017, it records employees' self-reported motivation to move to a new job, move to a new BU, keep their current job, or have more responsibilities in the same job (each in one-year and three-year timeframes), allowing us to test for supply-side drivers of career advancement.

The dataset covers 9197 unique individuals and contains 57,053 individual-year observations between 2011 and 2019: 10,382 in the headquarters, and 46,671 in the branches. Analyses including employee motivations are based on the single year (2017) for which data were available (6489 observations).

3.2 | Measures

French companies are required by law to conduct a biannual "professional interview" with all their employees to assess their professional aspirations and training needs. Every 2 years, Bebank employees are invited by their HR manager to participate in a survey on their professional plans, expectations, and motivations. We received the results of the survey conducted in 2017. From these data, we create two variables to test gender differences in employees' motivation to move to a new job or to a different BU inside the company. The variable *new job* takes the value of 1 if an employee indicated that they would like to change jobs within the next year, and 0 otherwise. This variable comes from the survey item: "How do you see yourself in 1 year?" Employees were required to select the statement that best reflected their intentions: "I would like to continue in my current position"; "I would like to move to a new position"; "I would like to keep my current position but with a change in responsibilities"; "I am considering a job outside the company"[8]; "I don't know." We coded "I would like to move to a new position" as 1, and other answers as 0. *New unit* takes the value of 1 if the employee indicated availability to move across BUs, and 0 otherwise. It comes from the closed-ended question, "Are you available to move to another subsidiary?" The employees and their supervisor discuss the answers during a face-to-face interview. Supervisors provide comments on employees' professional aspirations and training needs, which are then forwarded to HR managers. These data form one of the foundations for making decisions regarding relocation, job changes, and promotions within the organization.

Job change, *unit change*, and *promotion* are lagged binary variables, measured as the difference between values at times $t + 1$ and t. There are 80 unique job titles in the bank, each with a job code that has either three (e.g., 101, 756) or four digits (e.g., 1138). *Job change* takes the value of 1 if there is a change in any of the digits of the focal employee's job code in year $t + 1$ compared to year t. *Job change* may or may not involve a promotion. *Unit change* is coded as 1 if the six-digit code of the BU where the employee works in year $t + 1$ differs from the code in year t.[9] *Promotion* takes the value of 1 if an employee experiences a move up in hierarchical level in year $t + 1$ relative to year t. The bank defines 11 hierarchical ranks of jobs, from 2 (lowest) to 12 (highest).

Female is a binary variable that is 1 for a woman and 0 for a man.

Job concentration is calculated as the number of positions or jobs that are at a higher hierarchical level than the individual's current job in the postal code where a given BU is located in a given year.

Jobholders is calculated as the number of employees holding the same type of job as the focal employee in a given year. To tackle the skewed distribution of *job concentration* and *jobholders* and to mitigate concerns about potential multicollinearity in our interaction analysis, we first log transform these two variables and then mean center them.

To isolate potential confounding effects, we control for employee age (measured in years, Min = 20, Max = 69) and for several human capital attributes that have been linked to career success, all measured in years: organizational tenure (Min = 0.03, Max = 45.5), job tenure (Min = 0.003, Max = 30.56), and years of education (Min = 8, Max = 18).[10] Since longer organizational and job tenure may be associated with lower job performance (Ng & Feldman, 2010) and therefore with lower promotion prospects, we include their squared terms. To consider employees' family commitments and the possibility that women may be less likely to be promoted because they are trailing spouses, we control for marital status and the number of children.[11] Since part-time employees may be less likely to be promoted than full-time ones (Javdani & McGee, 2019), we control for part-time status, which takes the value of 1 if the employee works fewer than 37.5 h a week and 0 otherwise.[12] We rely on the bank's own 11 categories (Min: 2, Maximum: 12) to control for employees' hierarchical level in year *t*. We use job dummies to account for the influence of different types of jobs (customer service, IT, marketing) on promotion prospects, and year dummies to isolate the effect of macroeconomic conditions and business cycles on Bebank's promotion and hiring practices. In robustness checks, we control for employees' global performance ratings, which are on a 4-point Likert-style scale where 1 stands for performance below expectations, 2 for "close to expectations," 3 for "expected performance," and 4 for "performance above expectations." A rating of 3 is considered the norm, while ratings of 1, 2, and 4 are exceptions. Performance ratings are assigned by supervisors during the annual performance review between January and March. Information on job performance is available only for 2017 and 2018.

3.3 | Estimation methods

Our key independent variable is gender, which does not vary over time. Moreover, our longitudinal dataset includes repeated observations over time. We therefore employ generalized estimation equations (GEE) to test our hypotheses related to promotions. GEE, which take into account the nonindependence of observations and repeated observations over time, have been widely used by researchers who examined wage or promotion gaps linked to gender, race, or nationality (e.g., Castilla, 2008, 2015). Since our dependent variable (promotion) is binary, we specify a binominal distribution with a logit link function. Additionally, all regression models use robust standard errors clustered at the individual level. The analyses with the variables *new job* and *new unit* have only one data point per individual, so we use logit regression models to test these hypotheses. To account for the fact that unobservable characteristics associated with distinct jobs, BUs, and calendar years may influence our results, we use job, BU, and year fixed effects in all models.

4 | RESULTS

Table 1 presents means, standard deviations, and binary correlations of key variables. Table 2 shows base models predicting promotion, job change, and unit change. Table 3 includes regressions that test the process model (Hypotheses 1a, 1b, and 1c). The regression models in Table 4 test Hypotheses 2a, 2b, and 2c, while those in Table 5 test Hypotheses 3a, 3b, and 3c.

Model 1 of Table 2 includes the control variables. Model 2 tests the relationship between *female* and *promotion* in the full sample, without controlling for motivation. *Female* is negative and statistically significant ($b = -0.161$, $p < 0.001$) in Model 2, showing that women are indeed less likely to be promoted than men. Model 3 shows that the results hold after we add performance evaluation scores—available only for years 2017 and 2018—to the model (*female* $b = -0.205$, $p < 0.05$), indicating that women's lower likelihood of being promoted is not due to performance differences between men and women. Model 4 tests the relationship between *female* and *job change* without controlling for motivation. The results are similar to those of the main model in Table 3: *female* is not related to the likelihood of *job change* ($b = -0.012$, n.s.). Model 5 tests the relationship between *female* and *unit change* without controlling for motivation. As in the main analyses, female employees are just as likely to be transferred to a new unit as their male counterparts (*female* $b = -0.002$, n.s.).

The models in Table 3 test the promotion process model (Hypotheses 1a, 1b, and 1c) to identify the drivers of promotion differences between men and women. Hypothesis 1a argues that women are less motivated to change jobs or move to a new BU than men. Model 1 of Table 3 reveals that *female* has a significant and negative relationship with *new job* ($b = -0.177$, $p < 0.05$), indicating that women are indeed less motivated to change jobs. In Model 2, *female* has a significant and negative relationship with *new unit* as well, indicating that women are less motivated to relocate than men ($b = -0.643$, $p < 0.001$).[13] The coefficient for *female* is almost three and a half times bigger in Model 2 than in Model 1, showing that men and women differ considerably more in their motivation to relocate than in their motivation to change jobs. These results support Hypothesis 1a.[14]

The above results may suggest that it is women's lower motivation to change jobs and their considerably lower motivation to relocate that are responsible for their lower rate of promotions. To check this possibility, Models 3 and 4 of Table 3 add predictors representing employee motivations (*new job*, *new unit*) to Model 2. The results reveal that women are still significantly less likely to be promoted than men. Specifically, *female* has a significant and negative relationship with *promotion* in Model 3 ($b = -0.332$, $p < 0.01$) after we control for motivation to change jobs. In Model 4, *female* has a significant and negative relationship with *promotion* ($b = -0.442$, $p < 0.001$) after we control for availability to relocate.

