

Gender Differences in Sorting*

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Abstract

In this paper, we investigate the sorting of workers in firms to assess different theories of gender gaps in labor market outcomes. Using Danish employer-employee matched data, we find strong evidence of glass ceilings in certain firms, especially after motherhood, preventing women from climbing the career ladder and causing the most productive female workers to seek better jobs in more female-friendly firms in which they can pursue small career advancements. Nonetheless, gender differences in promotion persist and are found to be similar in all firms when we focus on large career advancements. These results provide evidence of the sticky floor hypothesis.

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1 Introduction

Recent studies report that wage gaps for male and female workers arise as a result of segregation in lower-paying occupations, in less productive establishments and in lower-paying occupations within establishments (Bayard, Hellerstein, Neumark and Troske, 2003; Hellerstein and Neumark, 2008). Understanding such segregation is crucial to proposing policies that alleviate gender gaps. However, because a great deal of wage heterogeneity arises from unobservable skills, estimating the extent to which good workers are employed in good firms is problematic.

In this paper, we study career advancements to understand how the matching profile arises. This study enables us to investigate whether there are gender differences in the strength and direction of sorting that induce segregation. In particular, we analyze how different types of transitions (job-to-job transitions, promotions and transitions into self-employment or unemployment) are affected by worker types and how this relationship differs for male and female workers.

We exploit within-firm variation in wages to rank workers (within firms), and we use profits to rank firms; this methodology was recently proposed by Bartolucci and Devicienti (2012) (henceforth BD). Using Danish employer-employee matched data, we are then able to trace whether better-performing workers are more likely to move to better firms (i.e., firms with higher profits). This exercise is particularly relevant because different theories of gender gaps have different implications in terms of the career advancements of workers. Hence, we are able to assess their relevance based on the patterns that we observe.

Although we find evidence of a general tendency for positive assortative matching in job-to-job transitions, the strength of this positive sorting is much stronger for female workers. On the contrary, when we examine career advancement within firms, higher-performing women are less likely to be promoted than men, especially in firms that

have few white-collar female workers, which we label “non-female-friendly” firms.

Because career advancement is difficult for women in these firms, especially after a woman’s first child is born, good female workers pursue career advancements primarily by finding a different employer. Furthermore, these women specifically seek female-friendly firms that have promotion policies without gender bias.

When we examine transitions into unemployment and self-employment, we find a lower willingness of employer to retain women, especially in firms that are not female-friendly.

Overall, our findings support a refined version of the glass ceiling hypothesis. There are firms both with and without glass ceilings: because the former have gender-biased promotion policies, good female workers seek jobs in firms without glass ceilings to advance in their careers. Interestingly, these female-friendly firms report higher profitability than those firms in which good female workers have fewer opportunities to climb the occupational ladder. Because only the best female workers can pursue career advancements via job-to-job transitions and because significant career advancement occurs more slowly for women in all firms, segregation and gender gaps emerge.

According to the Global Gender Gap Report of Hausmann, Tyson and Zahidi (2012), Denmark is ranked seventh (out of 134 countries) on the overall Gender Gap Index, but it occupies 78th place on this index for representation among legislators, senior officials and managers. This ranking is consistent with our findings: even in a context characterized by a flexible labor market and generous family-friendly schemes, such as Denmark, there still exists a persistently large gender gap in top job positions and promotions, and this gap is related to motherhood.

Our empirical analysis of several aspects of both internal and external labor market transitions considerably extends previous investigations on this topic, as to the best of our knowledge, no other work has provided such a clear and comprehensive description and explanation of gender differences in sorting. Because gender bias in

promotion choices costs firms in terms of profitability, there is a strong rationale for policy interventions.

Several studies have noted different mechanisms for the emergence of gender differences in labor market outcomes. These mechanisms have different implications for the career development of women, and this pattern of distinctions allows us to make sense of our empirical findings:

(i) “glass ceilings”¹: women are not promoted; hence, we should find no (or a weaker) tendency for women with respect to positive assortative matching.

(ii) “sticky floors” (Booth, Francesconi and Frank, 2003): women do not confront discrimination in promotions, but they receive smaller wage improvements than men following promotions. In our context, although women do not encounter discrimination in small career advancements, they are less likely than men to pursue major career advancements because their market opportunities are fewer than those available to men.

(iii) women have better “non-market opportunities” than men (Lazear and Rosen, 1990). As a result, women should be less likely to be promoted than men in all firms but more likely to receive higher wages if promoted and more likely to quit to pursue non-market opportunities.

(iv) “biological differences” (Ichino and Moretti, 2009): women are less productive (or their productivity is less observable) at the beginning of their careers because their rate of absenteeism is higher than that of male workers; hence, gender gaps should be smaller for older workers at the top of the wage distribution.

We exploit the richness of the Danish register data on individuals and companies to provide an overall assessment of labor market transitions for different categories of firms and workers, and this assessment will assist us in understanding the relevance of these different theories. The Danish data, which are described in Section 3, are

¹The term was first used by Gay Bryant (Frenkiel, 1984).

particularly appropriate because they provide information on the universe of workers who are employed in all firms and occupations for a long period of time. In addition, the assortativity between firms and workers in Denmark is not influenced by rigidities that are imputable to labor market institutions (Subsection 3.3).

Our estimation strategy, which is described in Section 4, extends a recent approach developed by BD to all types of labor market transitions and compares sorting across genders. This methodology exploits within-firm wage variations to assess how good each worker is, conditional on observables. We trace mobile workers (*movers*) who are involved in job-to-job, job-to-self-employment and job-to-unemployment transitions to evaluate the relationships between their types, i.e., their recruitment in a company characterized by high profitability, the start of a business and entry into unemployment. Furthermore, we complement the analysis by examining the promotions of workers who are employed in a given firm (*stayers*) to understand how employee types are linked to the probability of ascending to higher positions. This method is based on two main identifying assumptions: the monotonicity of agents payoffs in their own types and the existence of mismatches in the equilibrium distribution of workers and firms. This approach is “as agnostic as possible with regards to the labor market model generating the data” (BD).

When we investigate how the position of a worker in the rankings according to within-firm wage variations is related to the probability of moving to a better firm, we consider profits as a measure of the “quality” of firms. However, because accounting profits are a noisy measure, different definitions of quality are used in the empirical implementation.² Regardless, all these definitions yield qualitatively similar results.