TABLE 1 Descriptive statistics.

Variables	Obs	Mean	Std. dev.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(1) Promotion	47,871	0.097	0.296	1.000									
(2) Female	57,053	0.558	0.497	0.024*	1.000								
(3) HQ	57,053	0.182	0.386	−0.008	−0.090*	1.000							
(4) Job concentration	57,053	290.515	434.089	−0.009*	−0.101*	0.947*	1.000						
(5) Job holder	57,053	352.961	316.782	0.052*	0.244*	−0.333*	−0.402*	1.000					
(6) New job	5225	0.226	0.419	0.120*	−0.018	−0.045*	−0.063*	0.060*	1.000				
(7) New unit	3902	0.434	0.496	0.052*	−0.132*	−0.162*	−0.203*	0.069*	0.148*	1.000			
(8) Job change	47,879	0.139	0.346	0.813*	0.015*	−0.005	−0.004	−0.007	0.195*	0.060*	1.000		
(9) Unit change	47,879	0.26	0.439	0.106*	−0.019*	0.018*	0.020*	−0.014*	0.188*	0.083*	0.243*	1.000	
(10) Years of education	57,052	15.069	2.41	0.066*	0.005	0.156*	0.180*	−0.079*	0.034*	0.023	0.065*	0.055*	1.000
(11) Org tenure	57,053	16.546	11.536	−0.105*	−0.095*	−0.051*	−0.052*	−0.141*	−0.046*	−0.019	−0.081*	−0.063*	−0.390*
(12) Job tenure	57,053	4.741	3.891	−0.020*	−0.003	−0.075*	−0.084*	0.114*	−0.024	−0.151*	−0.025*	−0.025*	−0.240*
(13) Org tenure squared	57,053	406.868	480.501	−0.102*	−0.092*	−0.037*	−0.036*	−0.119*	−0.053*	−0.017	−0.086*	−0.067*	−0.388*
(14) Job tenure squared	57,053	37.611	69.975	−0.040*	−0.007	−0.048*	−0.053*	0.104*	−0.041*	−0.127*	−0.046*	−0.024*	−0.214*
(15) Age	57,053	41.472	10.151	−0.144*	−0.162*	0.036*	0.066*	−0.303*	−0.112*	−0.172*	−0.105*	−0.055*	−0.445*
(16) Number of children	57,053	1.625	1.065	−0.043*	−0.053*	0.013*	0.026*	−0.136*	−0.035*	−0.122*	−0.014*	−0.011*	−0.117*
(17) Married	57,053	0.543	0.498	−0.035*	−0.038*	0.010*	0.015*	−0.116*	−0.034*	−0.076*	−0.016*	−0.013*	−0.102*
(18) Part-time	57,053	0.095	0.294	−0.036*	0.182*	−0.005	−0.002	0.090*	−0.053*	−0.124*	−0.041*	−0.046*	−0.100*
(19) Hierarchical level	57,037	6.583	1.773	−0.102*	−0.306*	0.256*	0.315*	−0.632*	−0.038*	−0.023	−0.026*	0.024*	0.188*
(20) Supervisor gender	47,286	0.321	0.467	0.004	0.084*	0.019*	0.045*	−0.009*	−0.029	−0.001	0.004	0.000	0.027*
(21) Female supervisor %	57,053	0.267	0.313	0.002	0.142*	−0.004	0.023*	0.014*	−0.032*	−0.008	0.000	−0.024*	0.017*

Variables	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
(11) Org tenure	1.000										
(12) Job tenure	0.344*	1.000									
(13) Org tenure squared	0.966*	0.294*	1.000								
(14) Job tenure squared	0.314*	0.920*	0.292*	1.000							
(15) Age	0.670*	0.434*	0.610*	0.367*	1.000						
(16) Number of children	0.227*	0.156*	0.173*	0.112*	0.400*	1.000					
(17) Married	0.203*	0.115*	0.177*	0.091*	0.310*	0.454*	1.000				
(18) Part-time	0.127*	0.180*	0.128*	0.163*	0.122*	0.161*	0.100*	1.000			
(19) Hierarchical level	0.128*	−0.104*	0.072*	−0.125*	0.344*	0.229*	0.176*	−0.122*	1.000		
(20) Supervisor gender	−0.011*	−0.010*	−0.009	−0.007	−0.009	−0.023*	−0.016*	0.000	−0.008	1.000	
(21) Female supervisor %	−0.014*	−0.006	−0.016*	−0.006	−0.024*	−0.034*	−0.030*	0.007	−0.050*	0.731*	1.000

Note: Promotion, job change, and unit change variables are measured as whether the focal employee receives a promotion or realized job/unit change in year $t + 1$.
*$p < 0.05$.

TABLE 2 Gender differences in realized job change: Baseline models.

	(1) Promotion	(2) Promotion	(3) Promotion	(4) Job change	(5) Unit change	(6) Promotion	(7) Promotion
HQ	0.097	0.095	−0.295*	0.038	0.138**	−0.067	0.094
	(0.073)	(0.073)	(0.143)	(0.061)	(0.051)	(0.100)	(0.073)
Years of education	0.056***	0.057***	0.013	0.036***	0.017**	0.057***	0.057***
	(0.011)	(0.011)	(0.024)	(0.009)	(0.007)	(0.011)	(0.011)
Org tenure	0.032***	0.033***	0.030	0.029***	0.019***	0.034***	0.033***
	(0.008)	(0.008)	(0.017)	(0.007)	(0.005)	(0.008)	(0.008)
Job tenure	0.319***	0.320***	0.196***	0.235***	0.048***	0.320***	0.320***
	(0.022)	(0.022)	(0.041)	(0.019)	(0.012)	(0.022)	(0.022)
Org tenure squared	−0.001***	−0.001***	−0.001	−0.001***	−0.001***	−0.001***	−0.001***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Job tenure squared	−0.022***	−0.022***	−0.013***	−0.016***	−0.003***	−0.022***	−0.022***
	(0.002)	(0.002)	(0.003)	(0.002)	(0.001)	(0.002)	(0.002)
Age	−0.035***	−0.035***	−0.040***	−0.030***	−0.015***	−0.035***	−0.035***
	(0.004)	(0.004)	(0.007)	(0.003)	(0.002)	(0.004)	(0.004)
Number of children	0.102***	0.105***	0.140**	0.081***	0.009	0.104***	0.105***
	(0.020)	(0.020)	(0.043)	(0.018)	(0.013)	(0.020)	(0.020)
Married	0.015	0.024	0.045	0.021	−0.011	0.026	0.023
	(0.040)	(0.040)	(0.083)	(0.034)	(0.026)	(0.040)	(0.040)
Part-time	−0.537***	−0.493***	−0.609***	−0.384***	−0.318***	−0.496***	−0.494***
	(0.076)	(0.076)	(0.166)	(0.065)	(0.050)	(0.076)	(0.076)
Hierarchical level	−1.265***	−1.274***	−0.634***	−0.801	0.104	−1.262***	−1.278***
	(0.332)	(0.333)	(0.156)	(0.896)	(0.469)	(0.332)	(0.333)
Supervisor gender	−0.020	−0.014	−0.022	−0.004	0.031	−0.014	0.044
	(0.038)	(0.038)	(0.079)	(0.033)	(0.025)	(0.038)	(0.057)
Female		−0.161***	−0.205*	−0.012	−0.002	−0.198***	−0.172***
		(0.040)	(0.082)	(0.034)	(0.025)	(0.042)	(0.052)
Performance evaluation			0.681***				
			(0.088)				
Female × HQ						0.289**	
						(0.112)	
Female supervisor %							−0.148 (0.112)
Female × female supervisor %							0.049
							(0.115)
Job FE	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES
Business Unit FE	YES	YES	YES	YES	YES	YES	YES
Constant	5.944*	6.019*	0.108	3.002	−1.934	6.051*	6.048*
	(2.427)	(2.434)	(0.765)	(7.257)	(3.815)	(2.431)	(2.435)
N	36,940	36,940	7962	37,355	37,353	36,940	36,940
Wald chi^2	1899.14***	1904.25***	583.54***	14964.23***	13467.01***	1920.61***	1910.41***

Note: Robust standard errors in parentheses.
*p < 0.05.**p < 0.01.***p < 0.001.

Hypothesis 1b proposes that, given the motivation to change jobs or move across BUs, women will be less likely than men to do so. Model 5 of Table 3 reveals that when we control for their motivation, women are just as likely as men to change jobs: The coefficient for *female* is not significant ($b = -0.175$, *n.s.*). While motivation to change jobs (*new job*) is, unsurprisingly, a strong predictor of

TABLE 3 Gender differences in promotion: A process model.

	(1) New job	(2) New unit	(3) Promotion	(4) Promotion	(5) Job change	(6) Unit change	(7) Promotion with job change	(8) Promotion with unit change
Female	−0.177*	−0.643***	−0.332**	−0.442**	−0.175	0.140	−0.361***	−0.292***
	(0.083)	(0.084)	(0.122)	(0.141)	(0.125)	(0.127)	(0.086)	(0.070)
HQ	0.176	−0.274	−0.295	−0.470	−0.350	−0.089	0.300*	0.025
	(0.153)	(0.181)	(0.211)	(0.266)	(0.186)	(0.182)	(0.148)	(0.158)
Years education	0.011	−0.007	0.019	0.051	−0.002	0.016	0.072***	0.070**
	(0.023)	(0.023)	(0.035)	(0.043)	(0.029)	(0.026)	(0.021)	(0.021)
Org tenure	0.038*	0.057***	0.093***	0.083*	0.101***	0.048*	0.031	0.049**
	(0.015)	(0.016)	(0.028)	(0.033)	(0.024)	(0.022)	(0.018)	(0.015)
Job tenure	0.145**	−0.098**	0.193***	0.226***	0.165**	0.023	0.139***	0.216***
	(0.044)	(0.033)	(0.057)	(0.067)	(0.053)	(0.032)	(0.037)	(0.037)
Org tenure squared	−0.001**	−0.001***	−0.003***	−0.003**	−0.003***	−0.002**	−0.001*	−0.001**
	(0.000)	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)	(0.000)	(0.000)
Job tenure squared	−0.008*	0.003	−0.012**	−0.013**	−0.010**	−0.000	−0.011***	−0.015***
	(0.003)	(0.002)	(0.004)	(0.005)	(0.004)	(0.002)	(0.002)	(0.003)
Age	−0.042***	−0.049***	−0.018	−0.006	−0.017	−0.003	−0.034***	−0.038***
	(0.007)	(0.007)	(0.011)	(0.013)	(0.010)	(0.009)	(0.008)	(0.006)
Number of children	0.048	−0.136**	0.078	0.129	−0.029	−0.168***	0.116**	0.063
	(0.045)	(0.047)	(0.066)	(0.078)	(0.059)	(0.050)	(0.045)	(0.036)
Married	−0.026	−0.002	0.101	0.025	0.091	−0.036	−0.005	0.049
	(0.086)	(0.088)	(0.125)	(0.145)	(0.111)	(0.095)	(0.086)	(0.073)
Part-time	−0.519**	−0.545***	−0.650**	−0.800**	−0.395	−0.145	−0.558***	−0.416**
	(0.160)	(0.160)	(0.252)	(0.297)	(0.207)	(0.157)	(0.164)	(0.147)
Hierarchical level	0.028	0.229	−0.668**	−0.590*	−0.353	0.318	−0.746***	−0.542**
	(0.183)	(0.177)	(0.225)	(0.295)	(0.188)	(0.279)	(0.164)	(0.184)
Supervisor gender	−0.146	0.091	−0.027	−0.099	−0.022	0.054	0.002	0.103
	(0.081)	(0.084)	(0.119)	(0.135)	(0.104)	(0.089)	(0.088)	(0.070)
New job			0.265*		0.390*			
			(0.126)		(0.168)			
New unit				0.236		0.139		
				(0.134)		(0.140)		
Female × New job					−0.078			
					(0.216)			
Female × New unit						−0.013		
						(0.173)		
Job FE	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	NO	NO	NO	NO	NO	NO	YES	YES
Business Unit FE	YES	YES	YES	YES	YES	YES	YES	YES

TABLE 3 (Continued)

	(1) New job	(2) New unit	(3) Promotion	(4) Promotion	(5) Job change	(6) Unit change	(7) Promotion with job change	(8) Promotion with unit change
Constant	0.025	1.420	1.001	−0.186	0.028	−2.298	6.197***	0.379
	(0.845)	(0.828)	(1.087)	(1.410)	(0.909)	(1.222)	(0.839)	(0.825)
N	4536	3409	3831	2786	3970	3028	4967	8238
Wald chi squared	231.73***	445.61***	251.02***	181.46***	225.08***	203.58***	1249.59***	587.96***
Log pseudolikelihood	−2282.165	−2034.839	−1178.748	−900.479	−1492.476	−1773.794		

Note: Robust standard errors in parentheses.
*$p < 0.05$.**$p < 0.01$.***$p < 0.001$.

individuals' likelihood of doing so ($b = 0.390$, $p < 0.05$), the interaction term *new job* × *female* is not significant ($b = -0.078$, *n.s.*), indicating that once they indicate the motivation to do so, women are not treated any differently from men in employer decisions related to job changes. Model 6 of Table 3 shows that women are also just as likely as men to move to a new BU after indicating the motivation to do so (female $b = 0.140$, *n.s.*). While motivation (*new unit*) strongly predicts employees' likelihood of changing BUs ($b = 0.139$, $p < 0.05$), the interaction term *female* × *new unit* is not significant ($b = -0.013$, *n.s.*), indicating that upon expressing the motivation to move to a new BU, women are not treated any differently in employer decisions related to relocations. These results do not support Hypothesis 1b.[15]

Hypothesis 1c proposes that women are less likely to get a promotion than men when changing jobs and BUs. Model 7 of Table 3 looks at the relationship between *female* and the outcome variable *promotion* after restricting the sample to those who changed jobs. The results reveal that *female* is negatively related to *promotion* ($b = -0.361$, $p < 0.001$), indicating that women's job changes are much less likely to result in a promotion than men's. In Model 8 of Table 3, the coefficient of *female* is negative and significant ($b = -0.292$, $p < 0.001$), indicating that among those who relocated to a different BU, women were less likely to get a promotion than men. Supplementary analyses reveal that this is because women tend to move into the same job as they relocate to a different BU. Men tended to change jobs and BUs simultaneously; their moves across BUs were more likely to involve a job change and a promotion. These results support Hypothesis 1c.