We find evidence of positive sorting in job-to-job transitions, which increases in strength with age, educational and occupational levels (Section 5). Our key finding is

²In particular, we use the profit differential between sending and receiving firms of at least 10 percent age points, the average profits across time, the past average profitability and a firms added value. All indicators are calculated both in levels and per worker.

a sizable and significant difference in positive sorting in favor of women. This difference is stable, as it arises in a number of different specifications and tests referring to the sample of movers. Furthermore, gender differences are stronger in non-female-friendly firms, and they disappear when transitions are not voluntary (e.g., when they are driven by a firms closure).

The results for the promotion patterns allow us to understand how it is possible to observe gender gaps even if women have a strong tendency toward positive assortative matching. In fact, women encounter significant glass ceilings in internal promotions, and this finding does not depend on their age, occupation or sector.

This finding suggests that women are subject to discriminating promotion policies, and for this reason, the best female workers attempt to overcome gender barriers by searching for better jobs in fairer firms. Consistent with this view, we find that negligible gender differences arise when we compare male and female promotion rates in those firms in which good female workers tend to find jobs, at least in terms of small career advancements. Such firms are also highly profitable, which suggests that the best firms are those with non-discriminatory policies.³

Glass ceilings in non-female-friendly firms appear to emerge especially after workers become parents, which emphasizes the role of motherhood as a career impediment in those firms. Again, this impediment is not observed in female-friendly firms.

Finally, we find substantial differences between men and women in the propensity to become self-employed or to experience unemployment, indicating that stronger female job-to-job sorting may also be related to the lower willingness of some employers to retain women.

The structure of the article is as follows: Section 2 reviews the related literature.

³There may be several reasons that less profitable discriminatory firms could survive competition from non-discriminatory firms. First, social enforcement might result in less lost profit in discriminatory firms. Second, certain firms may have clients with discriminatory tastes. Third, search frictions may facilitate social enforcement.

Section 3 briefly describes the data and the institutional background; and Section 4 describes the econometric routes that we follow to measure gender-based differences in sorting. Section 5 reports the main results and Section 6 offers concluding remarks.

2 Literature review

Our work connects the literature on assortative matching to the literature on gender differences in labor market outcomes by empirically investigating gender differences in sorting to assess the causes of labor market outcomes across genders.

From the seminal contribution of Becker (1973), several studies have investigated whether good workers move to good firms (i.e., whether positive assortative matching arises). The theory on sorting in the labor market indicates that different equilibrium matching patterns are possible, depending on the supermodularity of the production function, the transferability of utility, and the heterogeneity and endogeneity of search costs (Sattinger, 1995; Shimer and Smith, 2000; Legros and Newman, 2002; Atakan, 2006).

However, even when there is a tendency toward assortative matching, Merlino (2012) notes that the interplay among frictions, matching opportunities and firms' investments is crucial to understand the gaps in labor market outcomes. Indeed, wage gaps resulting from poor matching opportunities of disadvantaged workers may induce the firms that employ these workers to adopt suboptimal technologies.

However, from an empirical perspective, a number of difficulties arise when these models are brought to the data: because observable characteristics only partially explain the wage distribution, the task of defining "good workers" is not straightforward.⁴ A central study in this context is that of Abowd, Kramarz and Margolis (1999) (henceforth, AKM), who propose to evaluate assortativity by examining the correlation

⁴See Christensen, Lentz, Mortensen, Neumann and Werwatz (2005) for a survey of the literature.

between the estimated individual worker and firm fixed effects. In fact, AKM find a small or negative correlation, and interpret it as evidence of no role or of a negative role of sorting in the labor market. Subsequently, similar studies have been conducted for different countries. Some of them appear to be consistent with AKMs conclusions (Abowd, Creedy and Kramarz, 2002), whereas others do not (Abowd and Kramarz, 2003; Woodcock, 2008).

However, AKM's contribution has relevant shortcomings, as their identifying assumptions eliminate the possibility of key mechanisms, such as endogenous search intensity. This mechanism can induce sorting in models with production function complementarities (Bagger and Lentz, 2008). More importantly, the correlation between worker and firm fixed effects may be biased as a result of the non-monotonicity of wages in different types of firms that can emerge because of frictions that arise between competing firms in the context of posting new vacancies (Postel-Vinay and Robin, 2002; Cahuc, Postel-Vinay and Robin, 2006) or in the hiring process between competing firms (Eeckhout and Kircher, 2010).

To the best of our knowledge, the most interesting recent contribution on how to estimate the nature of sorting is the test provided by BD.⁵ These authors provide an estimation strategy that is grounded on agents' payoff monotonicity among their (own) types and the presence of some mismatches between workers and firms in the equilibrium distribution. The latter condition is crucial, as perfect sorting would make both sources of heterogeneity empirically indistinguishable. Using an employer-employee data set, BD exploit within-firm variations in wages to order worker types (within firms), and they utilize profits to rank firm types.

Although we are the first researchers to use the empirical strategy developed by BD to study gender differences in sorting, we are clearly not the first to attempt to

⁵Other recent contributions are those of Eeckhout and Kircher (2011) and Lopes De Melo (2009). However, both of these approaches are limited in that although they can detect the strength of sorting, they cannot detect its sign.

use career developments to disentangle different theories of gender gaps. Most notably, Booth et al. (2003) find support for their model of sticky floors, in which men and women are equally likely to be promoted but women receive lower wage increases. Nonetheless, these authors do not obtain information on firms or job-to-job transitions. Hence, our study represents a significant advancement with respect to their study.

Furthermore, Bayard et al. (2003) and Hellerstein and Neumark (2008) study gender differences matching patterns using matched employees-employer data, but they examine only segregation patterns (i.e., the static matching profile). In our paper, we directly test sorting by examining both career paths and a wide range of transitions. In addition, we take advantage of the high degree of flexibility of the Danish labor market and the completeness of our data; in other words, we study how the matching profile arises.

The work of Gayle, Golan and Miller (2012) is likely the most closely related to our study. These authors focus on CEOs of publicly listed firms to trace the careers of top CEOs, and they find that women are more likely to become CEOs when they have not exited their occupations. Our findings are consistent with these results, but we provide a more general and detailed analysis, as we do not restrict our attention to CEOs but rather examine all transitions.

3 Data and institutional background

3.1 Data

The data set is a merged employer-employee unbalanced panel sample of Danish firms observed over the period 1996-2005 period. The key features of our data, provided by Statistics Denmark, are that they cover the universe of employees and firms, and that they match employees and firms records. Both of these features make these data

particularly suitable for our purposes, as they enable us to detect moving workers in each year and their sending and receiving firms (Parrotta and Pozzoli, 2012).

The firm-level data⁶ includes sales, employment, value added, materials, profits, fixed assets and a two-digit NACE identifier. All the companies in the sample have more than 20 employees and are private firms (i.e., they are not part of the public sector).⁷ Furthermore, all firms with imputed accounting variables are omitted from the analysis.

The individual-level data, which are available from 1980 onwards, cover the working age population. These data include wage, age, gender, marital status, the number of children, experience, tenure, highest completed education, occupation and information on the family background characteristics. Apart from deaths and permanent migration, there is no attrition in the data set. The labor market status of each person as of the last week in November is recorded as the relevant datum for each person for that year. Therefore, if a worker changes jobs, then we observe only the year in which this change occurred.⁸ However, we can observe whether a worker experiences unemployment and

⁶Firm-level statistics have been gathered by Statistics Denmark in several ways. All firms with more than 50 employees or with profits higher than a given threshold have been surveyed directly. The other firms are recorded in accordance with a stratified sample strategy. The surveyed firms can choose whether to submit their annual accounts and other specifications or complete a questionnaire. To facilitate responses, the questions are formulated similarly to those in the Danish annual accounts legislation. The final sample includes the following industries: the manufacturing of food, beverages and tobacco; the manufacturing of textiles and leather; the manufacturing of wood products and printing; the manufacturing of chemicals and plastic products; the manufacturing of other non-metallic mineral products; the manufacturing of basic metals and fabricated metal products; the manufacturing of furniture; manufacturing n.e.c.; construction; the sale and repair of motor vehicles, the sale of automotive fuel; wholesale except for motor vehicles; the retail trade of food; department stores; the retail sale of pharmaceutical goods and cosmetic articles; the retail sale of clothing and footwear; other retail sale and repair work; hotels and restaurants; land transport and transport via pipelines; water transport; air transport; supporting transport activities; post and telecommunications; finance; insurance; activities auxiliary to finance; real estate activities; the renting of transport equipment and machinery; computer and computer-related activities; research and development; consultancy activities; and cleaning activities.

⁷As our empirical strategy involves examining job-to-job transitions by comparing movers, our estimation strategy uses only those firms from which there are at least two movers over the sample period; hence, we omitted from the sample firms with fewer than 20 employees, as they do not have a sufficient number of transitions. Furthermore, because we rank firms based on their profits, we exclude public firms for which profits are not a stated objective.

⁸For individuals with multiple jobs, only the main occupation is considered.

the duration (in weeks) of the overall unemployment period in a calendar year.

In the analysis that follows, we include only individuals with a positive annual salary⁹ and individuals younger than 60. Furthermore, apprentices and part-time employees are excluded from the main analyses.

Our empirical estimations are based on two samples. The first sample considers only those workers who, within the 1996-2005 period, switched at least once from one firm (the sending firm, according to our terminology) to another firm (the current or receiving firm) at least once in the data set within the 1996-2005 period. An important challenge regarding this data set is that, because of changes of firms' ownership, there appears to be some false transitions in the data. To minimize miscoded transitions, transitions involving more than 50 percent of the size of the same sending firm are excluded from the final sample. Furthermore, because we want to focus on voluntary transitions, we exclude from the sample of switchers those workers who changed jobs after a firm closure. In total, our sample includes 479,161 yearly observations of 357,487 job switchers (i.e., 10 percent of the original sample) and approximately 17,000 firms. The second sample excludes the switchers and consists of 4,658,374 observations, 617,513 "stayers" and nearly 18,000 firms.

3.2 Descriptive Statistics

Table 1 lists the descriptive statistics for both samples separately according to gender, measured at both the worker and firm levels.

The average male job switcher is 36 years of age and has 15 years of experience, whereas the average female job switcher is 35 years of age and has 12 years of experience. The average tenure for both women and men is approximately three years. The majority of workers have secondary or post-secondary diplomas, and 5 percent of

⁹We exclude from the original sample the extreme observations of the annual salary, i.e. those lower than the 1th percentile and higher than the 99th percentile of the salary distribution.

male job changers have at least a university degree, whereas 32 percent have completed only primary education. In addition, 6 percent of female job changers have at least a university degree, and 38 percent have a primary education. Most men and women are classified as blue-collar workers (75-74 percent), followed by middle managers (21-24 percent). Significantly more male switchers have managerial jobs compared with their female counterparts (4 percent versus 2 percent, respectively). For both genders, approximately 5 percent are foreigners, nearly 13 percent have at least one child at 0-3 years of age, and approximately 4 percent have at least one parent working as a manager at the time of the job transition or before. Hence, 4-5 percent of job switchers have what we refer to as a familiar network (i.e., having at least one parent employed as a manager). In comparison, the average stayer is approximately three years older and has two more years of tenure, with a slightly lower educational and occupational level. The average stayer is also more likely to be married and less likely to have a child between 0 and 3 years of age and a familiar network, regardless of the gender of the individual. The percentage of foreigners is reasonably comparable across the two samples. During the period covered by our sample, the wage of an average male and female job switcher was approximately 229 and 186 thousand Danish Kroner, respectively, or approximately 30 and 25 thousand Euros per annum, respectively. The salary of an average stayer was approximately 10 percent above that figure. Turning to the firm-level characteristics, we find that the average size and share of women are fairly similar across the two samples, although the profits per worker are higher in the sample of stayers, regardless of the gender of the employee.

Table 2 includes the mean of all the outcome-dependent variables used in our empirical analysis. For the sample of job switchers, we calculate an indicator function that takes the value of one (zero) if a worker moves to a receiving firm that is of higher (lower) quality than the sending firm. As suggested by BD, the quality of firms is primarily defined in terms of their profits. Given that the measure of profits is firm- and

time-specific and can be affected by transitory productivity shocks or measurement error, we also calculate a set of indicator variables that are based on either a substantial improvement in profits (i.e., the profit differential between sending and receiving firms is at least 10 percent) or the average profits across time. Furthermore, given that job switchers may have not been aware of the overall evolution of firm profits over time, we also define a firm's quality on the basis of its past average profitability (BD). Finally, all the alternative indicators identified before are calculated on the basis of profit measures per worker and firm's value added in levels and per worker. The means of these outcome variables are reported in Table 2 and allow us to conclude that women and men have similar probabilities of moving to a receiving firm of higher quality, regardless of the definition of firm quality that we utilize. In addition, for the sample of stayers, we examine the probability of promotion to a higher occupational level and to a managerial position; these probabilities are additional outcome variables. Consistent with the glass ceiling hypothesis, women are generally less likely to be promoted than men. The last two outcome variables that are included in our empirical analysis are the probabilities of moving from the state of employment to the states of unemployment and self-employment, respectively.¹⁰ On average, women are more likely to be unemployed and less likely to be self-employed than men.