The next set of analyses looks at the differences in promotion prospects between men and women in the various BUs of the bank. We first confirm whether our data are consistent with the key findings of research on differences in gender diversity across BUs. This research has shown that diversity policies are created and first implemented in the headquarters and subsequently adopted by the BUs, headquarters managers being more committed to diversity management issues than BU managers; and these findings imply that the promotion penalty faced by women should be smaller in the headquarters than in the branches. The binary moderator variable *HQ* takes the value of 1 if the employee works in the HQ and 0 otherwise. Model 6 of Table 2 tests this assumption by adding the interaction term *female* × *HQ* to the model predicting the outcome variable *promotion*. While the predictor HQ by itself is not significant, indicating that working in the HQ has no impact on career advancement in the bank, the interaction term *female* × *HQ* is positive and significant ($b = 0.289$, $p < 0.01$), in accord with our assumption that women are more likely to be promoted in the HQ than in the branches.

Second, previous papers revealed that an important driver of BU differences in diversity outcomes was the presence of female leadership in the BUs (Joshi et al., 2006; Kemper et al., 2019). Accordingly, we test whether female employees who work in units with a higher proportion of female superiors will have a higher likelihood of promotion than those in units with fewer female supervisors. *% female supervisors* captures the proportion of women among the supervisors in a BU. Model 7 of Table 2 adds the interaction term *female* × *% female supervisors* to the model predicting promotion. The sign of the interaction term is in the expected direction, showing that the higher is the percentage of female supervisors, the better are women's promotion prospects. The *p* value, however, does not reach statistical significance ($b = 0.049$, n.s.).

Table 4 tests the moderating impact of job concentration (Hypotheses 2, 2a, 2b, and 2c). These models control for *HQ* and *female supervisor*, the two significant drivers of within-firm differences in diversity identified by previous research. Hypothesis 2 states that women in BUs in regions with a higher job concentration are more likely to be promoted than women in units with a lower job concentration. This hypothesis is tested in Model 1 of Table 4. The interaction term *female* × *job concentration* is positive and significant ($b = 0.067$, $p < 0.001$), indicating that women are likelier to be promoted in BUs that are in regions with more available positions. Figure 2 shows the interactive effect of *female* and *job concentration* on *promotion*. It reveals that while male employees are more likely to be promoted than females in BUs with low to medium levels of job concentration, females are more likely to receive a promotion in BUs that have very high levels of job concentration. Models 2–7 in Table 4 show that this effect operates mostly through boosting women's motivation to change jobs. In Model 2 of Table 4, the interaction term *female* × *job concentration* has a positive and significant relationship

TABLE 4 The interactive effect of employee gender and job concentration on promotion: A process model.

	(1) Promotion	(2) New job	(3) New unit	(4) Job change	(5) Unit change	(6) Promotion	(7) Promotion
Female	−0.136***	−0.135	−0.669***	−0.176	0.159	−0.357***	−0.278***
	(0.041)	(0.085)	(0.091)	(0.108)	(0.098)	(0.087)	(0.077)
Job concentration	0.010	0.004	−0.030	0.059	−0.067	−0.019	0.024
	(0.023)	(0.047)	(0.049)	(0.059)	(0.052)	(0.049)	(0.041)
Female × Job concentration	0.067**	0.084*	−0.032	0.080	0.042	0.028	0.025
	(0.021)	(0.043)	(0.048)	(0.055)	(0.049)	(0.044)	(0.040)
HQ	0.012	0.101	−0.194	−0.495*	−0.011	0.304	−0.031
	(0.080)	(0.164)	(0.194)	(0.197)	(0.198)	(0.166)	(0.168)
Years of education	0.056***	0.010	−0.007	−0.000	0.016	0.072***	0.070**
	(0.011)	(0.023)	(0.023)	(0.029)	(0.026)	(0.021)	(0.022)
Org tenure	0.034***	0.039*	0.057***	0.102***	0.049*	0.032	0.049***
	(0.008)	(0.015)	(0.016)	(0.024)	(0.022)	(0.018)	(0.015)
Job tenure	0.320***	0.145***	−0.099**	0.166**	0.022	0.140***	0.215***
	(0.022)	(0.044)	(0.033)	(0.053)	(0.032)	(0.037)	(0.037)
Org tenure squared	−0.001***	−0.001**	−0.001***	−0.003***	−0.002**	−0.001*	−0.001**
	(0.000)	(0.000)	(0.000)	(0.001)	(0.001)	(0.000)	(0.000)
Job tenure squared	−0.022***	−0.008*	0.003	−0.010**	−0.000	−0.011***	−0.015***
	(0.002)	(0.003)	(0.002)	(0.004)	(0.002)	(0.002)	(0.003)
Age	−0.035***	−0.042***	−0.049***	−0.017	−0.003	−0.034***	−0.038***
	(0.004)	(0.007)	(0.007)	(0.010)	(0.009)	(0.008)	(0.006)
Number of children	0.104***	0.050	−0.136**	−0.031	−0.168***	0.116**	0.062
	(0.020)	(0.045)	(0.047)	(0.059)	(0.050)	(0.045)	(0.036)
Married	0.029	−0.026	−0.001	0.105	−0.036	−0.005	0.051
	(0.040)	(0.086)	(0.088)	(0.111)	(0.095)	(0.086)	(0.073)
Part-time	−0.495***	−0.528***	−0.542***	−0.401	−0.143	−0.563***	−0.411**
	(0.076)	(0.160)	(0.160)	(0.208)	(0.157)	(0.164)	(0.148)
Hierarchical level	−1.314***	−0.450	−0.104	−2.172	−1.559	−0.819**	−0.268
	(0.336)	(0.962)	(0.918)	(1.555)	(2.416)	(0.256)	(0.271)
Supervisor gender	−0.017	−0.150	0.089	−0.027	0.051	−0.000	0.101
	(0.038)	(0.082)	(0.084)	(0.104)	(0.089)	(0.088)	(0.070)
Job holder	0.258	−0.554	−0.373	−2.446	−2.255	−0.122	0.409
	(0.150)	(1.072)	(1.024)	(2.219)	(3.161)	(0.298)	(0.289)
New job				0.339**			
				(0.109)			
New unit					0.129 (0.088)		
Job FE	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	NO	NO	NO	NO	YES	YES
Business Unit FE	YES	YES	YES	YES	YES	YES	YES
Constant	6.822**	2.599	3.090	10.399	7.875	6.621***	−1.161
	(2.486)	(5.009)	(4.783)	(8.910)	(13.496)	(1.426)	(1.427)
N	36,940	4536	3409	3970	3028	4967	8238
Wald chi^2	1945.27***	241.77***	443.74***	234.48***	204.84***	1246.42***	591.14***
Log pseudolikelihood		−2279.09	−2033.70	−1488.910	−1772.977		

Note: Robust standard errors in parentheses.
*p < 0.05.**p < 0.01.***p < 0.001.

TABLE 5 The interactive effect of employee gender and job holder on promotion: A process model.