3.3 Institutional Background

As institutional constraints may hamper the degree of assortativeness and sorting in the labor market, we outline the main features of the Danish labor market, which is represented by the combination of high flexibility and social security, the role of family-friendly policies and decentralized wage settings.

Cornerstones of the Danish “flexicurity” model are a high level of labor mobility and

¹⁰Unemployment and self-employment are measured as the destination state by observing the longest period of time for these states in the year following the transition.

generous social security schemes. In particular, the absence of severance pay legislation lowers hiring and firing costs, reduces frictions in the labor market and facilitates the efforts of firms to adjust the quality and size of their workforce. Moreover, although they are not protected by stringent employment rules, workers bear relatively low costs of changing employers and have easy access to unemployment insurance or social assistance benefits. In fact, Danish replacement ratios are among the most generous in the world. Therefore, a notable part of the observed labor mobility is also associated with wage mobility (Eriksson and Westergaard-Nielsen, 2009).

A further key feature of the Danish labor market is the wide coverage of publicly provided childcare, which, combined with the length and flexibility of parental leave schemes, has favored female labor market participation and full-time employment without dramatic consequences on the fertility rate (OECD, 2005). In fact, Denmark and the other Nordic countries (Finland, Iceland, Norway and Sweden) have traditionally been considered forerunners in designing family-friendly policies. In these countries, female participation has been correlated with the expansion of the welfare state, and many of the jobs held by women have been part-time occupations in the public sector. Today, a notable proportion of women is employed in the private sector and works full-time.

For the purposes of our analysis, a brief description of wage bargaining in the Danish private sector is important. Similar to other OECD countries, Denmark experienced a shift in wage bargaining from a highly centralized system to a considerably decentralized system. Since the early 1980s, an increasing share of wage bargaining descended to the firm (individual employee) level, which increased the weight of employer and employee roles in the resulting internal firm wage structure. As found in Shaw and Lazear (2008), the within-firm wage variability in Denmark represents more than 80 percent of the total variability observed among all workers.

4 The Estimation Strategy

Our empirical analysis is based on a reduced form model developed from the theoretical framework formalized by BD. This framework is based on a modified version of Shimer and Smith (2000), in which payoffs of economic agents can be used to identify the types of firms and workers as soon as the payoffs are monotonically increasing among the payoffs in their own category. The ability to rank firms allows us to use the job-to-job mobility of workers of different types to assess the sign and strength of sorting. Specifically, to make inferences about the existence, sign and strength of assortative matching, we estimate the following probability model, which is conditional on workers movement (i.e., for the sample of movers):

$$\begin{aligned} move_up_{ijr} = & \alpha_0 + \alpha_1 wage_lag(e_i, f_j) + \alpha_2(wage_lag(e_i, f_j) * gender_i) \\ & + \alpha_3 gender_i + x'_{ij}\beta + z'_j\gamma_1 + z'_r\gamma_2 + u_j \end{aligned} \quad (1)$$

where $move_up_{ijr}$ is a dummy variable that is equal to 1 if employee i , who has worked in the sending firm j , moves to a “better” receiving firm r . As explained in the previous section, we apply alternative definitions and measures of a firms quality: some of these definitions are time-dependent, whereas others are not. The term wage lag $wage_lag(e_i, f_j)$ is the log of the wage earned in sending firm j by employee i , which we assume to be increasing in her own type e_i , and f_j is the employer type. The assumption that employee wages are monotone in their types allows us to use within-firm variation in wages to rank workers.

As shown by BD, the extent and sign of sorting are tested by investigating whether coefficient α_1 is different from zero. More specifically, if $\alpha_1 > 0$, then there is evidence of positive sorting because the positive sign indicates that better workers (i.e., those workers who receive higher wages in a given firm after controlling for observables) are

more likely to move to firms that earn higher profits or more value added, depending on the specification. Hence, a more positive coefficient indicates a relatively stronger tendency towards positive assortative matching.

As noted above, this estimation strategy is grounded on agents payoff monotonicity among their own types and the presence of some mismatches between workers and firms in the equilibrium distribution. The former assumption is a natural assumption that is consistent with a large family of models (BD). The latter condition is crucial, as perfect sorting would make both sources of heterogeneity empirically indistinguishable because no transitions would be observed. Even in a flexible labor market, such as the Danish labor market, mismatches and frictions may arise for a variety of reasons. Search models rely on the assumption that time and effort are needed for workers to change jobs because they possess imperfect information about the labor market. However, even with full information and no mobility costs, firms may have monopsony power if jobs are differentiated as a result of, for example, commuting distances or non-monetary factors. Rents in the employment relationship may also arise as a result of specific wage-setting mechanisms, such as efficiency wages, or the accumulation of specific human capital. For a recent review of the theory and empirical work on imperfect labor markets, see Manning (2011).

The focus of this paper is to test whether the degree and sign of sorting vary according to gender using two strategies: first by estimating the coefficient α_2 and second by estimating equation (1) separately by gender and testing whether α_1 significantly varies across the female and male sub-samples. The second approach accounts for of the concern that the rankings may be biased across genders because the wages of women are typically not directly comparable with those of men.

As there are many worker characteristics that may influence wages and mobility, such as demographic characteristics, and it is unclear to what extent the monotonicity assumption on payoffs is fulfilled when comparing coworkers in different occupations,

we augment equation (1) with the vector x_{ij} . This vector consists of relevant worker characteristics, such as age, tenure, work experience, ethnicity, marital status, parental status, education, occupation and a familiar network dummy (i.e., a dummy that records whether a worker has had at least one parent employed as a manager). The vectors z_j and z_r include the share of white-collar women, which is a proxy of the female-friendliness of a firm, and the size of the sending and receiving firm, respectively. Finally, u_j captures the fixed effects of firm j .

With regard to the sample of stayers and their probability of being promoted, a similar model is implemented:

$$\begin{aligned} move_up_{ij} = & \alpha_0 + \alpha_1 wage_lag(e_i, f_j) + \alpha_2(wage_lag(e_i, f_j) * gender_i) \\ & + \alpha_3 gender_i + x'_{ij}\beta + z'_j\gamma + u_{cj} \end{aligned} \quad (2)$$

where $move_up_{ij}$ is a dummy variable that is equal to 1 if employee i , who has worked within a specific occupation in firm j , is promoted to a higher occupational level.¹¹ The term u_j captures within firm fixed effects. As in the previous model, the vector x_{ij} and z_j include worker and firm characteristics.

To complement the analysis on the sorting patterns and to gain a better understanding of the related findings, we also employ model (1) for transitions from employment to either unemployment or self-employment.

5 Results

Given the large volume of results, we discuss them in three separate sub-sections. The first sub-section describes sorting in job-to-job transitions, the second sub-section

¹¹Three main occupational groups are considered: managers, middle-managers and blue-collar workers.

discusses promotion patterns, and the third sub-section examines both job-to-self-employment and job-to-unemployment transitions. Each sub-section complements the others and provides support for the proposition that female workers encounter glass ceilings in some firms.

5.1 Job-to-Job Transitions

The results pertaining to job-to-job transitions are reported in Table 3 through 12. The first two columns of Table 3 include the baseline results with and without an interaction term. In both cases, there is a significantly positive association between the logarithm of the past wage that was earned in the previous firm and the probability of moving to a better firm. Although statistically significant, the size of this elasticity is relatively low at 0.011. Interestingly, although women are less likely to move to better firms, they display a substantially stronger tendency toward positive sorting than men, as indicated by the estimated coefficient on the interaction term. These empirical associations suggest that women are frequently better represented in companies that are characterized by higher profits than in less profitable companies. In addition, transitions to better firms are more likely for workers who are married or native citizens or for those who hold a tertiary education. The relationship with age and tenure appears to be positive but slight; thus, there is limited evidence of the hypothesis of biological differences proposed by Ichino and Moretti (2009). Finally, having at least a child or a parent with past managerial experience is found to have a positive effect on sorting.

Our results are consistent with the findings of Bagger, Sørensen and Vejlin (2013), who document a strong trend of positive assortative wage sorting in Denmark, largely driven by high-wage workers being increasingly likely to transition to high-wage firms.

These coefficients could be biased because women receive, on average, lower wages,

such that a stronger coefficient could result even if similarly ranked individuals in the sub-group have the same transition probabilities. Hence, to further investigate gender differences in sorting, the first column of Table 4 reports the results according to gender. Again, we observe notable differences in sorting patterns in favor of women. Furthermore, hypothesis testing that is reported at the bottom of the table confirms that the coefficient that is associated with women's lagged wages is statistically higher from that associated with men's wages.

Our results could be sensitive to how we define "better firms" that we employ in this study (i.e., firms with profits at least five percent higher than ones previous firm). We address this issue in four different ways.

First, we perform the same estimation by changing the definition of profits (columns 3 to 9 of Table 3), using the average profits of the firms in our sample, incorporating past profits that were made before the job-to-job transition occurred and using value added. Furthermore, we calculate both the total and per-worker profits. Similarly, columns 3 and 5 of Table 4 report the results using profits per worker and value added as the definition of profits for the estimations separately according to gender. In all the specifications, the results are qualitatively similar to the main results. There is a general positive sorting tendency between workers and firms, and the size of this elasticity is relatively low, as it fluctuates between 0.004 and 0.013 depending on the definition of "better firms" that we use. Specifically, the sorting coefficient typically increases if we consider profits rather than average or past profits or value added for the definition of firm type. The finding that women appear to be less likely to move to better firms is not robust in all specifications, which lends support for the theory of sticky floors in job-to-job transitions; this phenomenon would imply equal promotion rates. With regard to the regressions run separately by gender, it is interesting to note that the share of white-collar women in the sending firms has opposite effects in the two sub-samples: this share decreases the probability of moving for female workers,

whereas it increases the corresponding probability for men. Overall, there appears to be little support for the classical version of the glass ceiling hypothesis, which would imply that positive sorting is weaker for women than for men.

Second, in the first two columns of Table 5 and in the last two columns of Table 4, we replace the past log of the level of wage that was earned with employee fixed effects that are estimated from a gender-specific wage equation à la AKM. The findings reveal that the conditional probability of being recruited by a better firm is also positively correlated with worker fixed effects, and as in the previous table, this correlation is stronger for women, implying that both the sign of sorting and the gender effect are confirmed when using the alternative definition of worker rankings suggested by AKM.

Third, we strengthen the conditions on profits and value added by defining a transition to a better firm as a transition to a firm whose profits are at least 10 percent higher than the profits of the sending enterprise. The results are reported in columns 2 to 11 of Table 5 and in columns 2, 4 and 6 of Table 4, again corroborating the findings of the main regressions.

Fourth, we restrict or relax the definition of job-to-job transitions to a better firm to observe how the results change. In Table 6, we separately study transitions to the same or to a better occupational level. The results show that the transitions to the same occupational level are those with stronger gender differences. This finding that small career advancements for women are easier than more significant career advancements lends support to both the sticky floor hypothesis and the theory of Booth et al. (2003). Furthermore, if we impose the condition that switchers also earn higher wages after a transition to a better firm, then the gender difference in sorting is observed to be stronger than in the baseline model (Table 6). When we study transitions without periods of unemployment between jobs and include transitions motivated by a firms demise (Table 7), the results are similar to the main results of Table 4. However, when we focus solely on transitions from a firms closure or two years before a firms closure,

we find no evidence of gender differences in sorting, as these mobility patterns do not completely reflect the voluntary choices and career concerns of employees.

Indeed, in that situation, men are also forced to seek jobs outside of their current firms. When there are certain differences between firms (i.e., when profits are at least 10 percent higher in the receiving firm), the statistics are actually in favor of men. The results pertaining to promotions in the next section will make sense of these findings that emphasize that gender differences in sorting in favor of women emerge when we consider voluntary transitions.

The discrepancies between men and women in sorting are confirmed in the subsamples that refer to age, occupation and education (Table 8). As before, men generally show weaker positive sorting patterns, and the difference between genders is larger for middle-aged workers, who are at the stage in which we expect more significant career advancements to occur. The difference is particularly strong for blue-collar workers and for workers with primary education, whereas the difference weakens for the more educated workers or for those with better occupations; ultimately, this difference becomes statistically insignificant or minimal for workers with tertiary educations.¹² The finding that gender differences in sorting disappear with age is consistent with the theory of biological differences of Ichino and Moretti (2009), but the finding that positive sorting is stronger for women seems to contradict this theory.

Sorting is also stronger for women independently of their civic status or focusing on transitions without a change of residence, as these transitions are likely to be career related (Table 9). Conversely, the reductions in the labor supply that are represented by shifts from full-time to part-time employment are not associated with positive and significant sorting, as changes in the number of hours worked are likely to be triggered by family considerations. Most importantly, there are no gender differences in these

¹²Although the coefficients for workers in managerial positions are not statistically significant or negative, they would become positive and significant if we restricted the sample to workers with a tertiary education. These results are available upon request.

transitions, again suggesting that family considerations do not explain the sorting patterns that we observe.

Table 10 documents that parenthood does not appear to be relevant to job-to-job transitions, as not only do gender differences in sorting emerge for both workers with and without children and for workers both before and after the first child, but the coefficients are also similar in all these sub-samples.