	(1) Promotion	(2) New job	(3) New unit	(4) Job change	(5) Unit change	(6) Promotion	(7) Promotion
Female	−0.125**	−0.159	−0.615***	−0.159	0.131	−0.367***	−0.231**
	(0.041)	(0.084)	(0.087)	(0.107)	(0.097)	(0.087)	(0.073)
Job holder	0.336*	−0.452	−0.256	−2.504	−2.165	−0.085	0.526
	(0.151)	(1.077)	(1.047)	(2.217)	(3.162)	(0.305)	(0.294)
Female × Job holder	−0.112***	−0.074	−0.096	−0.172*	0.002	−0.050	−0.174**
	(0.033)	(0.073)	(0.077)	(0.087)	(0.082)	(0.072)	(0.060)
HQ	0.009	0.091	−0.183	−0.498*	−0.021	0.303	−0.024
	(0.080)	(0.164)	(0.192)	(0.197)	(0.198)	(0.166)	(0.168)
Years of education	0.055***	0.010	−0.007	−0.001	0.016	0.072***	0.069**
	(0.011)	(0.023)	(0.024)	(0.029)	(0.026)	(0.021)	(0.021)
Org tenure	0.034***	0.038*	0.057***	0.100***	0.049*	0.032	0.050***
	(0.008)	(0.015)	(0.016)	(0.024)	(0.022)	(0.018)	(0.015)
Job tenure	0.320***	0.146***	−0.097**	0.170**	0.022	0.140***	0.218***
	(0.022)	(0.044)	(0.034)	(0.053)	(0.032)	(0.037)	(0.037)
Org tenure squared	−0.001***	−0.001**	−0.001***	−0.003***	−0.002**	−0.001*	−0.001**
	(0.000)	(0.000)	(0.000)	(0.001)	(0.001)	(0.000)	(0.000)
Job tenure squared	−0.022***	−0.008*	0.003	−0.010**	−0.000	−0.011***	−0.015***
	(0.002)	(0.003)	(0.002)	(0.004)	(0.002)	(0.002)	(0.003)
Age	−0.035***	−0.043***	−0.049***	−0.017	−0.003	−0.034***	−0.038***
	(0.004)	(0.007)	(0.007)	(0.010)	(0.009)	(0.008)	(0.006)
Number of children	0.106***	0.049	−0.133**	−0.026	−0.168***	0.117**	0.068
	(0.020)	(0.045)	(0.048)	(0.059)	(0.050)	(0.045)	(0.036)
Married	0.028	−0.028	0.001	0.097	−0.038	−0.003	0.056
	(0.040)	(0.086)	(0.088)	(0.111)	(0.095)	(0.086)	(0.073)
Part-time	−0.489***	−0.516**	−0.534***	−0.385	−0.142	−0.558***	−0.403**
	(0.076)	(0.160)	(0.160)	(0.209)	(0.157)	(0.163)	(0.148)
Hierarchical level	−1.325***	−0.392	−0.018	−2.277	−1.499	−0.816**	−0.235
	(0.336)	(0.965)	(0.937)	(1.554)	(2.417)	(0.258)	(0.271)
Supervisor gender	−0.015	−0.146	0.091	−0.028	0.053	0.001	0.105
	(0.038)	(0.082)	(0.084)	(0.104)	(0.089)	(0.088)	(0.070)
Job concentration	0.053**	0.055	−0.051	0.108*	−0.040	−0.004	0.037
	(0.018)	(0.040)	(0.039)	(0.048)	(0.041)	(0.041)	(0.032)
New job				0.342**			
				(0.109)			
New unit					0.128		
					(0.088)		
Job FE	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	NO	NO	NO	NO	YES	YES
Business Unit FE	YES	YES	YES	YES	YES	YES	YES
Constant	6.938**	2.340	2.659	11.024	7.541	6.615***	−1.312
	(2.490)	(5.021)	(4.879)	(8.906)	(13.507)	(1.431)	(1.425)
N	36,940	4536	3409	3970	3028	4967	8238
Wald chi^2	1949.98	238.58***	449.66***	231.69***	205.24***	1247.00***	600.45***
Log pseudolikelihood		−2280.478	−2033.160	−1488.043	−1773.334		

Note: Robust standard errors in parentheses.
*p < 0.05.**p < 0.01.***p < 0.001.

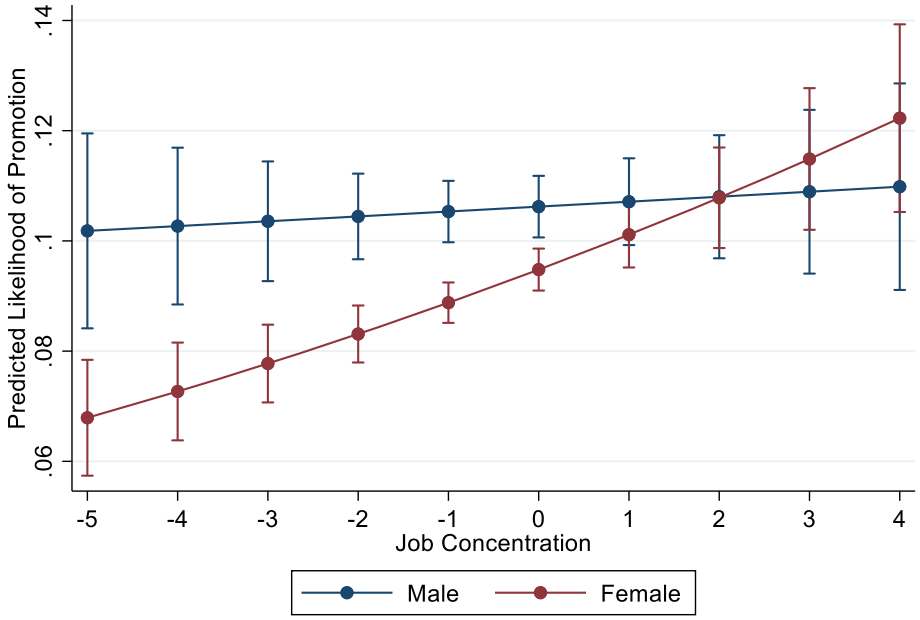

FIGURE 2 The interactive effect of employee gender and job concentration on promotion.

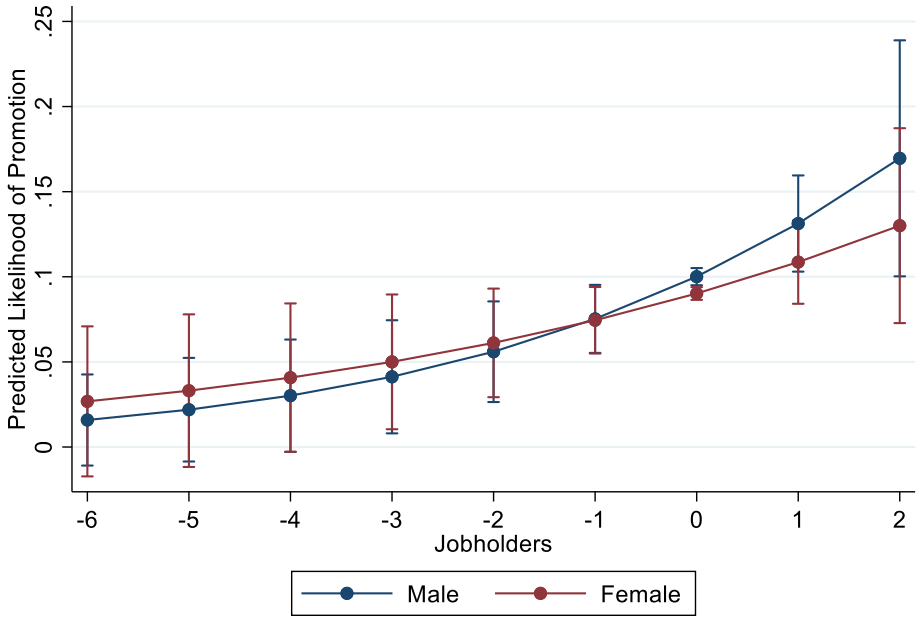

FIGURE 3 The interactive effect of employee gender and jobholders on promotion.

with the dependent variable *new job* ($b = 0.084$, $p < 0.05$), indicating that female employees have a higher motivation to change jobs if they work in BUs in regions with a higher concentration of Bebank's jobs, so that a job change is less likely to involve relocation.[16] The interaction term *female* × *job concentration* is not significant in the rest of the models. The results in Table 4 support Hypothesis 2a, but not Hypotheses 2b or 2c.

Table 5 tests the moderating impact of jobholders (Hypotheses 3, 3a, 3b, and 3c). Hypothesis 3 states that women in BUs in which jobs have fewer incumbents are more likely to be promoted than those in other units. We test this hypothesis by adding the interaction term *female* × *jobholders* to the main model. Model 1 of Table 5 reveals that this interaction term is negative and significant ($b = -0.112$, $p < 0.001$), indicating that women are less likely to be promoted if there are more individuals holding the same job.[17] Figure 3 shows the interactive effect of *female* and *jobholders* on promotions. It reveals that females are somewhat more likely to be promoted than males in jobs with fewer jobholders, an advantage that erodes as the number of jobholders increases. Models 2 and 3 show that—counter to Hypothesis 3a—an increase in jobholders does not affect female employees' motivation to change jobs or BUs. At the same time, it impairs their promotion prospects in two ways: First, it decreases their likelihood of being able to change jobs within the bank if they indicate the motivation to do so. In Model 4 of Table 5, the interaction term *female* × *jobholders* is negative and significant ($b = -0.172$, $p < 0.05$), indicating that as the number of jobholders increases, female employees are less likely to change jobs after we control for their motivation to do so. This finding supports Hypothesis

3b. Second, the number of jobholders decreases female employees' likelihood of being promoted upon changing jobs. In Model 7 of Table 5, the coefficient *female* × *jobholders* is negative and significant ($b = -0.174$, $p < 0.01$), indicating that as the number of jobholders increases, women are less likely to receive a promotion upon changing BUs, supporting Hypothesis 3c.

Our analyses are robust to alternative specifications of predictors such as *unit change* and control variables such as *education* or *part-time status* (see endnotes 9, 10, and 12). Given that the headquarters differs markedly from the bank's other BUs in its size and the types of jobs it has, we have rerun the models in Tables 3–5 restricting the analyses to the branch subsample only and excluding headquarters employees. The results remain essentially the same as those in the full sample.

While the personnel records of our dataset span 9 years, the variables *new unit* and *new job* are available only for 2017. As a result, models that include *new unit* and *new job* (tests of Hypotheses 1a, 1b, 2a, 2b, 3a, and 3b) have a lower number of observations than models without these variables (tests of Hypotheses 1, 2, 3, 1c, 2c, and 3c). In robustness checks, we have rerun the models without *new unit* and *new job* while restricting our analyses to person-year observations for which data on *new unit* and *new job* are available. While some coefficients lose from their statistical significance, the results remain similar.[18]

Since we have an unbalanced sample, we also considered whether employee turnover might affect our results. The bank has a very low turnover rate of 3.28%. T-tests show that those who leave and those who stay do not differ significantly in most attributes, but they do differ in education and organizational and job tenure. We control for all of these differences in the analyses. In addition, in alternative analyses we add the lead selection indicator variable *turnover* $t + 2$ (which takes the value of 1 if individuals leave the firm at time $t + 2$ and 0 otherwise) to the models in Table 2 and find that controlling for individuals' propensity to leave does not change the conclusions from the main analyses.

5 | DISCUSSION

5.1 | Discussion of results

We find important gender differences in the supply-side drivers of promotion gaps: Women are less motivated to move to a new job or unit. But demand-side drivers play an even more important role: female employees are as likely as males to change jobs or units, no matter whether we account for their lower motivation or not. And independently of motivation, they are less likely than men to receive a promotion.

Our finding that men and women differ in their motivation to change jobs and units is aligned with earlier studies that found gender differences in career aspirations (Azmat et al., 2023) and application behaviors (Bosquet et al., 2019; Hospido et al., 2022). But these studies found that once individuals' application behaviors (Bosquet et al., 2019; Hospido et al., 2022), motivation to work more hours (Javdani & McGee, 2019), or career aspirations (Azmat et al., 2023) were considered, there were no differences in promotion likelihood between male and female employees. In contrast, we find that gender differences in the supply-side drivers alone do not explain the gender promotion gap. There may be three reasons for this discrepancy between our findings and previous ones. First, the organizations studied in previous papers were experiencing shortages of women in high-ranking positions (partner in a law firm, tenured professor, mid-level employee in the European Central Bank), which may have forced these employers to pay attention to reducing gender promotion gaps. Bebank, on the other hand, experiences such pressures only at levels 10 and above, where only 24% of the workforce is female, compared to 58% at lower levels. And indeed, in supplementary analyses, we find that women at the highest hierarchical levels of Bebank have a higher likelihood of being promoted than those at lower levels, consistent with previous papers that identified a "female premium" (Leslie et al., 2017, p. 403) for women with great diversity value to organizations (Gayle et al., 2012; Petersen & Saporta, 2004; Spilerman & Petersen, 1999). Second, in two of the studies (Azmat et al., 2023; Bosquet et al., 2019), promotions were driven not by vacancy but by merit: After reaching an absolute level, all suitable candidates were promoted. Bebank's female employees, in contrast, have to compete with other employees for promotions. Supporting this explanation, De Paola et al. (2017) fail to detect any gender differences in academics' probability of obtaining the certification that enables them to apply for higher-ranking positions (an outcome that is not determined by the number of applicants). They show, however, that women have lower chances of promotion if there is a limited number of available positions. Finally, the organizations studied by Azmat et al. (2023), Bosquet et al. (2019), and Hospido et al. (2022) offered fewer opportunities to move geographically, so that decision makers could not mask a move across units as a promotion.

Our results show that among those who move across jobs or BUs, women are less likely to be promoted than men. This finding is consistent with results in previous papers, namely that women received "smaller" promotions (within the same managerial level) upon moving (Lyness & Schrader, 2006), or arrived at lower levels of organizational hierarchies despite receiving the same number of promotions (Cox & Harquail, 1991). Cox and Harquail (1991) argued that the differences between male and female promotion patterns were due to women's lower starting job levels and company seniority. Lyness and Schrader (2006) conjectured that organizational decision makers perceived greater risk in offering women larger promotions—it seemed safer to appoint a woman to a job that was similar to the one in which she had been successful. Our analyses provide two distinct explanations. First, they reveal that women are less likely to receive promotions when they move because they tend to stay in the same job as they transition across BUs. In contrast, men often change jobs and move across BUs concurrently. Second, women face a greater promotion disadvantage than do men as they change roles because they are more likely to work in positions that are commonly held throughout the organization. There is a larger pool of potential competitors for

promotions in these jobs, which diminishes women's promotion prospects.

Finally, we find support for the prediction that mobility differences within the firm are determined by the bank's structure, which determines the number of jobs available to employees without relocation (job concentration) and the number of similar individuals competing for an open position (number of jobholders). Women suffer different promotion penalties in different parts of Bebank, even though the bank professedly has the same HRM policies in all its units, policies that should provide similar chances of promotion to all employees. These penalties are smaller in BUs that have more jobs to move to, and more severe in units with jobs that have many similar jobholders.

5.2 | Theoretical and research contributions

The empirical research grounded in gender role theory has focused either on employees' gender role beliefs, to explain their varying motivations to pursue new jobs, or on employers' gender role perceptions to understand the demand-side drivers of promotion gaps. Our theoretical contribution lies in the development of a process model that integrates both employee and employer gender role perceptions into a unified framework, to compare their respective contributions. Despite accounting for women's gender role beliefs that might reduce their inclination to change jobs or units, our analysis reveals that women still face lower promotion prospects compared to men.