The finding that the sorting coefficient is significantly higher for women without a familiar network allows us to dismiss the surmise that women have stronger sorting patterns only because of stronger familiar ties in the labor market (Table 11).

In addition, the sorting parameter is larger for transitions that are not made to female-oriented firms, i.e., companies characterized by a large share of women in white-collar positions, which is lower than the industrial mean. This result suggests that female workers must be outstanding workers to succeed in such firms (again, see Table 11). On the contrary, there is no significant difference between genders in terms of transitions to female-friendly firms.

Gender differences in sorting do not qualitatively change with respect to the main results if we consider only transitions without job-to-job unemployment periods. It does not appear to be relevant whether firms conduct business in the same industry or in a different industry relative to that of the sending firm.

Finally, Table 12 shows that differences in positive sorting in favor of females do not depend on a firm's size or industry. The exceptions are the construction sector, which is not a female-oriented sector, and the financial and business services sector, in which the degree of positive assortativity for men is closer to that for women.

Overall, our empirical evidence generally suggests that the degree of positive sorting is higher for women than for men in voluntary job-to-job transitions. However, this result does not hold for all types of transitions and women, as their degree of sorting may be severely affected by the extent of career advancements, reductions in the labor

supply and attitudes toward female workers in receiving firms. These findings may initially appear puzzling, as they do not appear to support any well-known theory of gender gaps in the labor market and do not seem to be consistent with gender gaps in the labor market. Examining the other mobility patterns more closely will help us to clarify the reasons and mechanisms behind these gender differences in sorting.

5.2 Promotion Patterns

The main findings on sorting in job positions within firms are reported in Table 13. Not surprisingly, we find a general positive relationship between a stayers lagged wage and his probability of being promoted. The size of the elasticity parameter is reduced by approximately half if we consider only promotions to managerial jobs. A worker's native status, higher education and familiar networks are also positively associated with the conditional likelihood of being promoted.

Being a woman reduces the conditional probability of promotion, and the parameter of the interaction between past wages and the female dummy is significantly negative. These findings regarding the gender differences in promotions are confirmed when we separately investigate sorting in promotion for the sample of men and women. Interestingly, a greater share of women is associated with an average higher conditional probability for women and men. This correlation suggests that the share of female workers *per se* is not an indication of unbiased promotion policies.

Considering the results by age group in Table 14, we find that the discrepancy in the sorting parameter increases with the age of workers. The pattern appears to be consistent with the tendency of women to climb the career ladder at a slow pace; hence, women exhibit an increasing gap with respect to men. This pattern lowers a woman's probability of reaching top-level positions at a given age, as also found by Ichino and Moretti (2009). Interestingly, the difference is lower for workers with

tertiary educations.

The differences in our key parameters do not decrease when we focus on samples composed of married workers or individuals with or without children (Table 15), although for women who will be mothers, the differences with respect to promotion appear after the first child is born. Similarly, there are no gender differences in the individual sub-samples. We will return to these patterns below to attempt to understand which firms treat women differently before and after parenthood.

However, focusing on the sub-sample of female-oriented and “female-sought” firms (i.e., female-friendly firms that are ideal destinations in the job-to-job transition of at least one female worker) provides us with an additional interesting result (Table 16). For this group of female-friendly companies, we find evidence that the strength of positive sorting is stronger for women when we examine promotions to a higher occupational level. In fact, the difference is consistent with the baseline results but is stronger in firms that are not sought after by females. These findings strongly indicate that good female workers seek career advancements in female-friendly firms in the sense that the promotion opportunities in these firms do not depend on gender.

Nonetheless, gender differences in promotion persist and are similar in all firms when we focus on large career advancements (i.e., promotions to positions at the managerial level), which provides evidence of the sticky floor hypothesis.

These results pertaining to promotions also qualify the findings in the previous section, according to which the share of white-collar women in sending firms has a negative correlation with the probability of moving to a better firm for women: because women are more likely to be promoted in female-friendly firms with many white-collar female workers, they are less likely to seek a job elsewhere if the sending firm is female-friendly. Furthermore, men have fewer incentives to seek a job outside of their current firm, especially in non-female-friendly firms, and this lack of incentives drives the stronger positive sorting for women in job-to-job transitions. This pattern is consistent with

the finding that the latter result disappears for transitions resulting from firm demises.

According to our empirical strategy, female-friendly firms are by construction more profitable. However, we have explicitly tested the correlation between profitability and female-friendliness by estimating a productivity equation with fixed effects and the dummy that takes the value of 1 if the firm is “female-sought”. Table 17 clearly shows a positive and significant correlation between non-discrimination and firm profitability.

With respect to the effect of parenthood on internal career advancements, Tables 18 and 19 report the results for the sub-samples both before and after the first child is born in female-friendly, non-female-friendly and female-sought firms. Interestingly, nearly all firms show few gender differences for promotions to better occupations before the first child is born.¹³ Furthermore, women who work in female-oriented and female-sought firms have even greater opportunities to be promoted after the first child is born compared with men of similar ability. However, women who work in other firms encounter a significant penalty in promotions after bearing a child. Finally, there are no gender differences in favor of men for promotions to managerial positions in female-sought firms, although this result is not true in other firms. This set of results strongly indicates that glass ceilings emerge because of motherhood in firms that are not female-oriented.

Finally, the results of the estimations that are conducted separately and that include firms operating in the same industry indicate that the same patterns emerge in all sector, as reported in Table 20 and 21.

Together with the job-to-job transition results, this evidence on gender differences in promotion suggests that women who cannot climb the occupational ladder within a firm because of discriminating promotion policies, especially after motherhood, attempt to overcome these gender barriers by searching for better jobs offered by fairer firms

¹³Although the coefficients for workers who have not had a child and who work in female-friendly firms are negative, they become significantly positive for women and insignificant for men if we restrict the sample to workers without tertiary educations. These results are available upon request.

in which they can pursue small career advancements. By contrast, greater career advancements tend to be easier for men than for women in all firms.

To complete the description of the mechanisms driving such sorting patterns, we proceed by examining the gender differences in transitions to unemployment and self-employment.

5.3 Job-to-Unemployment and Job-to-Self-Employment Transitions

The results pertaining to transitions from employment to unemployment are reported in Table 22. Not surprisingly, the association between the last earned wages and the propensity to become unemployed is significantly negative, estimated to be approximately -0.005 . Women appear to be more exposed to open unemployment than men, and as indicated by the coefficient on the interaction term, this tendency applies even to women who earn higher wages. The likelihood of falling into open unemployment increases with age, for workers with at least one child and for foreigners. In contrast, having longer tenure, better education, higher shares of white-collar females in sending firms, a parent with managerial experience and being married generally lower the probability of entering unemployment. By dividing the full sample into gender-specific sub-samples (columns 2 and 3, Table 22), we find that both women and men with higher past wage experience a lower likelihood of unemployment than otherwise comparable individuals. However, the coefficient that is estimated in the male sub-sample is more negative and statistically different from the female equivalent, as revealed by the hypothesis testing reported at the bottom of Table 22.