Gender role theory does not address why women's motivation to change jobs or units, as well as their likelihood of obtaining new opportunities and promotions, may vary across different parts of the same organization. We build on gender queuing theory to theoretically motivate the examination of a mostly overlooked driver of gender promotion gaps: organizational structure, and to formulate hypotheses regarding variations in promotion patterns across BUs. The theory's concepts of labor and job queues are especially helpful in describing the differences in BU characteristics and informing cross-BU variation in women's career prospects. Our findings align with this theory's predictions. Applying this sociological theory to the HRM domain, we demonstrate its relevance not only to hiring decisions (e.g., Campero & Fernandez, 2019; Fernandez & Mors, 2008; Reskin & Roos, 1990) but also to promotions and transfers. Furthermore, we show that the theory's applicability extends beyond occupation-level dynamics (Reskin & Roos, 1990; Roos & Reskin, 1992) to individual-level assessments.

Unlike analyses that treated promotion as a binary event, our process model breaks promotion into three steps. Although a sizeable literature looked at distinct steps of the promotion process in isolation, process models have been rare. Yet our findings reveal that process models are useful for theory and practice, as they highlight the step(s) in which the differences between men's and women's outcomes are the biggest and organizational interventions are the most needed—in our case, to increase women's motivation to change jobs and units, and to boost their likelihood of receiving a promotion when they do change jobs or units. In addition, our process model helps distinguish between the effect of two demand-side drivers: it shows that what accounts for women's lower promotion likelihood is not that they are not considered for open positions, but rather, that they are considered for different types of positions than men. These positions are less likely to represent a move up the organizational hierarchy, or a simultaneous change of jobs and units. If we had assessed promotion only as a binary outcome, we would have observed only that women had lower chances of being promoted. Our nuanced findings highlight the importance of using similar models in future studies.

DiPrete and Soule (1988) and Spilerman and Petersen (1999) called attention to a mostly overlooked driver of career advancement: organizational structure, specifically the size and location of the various BUs, and the spatial distribution of jobs within the organization. We go beyond their work by showing that the spatial distribution of jobs influences not only the outcome, but each step of the promotion process as well: it influences women's motivation to change jobs or units, their likelihood of changing roles upon indicating the motivation to do so, and their likelihood of being promoted upon moving. Furthermore, job concentration and the number of jobholders influence different steps of the process. Job concentration affects the first step (women who work in units within regions with a higher job concentration are more likely to express a motivation to change jobs), while the number of jobholders affects the second and third (women in jobs with more jobholders are less likely to change jobs upon indicating the motivation to do so, or to receive a promotion upon changing jobs). Spilerman and Petersen (1999) conjecture (but do not test empirically) that the differences in the gender promotion gaps between the headquarters and the local offices of their case study organization are driven by men's and women's differing preferences for relocation. Our analyses show that the HQ-branch promotion differences also result from demand-side drivers, namely that employers are less likely to move women to a new job, and such moves are less likely to represent a promotion, in units that have jobs with more jobholders. These effects should be investigated further, given the high percentage of workers in multidivisional, multinational corporations that regularly move employees across units. More globally, these findings also help explain why the outcomes of diversity management practices and HR policies vary within organizations (Nishii et al., 2018; Nishii & Wright, 2008).

Overall, the findings contribute to the literature on female career advancement by highlighting a silent and insidious gender promotion gap. Most laws and collective agreements regarding gender inequality in the workplace, as well as the media and diversity managers (including those in France and at Bebank), focus on the gender pay gap. Accountability for gender promotion gaps is very limited, except for top executive positions, even though a large body of research shows that holding decision makers accountable for their decisions works to reduce gender inequality (e.g., Castilla, 2015; Dobbin et al., 2015; Nishii et al., 2018). Institutional pressures make companies appoint a small number of women to highly visible positions: boards and executive committees (e.g., Dezső et al., 2016). Bebank is no exception. But at lower levels the gender promotion gap is less visible, either because

women are less motivated to move into new roles (Hypothesis 1a), and therefore their lack of advancement may be attributed to their lower career motivation, or because they are not blocked once they do express a motivation to move (Hypothesis 1b). Yet they are more likely to be fobbed off with lateral moves that slow their career advancement (Hypothesis 1c). Because this promotion gap (lower rewards for moving) is less obvious than no change at all, women and other stakeholders (such as trade unions) may not be aware of it, and there may not be any strong internal advocacy for change.

5.3 | Practical implications

For managers and HR professionals, our results identify the reasons why gender promotion gaps persist and the stages at which organizational interventions are the most needed. Our study shows that women are less motivated to change jobs and BUs. This lower motivation stems from demand-side factors, such as a lower likelihood of receiving promotions in the past, and from fear of relocation, especially in regions with fewer available jobs where job changes likely involve moving. These findings highlight the need for organizations to understand the reasons behind women's lower motivation. They urge practitioners to implement practices that increase women's motivation to pursue new opportunities, such as offering feedback on past rejections for intraorganizational opportunities and linking these reasons to job fit rather than personal qualities or attributes (Fernandez-Mateo et al., 2023; Keller, 2017). Additionally, organizations should make credible commitments to support women as they seek new opportunities within the organization (Greer & Kirk, 2022).

Second, our results highlight that the organization we studied is not effectively utilizing even the limited female talent that is willing to relocate or change jobs. This result cautions managers that raising women's career aspirations is insufficient. Rather, practitioners should also tackle the disadvantages faced by women in promotion decisions. Formalized selection processes for internal positions—such as using standardized assessments or linking promotion decisions to performance appraisals based on rigorously defined criteria—help reduce gender bias (Castilla, 2015). Practices that increase decision makers' accountability for promotion-related decisions are among the most effective to boost the proportion of minorities (Dobbin et al., 2015). For example, corporate diversity task forces or diversity managers may foster accountability through scrutinizing indicators of gender differences in promotions, forcing managers to explain and defend their decisions, or helping make managers' promotion decisions more visible to others in the organization (Castilla, 2015; Dobbin et al., 2015).

Our results show that another reason women are less likely to be promoted when they relocate or change jobs is that they are considered for different opportunities than their male counterparts. At Bebank, it is supervisors who inform HR about their subordinates' motivation to pursue new opportunities. Alternative avenues to new jobs, such as internal job portals (Keller, 2017) may be more beneficial for women. To boost women's application motivation, job posts should feature realistic requirements and encourage "stretch" applications. Additionally, unsuccessful female applicants should receive counseling on improving future applications and guidance on the opportunities best suited for them (Keller, 2017).

Finally, our results caution practitioners to be wary of differences in gender promotion gaps across BUs. Merely increasing the number of female managers who oversee promotion decisions in the BUs is insufficient. Practitioners must also pay attention to the size and location of BUs, the types of jobs they have, and the number of higher-level positions available. These seemingly gender-neutral factors may be screening out women from certain jobs (cf. Ely & Meyerson, 2000). We found significant discrepancies in women's career advancement across BUs. Therefore, companies should prioritize training and career counseling in units with fewer available jobs or a higher concentration of certain job types (Clarke, 2011), as these units pose the biggest obstacles to women's promotion prospects. They should also inform managers about how unit size and location can exacerbate gender promotion disparities, information that managers may be unaware of. Additionally, companies should provide greater transparency regarding gender differences in career advancement at the BU level. Making relevant, accessible, and accurate information available would help address gender-based organizational inequalities by highlighting these BU differences and giving BU managers a greater sense of urgency to correct them (Castilla, 2015; Dobbin et al., 2015).

5.4 | Limitations and future research

Because in our dataset employee motivations were collected only once (in 2017), we can look only at how motivations measured in 2017 influenced moves in 2018 and 2019; we cannot analyze the relationship between motivations and earlier moves (2012–2017). Our results, nevertheless, show that it is important to identify both supply- and demand-side drivers and urge future researchers to use datasets that can account for both drivers.