Tables 23 and 24 generally confirm this gender heterogeneity in the association between wages and the risk of open unemployment in favor of men. However, no statistically significant differences between genders emerge for individuals with at least

a tertiary education. Similarly, the effect of age is confirmed to be increasing but concave; furthermore, it is milder in female-friendly firms and stronger in non-female-friendly firms.

Tables 25, 26 and 27 include results for the sorting patterns in transitions from employment to self-employment. As in job-to-unemployment transitions, past wages generally appear to be negatively and significantly associated with the likelihood of self-employment. Gender interaction reveals that this association is especially apparent for men. The results reported for alternative sub-samples confirm these gender differences, with the magnitude of the association between wages and self-employment being more negative for men, although the difference is not always statistically significant. In particular, there are no gender differences in sorting into self-employment for singles, for workers who have yet not had their first child and in female-friendly firms.

In summary, the analysis of job-to-unemployment and job-to-self-employment transitions provides evidence of significant differences between men and women with respect to the propensity to become self-employed or to experience open unemployment in favor of women. Our results reveal a generally lower willingness of employers to retain women compared with men, especially with respect to women who work in firms that are not female-oriented and who have had at least one child. These findings suggest that women have fewer career opportunities than men in such firms.

After combining these results with those reported in the previous sub-sections, it appears that women do not have better non-market opportunities, which differs from the assumptions of Lazear and Rosen (1990), as women's career advancement opportunities do not appear to be better than those of men (they are less likely to be promoted or to move to a better firm and are more likely to move to a better firm when career advancements are not too difficult to achieve). Rather, the higher degree of positive sorting for females in job-to-job transitions is consistent with the finding

that strong female workers experience glass ceilings in the average firm, especially after motherhood; hence, such women pursue (mild) career advancements in firms with lower glass ceilings for women. As a result, we observe an overall gender gap in labor market outcomes and an under-representation of women in top positions.

6 Conclusions

In this paper, we measure sorting in different labor market transitions for female and male workers using Danish employer-employee matched data to assess the reasons for the gender gaps in labor market outcomes. In particular, we study the relationship between a workers ability, which is measured by ones position in the wage hierarchy of the firm for which (s)he works, and the probability of moving to a better firm (in the sense that it generates more profits/value added), the probability of being promoted and the probability of entering self-employment or unemployment.

The detailed account of gender differences that emerges provides support to the hypothesis that female workers encounter glass ceilings in some firms, especially after motherhood. This obstacle leads good female workers to seek firms that will reward their talents in a fair manner. As a result, good female workers are more mobile than male workers in the direction of better firms, but it is easier for good male workers to be promoted in their firms. Nonetheless, gender differences in promotion persist and are similar in all firms when we focus on large career advancements. Moreover, good female workers are also more prone than men to enter unemployment and self-employment, revealing a lower willingness of firms to retain female workers.

Our findings imply that there is scope for policy intervention to prevent glass ceilings, as the benefits of efficiently reallocating the labor force can be substantial. Furthermore, although the Nordic model that is characterized by a flexible labor market and generous public family-friendly schemes has succeeded in maintaining a high rate

of female employment, some unintended boomerang effects appear to have emerged and impeded women who become mothers from progressing in their careers in firms that are not female-friendly. These hurdles may be associated with the significant generosity of parental leave policies, as suggested by Datta Gupta, Smith and Verner (2008) and Smith, Smith and Verner (2011). Thus, it is important to conduct further research to determine why these effects emerge only in some firms.

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Table 1: The main descriptive statistics

Variables	Sample of switchers				Sample of stayers			
	Women		Men		Women		Men	
	Mean	S.d.	Mean	S.d.	Mean	S.d.	Mean	S.d.
log(wage_sending)	12.140	0.549	12.356	0.571	12.230	0.495	12.464	0.508
age	35.335	10.087	36.284	10.402	38.150	10.291	39.109	10.791
tenure	3.257	3.556	3.233	3.581	5.304	4.760	5.653	4.998
labor market experience	12.405	8.690	14.807	9.593	14.422	8.743	17.381	9.879
manager	0.022	0.148	0.037	0.188	0.016	0.127	0.042	0.200
middle manager	0.236	0.424	0.214	0.410	0.169	0.254	0.102	0.303
blue-collar worker	0.742	0.438	0.749	0.434	0.815	0.279	0.856	0.351
with at least a child (0-3)	0.137	0.344	0.134	0.341	0.119	0.324	0.116	0.320
primary (1, if primary education)	0.380	0.485	0.318	0.466	0.399	0.490	0.322	0.467
secondary (1, if secondary and post-secondary education)	0.556	0.497	0.633	0.482	0.538	0.499	0.625	0.484
tertiary (1, if tertiary education)	0.063	0.244	0.049	0.216	0.063	0.243	0.053	0.224
foreigner	0.051	0.220	0.050	0.217	0.048	0.214	0.046	0.209
familiar network (1, if the father or mother is a manager)	0.051	0.220	0.043	0.203	0.052	0.223	0.044	0.206
married or cohabitating	0.694	0.461	0.669	0.471	0.752	0.432	0.715	0.451
share of white-collar women in the sending firm	0.039	0.045	0.017	0.041	-	-	-	-
share of white-collar women in the current firm	0.038	0.049	0.016	0.040	0.029	0.048	0.016	0.035
sending firm size has fewer than 50 employees	0.124	0.330	0.175	0.380	-	-	-	-
sending firm size has between 51 and 100 employees	0.102	0.303	0.132	0.338	-	-	-	-
sending firm size has more than 100 employees	0.774	0.418	0.693	0.461	-	-	-	-
current firm size has fewer than 50 employees	0.145	0.352	0.196	0.397	0.149	0.356	0.202	0.402
current firm size has between 51 and 100 employees	0.114	0.318	0.140	0.347	0.116	0.321	0.145	0.352
current firm size has more than 100 employees	0.741	0.438	0.664	0.472	0.735	0.442	0.653	0.476
sending firm profit per worker	81.508	270.250	83.911	257.572	-	-	-	-
current firm profit per worker	97.416	455.928	95.688	425.774	72.044	3127.781	88.332	2232.545
Obs	146,051		333,110		1,519,012		3,139,362	
Number of individuals	111,733		245,754		413,723		742,900	
Number of firms			17,491				18,105	

Notes: All the variables are averages from 1995 to 2005.