We did not have data on BU characteristics that may also contribute to variations in gender promotion gaps across BUs besides job concentration and the number of jobholders. An important characteristic is the gender diversity climate within the BU (Nishii & Wright, 2008). Although our models that incorporate BU fixed effects intend to tackle this issue, future research could use organizational surveys to assess BUs' diversity climate.

Our sample is from a single organization that operates exclusively in the banking sector within France, facts that limit the generalizability of our findings to other organizations in different industries and countries. While Bebank is representative of the French banking sector (Statista, 2021), women's promotion prospects in banking may be more challenging than in education, personal services, and healthcare, which have the highest share of women in leadership roles (World Economic Forum, 2022). However, these prospects may be better than in manufacturing, agriculture, or energy, which have some of the lowest shares of women in leadership positions (World Economic Forum, 2022). Similar studies in other industries that have multiunit

establishments (e.g., retail, insurance) may test our findings and their generalizability.

France is above the OECD average in both overall gender equality and the proportion of women in managerial positions (38% compared to the OECD average of 34% in 2023), highlighting the importance of testing our hypotheses in different countries (OECD, 2023). Specifically, while our process model uncovers covert barriers to women's advancement, datasets from countries with lower gender equality scores (e.g., Japan, Korea) may reveal more visible or overt obstacles (OECD, 2024).

6 | CONCLUSION

This article has exploited novel data in the proprietary personnel records of a bank to capture both the supply- and demand-side drivers of gender promotion gaps and to explore within-firm differences in them. Our results help explain why gender promotion gaps persist, provide insights into how organizational initiatives may reduce them, and invite more research that examines gender differences across the various entities of multiunit, multi-business organizations by accounting for both their demand-and supply-side drivers.

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CONFLICT OF INTEREST STATEMENT

The authors have no conflict of interest.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

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ENDNOTES

[1] The three previous papers that could map out both the supply- and demand-side drivers of gender promotion gaps (Azmat et al., 2023; Bosquet et al., 2019; Hospido et al., 2022) have shown that supply-side drivers were more important to promotion outcomes, and demand-side drivers less so, than has been suggested by researchers who could not measure supply accurately. A handful of papers have considered both supply-side and demand-side drivers of hiring decisions (Ding et al., 2013; Fernandez & Campero, 2017; Fernandez-Mateo & Fernandez, 2016).

[2] The only exception is Castilla's (2012) analysis of promotion, transfer, and termination decisions that followed performance evaluations. Three papers that analyzed hiring decisions also used process models (Barbulescu, 2015; Fernandez & Weinberg, 1997; Fernandez-Mateo & Fernandez, 2016).

[3] Brett et al. (1993) found that women were just as willing to relocate as men. However, their sample included only employees who had already relocated once in the past.

[4] Counter to the propositions of gender role theory, newer research shows that among those who applied for a promotion, women were just as likely as men to be promoted (Azmat et al., 2023; Bosquet et al., 2019; Hospido et al., 2022).

[5] However, several studies found that promotions yielded roughly similar wage increases for men and women (e.g., Blau & DeVaro, 2007; McCue, 1996; Olson & Becker, 1983).

[6] Bebank also owns many small subsidiaries in other industries (e.g., insurance, real-estate services), but our dataset does not include the employees of these small (and often, recently acquired) subsidiaries because each has its own corporate culture and HR policy.

[7] Women account for almost 60% of employees in the French banking sector (Statista, 2021) and for 56% at Bebank. Then, 20% of women in French banks (Catalyst, 2020) and 19% of women at Bebank reach leadership positions.

[8] Twenty-five individuals indicated that they were considering a job outside the company. As a robustness check, we reran the analyses excluding these individuals from the sample. The results remain the same.

[9] As a robustness check, we ran analyses with an alternative measure of *unit change* that captured change through the five-digit official French postal code of the business unit. This variable took the value of 1 if there was a change in the postal code of the business unit where the employee worked in year t compared to year $t-1$. Analyses with this alternative measure led to similar results.

[10] In alternative analyses, we replaced years of education with two alternative variables. *Highest level of bank-related qualifications* ranged between 1 and 5 and indicated education relevant for the bank; and *continuing education*, a binary variable, indicated whether employees participated in continuing education. The results with these alternative measures were not substantially different from those in our main analyses.

[11] In alternative analyses, we tested the trailing spouse hypothesis in two other ways: We also used the variables *marital status* and *number of children* as moderators in the main models to see whether they changed the relationship between the key predictor (*female*) and the outcome variable (*promotion*). The interaction terms were not significant in most models, meaning that married women and those with children did not fare worse than single or divorced counterparts. Surprisingly, the interaction term *female* × *married* was positive and significant in two models. This result contradicts the trailing spouse hypothesis. Second, we tested the relationship between *female* and *promotion* in a sample that was restricted to employees who changed jobs but did not relocate (that is, there was no change in the postal code of the office where they worked). Women were still less likely to be promoted in this restricted sample (*female* $\beta = -0.391$, $p < 0.01$).

[12] Using employees' average monthly working hours instead of part-time status does not change the results in any of the regression models.

[13] Individuals who previously changed jobs or moved across units are less motivated to change jobs or units in the subsequent year. To control for the possibility that recent moves across jobs or business units had decreased individuals' motivation to change roles again, we controlled for moves 1 and 2 years before motivations were measured. In these alternative analyses, women were still less motivated to change jobs or move across units.

[14] In supplementary analyses, we tested whether past demand-side drivers (such as the number of promotions employees received at the bank or whether at least one of their previous job changes was a promotion) account for women's lower motivation to change jobs and business units. While these past demand-side drivers are indeed an important

determinant of women's motivation to change jobs, they do not have a significantly different effect on women's motivation compared to men's. Demand-side drivers have no significant association with employees' motivation to change business units in any of the models.

[15] The main analyses look at career moves that took place in February 2018, immediately after employee motivation data were collected (between mid-2017 and early 2018). In alternative analyses we examined the impact of employee motivations on 2019 moves and on the pooled 2018 and 2019 moves together. The results were the same as those in the original analyses reported in the article: the predictor *female* was not statistically significant in any of the models, and neither was the interaction term between *female* and the motivation to change jobs or units.

[16] We tested our "fear of relocation" hypothesis in another way as well. We divided our sample into two groups: employees working near the bank's headquarters, where most of the bank jobs are located (operationalized as sharing the same postal code), and employees working in more remote areas where there are far fewer jobs available in the focal unit's proximity. We found that women have a lower motivation to change jobs only in branches further away from the bank's central operations (female $\beta = -0.283$, $p < 0.01$). In such areas, there are very few other jobs available nearby, so a job change possibly involves relocation. Female employees working in the same postal code as the bank's headquarters, on the other hand, are just as motivated to change jobs as their male counterparts (female $\beta = -0.000$, n.s.). This is possibly because there are plenty of other jobs close by, making job changes unlikely to involve relocation.

[17] Alternatively, we put both interaction terms (*female* × *job concentration* and *female* × *job holders*) in the same model. The results are very similar to the models (Model 1 of Tables 4 and 5) that included these interaction terms separately: *female* × *job concentration* $b = 0.04$ ($p < 0.06$); *female* × *jobholders* $b = -0.08$ ($p < 0.05$).

[18] Hypotheses 1, 3, and 2c were supported—at the $p < 0.05$ level—in this restricted sample as well. Hypothesis 2 received support only if we excluded employees in the headquarters. Hypotheses 1c and 3c were partially supported: 1c was supported only among employees who changed units, and not among those who changed jobs; 3c was supported only among employees who changed jobs, and not among those who changed units.

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