Table 2: The mean of all the dependent variables

Statistics of the dependent variables	Sample of switchers	
	Women	Men
Prob(profits of current firm>profits of previous firm)	0.529	0.518
Prob(profits of current firm>profits of previous firm by 10%)	0.417	0.403
Prob(va of current firm>va of previous firm)	0.471	0.474
Prob(va of current firm>va of previous firm by 10%)	0.394	0.418
Prob(profits of current firm PER WORKER>profits of previous firm PER WORKER)	0.529	0.528
Prob(profits of current firm PER WORKER>profits of previous firm PER WORKER by 10%)	0.403	0.410
Prob(va PER WORKER of current firm>va PER WORKER of previous firm)	0.546	0.534
Prob(va PER WORKER of current firm>va PER WORKER of previous firm by 10%)	0.484	0.456
Prob(AVERAGE profits of current firm>AVERAGE of profits previous firm)	0.558	0.535
Prob(AVERAGE profits of current firm>AVERAGE profits of previous firm by 10%)	0.411	0.406
Prob(AVERAGE profits of current firm PER WORKER> AVERAGE profits of previous firm PER WORKER)	0.545	0.539
Prob(AVERAGE profits of current firm PER WORKER> AVERAGE profits of previous firm PER WORKER by 10%)	0.453	0.439
Prob(PAST profits of current firm> PAST profits of previous firm)	0.504	0.507
Prob(PAST profits of current firm> PAST profits of previous firm by 10%)	0.415	0.415
Prob(PAST profits of current firm PER WORKER> PAST profits of previous firm PER WORKER)	0.531	0.528
Prob(PAST profits of current firm PER WORKER> PAST profits of previous firm PER WORKER by 10%)	0.439	0.430
Obs	146,051	333,110
<i>All sample without observations with switching</i>		
Promotion	0.012	0.020
Obs	1,519,012	3,139,362
Unemployment (0, stayers)	0.032	0.024
Obs	1,948,860	3,647,025
Self-employment (0, stayers)	0.002	0.005
Obs	1,994,818	3,706,615

Notes: All the dependent variables are expressed as time averages from 1995 to 2005.

Table 3: Sorting models results, main results

	Profits (> 5%)		Aver. Profits (> 5%)		Past Profits (> 5%)		Value Added (> 5%)	
	Total	Per Worker	Total	Per Worker	Total	Per Worker	Total	Per Worker
log(wage_lag)	0.011** (0.001)	0.013*** (0.000)	0.009*** (0.000)	0.012*** (0.000)	0.008*** (0.000)	0.009*** (0.000)	0.007** (0.001)	0.004*** (0.000)
female	-0.002* (0.001)	0.001* (0.000)	-0.002** (0.000)	0.000 (0.000)	-0.002** (0.000)	-0.002** (0.000)	-0.000 (0.001)	-0.002*** (0.000)
log(wage_lag)*female	-	0.005*** (0.001)	0.006*** (0.000)	0.015*** (0.001)	0.009*** (0.001)	0.012*** (0.000)	0.008*** (0.002)	0.010*** (0.000)
age	-	0.001* (0.000)	0.001** (0.000)	0.001** (0.000)	0.001** (0.000)	0.001** (0.000)	0.001 (0.001)	-0.000 (0.000)
age ² /1000	-0.023* (0.002)	-0.024* (0.008)	-0.029*** (0.001)	-0.026*** (0.001)	-0.029*** (0.002)	-0.030** (0.002)	-0.017 (0.008)	-0.007*** (0.000)
tenure	0.001** (0.000)	0.001** (0.000)	0.001*** (0.000)	0.002*** (0.000)	0.001*** (0.000)	0.002*** (0.000)	0.000 (0.000)	-0.001*** (0.000)
tenure ² /1000	-0.079*** (0.002)	-0.079*** (0.002)	-0.054*** (0.000)	-0.072*** (0.002)	-0.036*** (0.003)	-0.078*** (0.001)	-0.035** (0.003)	0.030*** (0.002)
share of white-collar women in sending firm	0.001*** (0.000)	0.001*** (0.000)	0.000*** (0.000)	-0.000** (0.000)	0.000*** (0.000)	0.000*** (0.000)	-0.000*** (0.000)	-0.000*** (0.000)
share of white-collar women in receiving firm	-0.001** (0.000)	-0.001** (0.000)	-0.001*** (0.000)	-0.001*** (0.000)	-0.000*** (0.000)	-0.001*** (0.000)	0.001*** (0.000)	0.002*** (0.000)
child	0.004*** (0.000)	0.004*** (0.000)	0.002** (0.000)	0.002** (0.000)	0.004** (0.000)	0.005*** (0.001)	0.003** (0.000)	0.002*** (0.000)
secondary	0.001 (0.001)	0.005*** (0.000)	0.001*** (0.000)	0.002*** (0.000)	0.000 (0.000)	0.001** (0.000)	0.003** (0.000)	0.003*** (0.000)
tertiary	0.021*** (0.000)	0.021*** (0.001)	0.024*** (0.000)	0.030*** (0.000)	0.019*** (0.001)	0.022*** (0.000)	0.025*** (0.000)	0.025*** (0.000)
married	0.003*** (0.000)	0.004*** (0.000)	0.006*** (0.000)	0.005*** (0.000)	0.004*** (0.000)	0.008*** (0.000)	0.001** (0.000)	0.002** (0.000)
foreigner	-0.001* (0.000)	-0.002** (0.000)	-0.007*** (0.000)	-0.007*** (0.000)	-0.007** (0.000)	-0.007** (0.000)	-0.003*** (0.000)	-0.004*** (0.000)
familiar network	0.005** (0.000)	0.005** (0.000)	0.004*** (0.000)	0.004*** (0.000)	-0.001 (0.001)	0.002** (0.001)	0.002** (0.000)	0.002** (0.000)
N	479,161	479,161	479,161	479,161	479,161	479,161	479,161	479,161
R ²	0.122	0.122	0.004	0.155	0.099	0.002	0.272	0.277

Notes: All specifications include experience and experience squared, sending firm fixed effects, size dummies of the receiving and sending firm, and year and occupational dummies. The standard errors are reported in parentheses and are clustered at the sending firm level and at the individual level. *Statistically significant at the 0.10 level, **at the 0.05 level, and ***at the 0.01 level.

Table 4: The sorting models estimated separately for men and women: main results

	Profits		Profits Per Worker		Value Added		Profits, Fixed Effects	
	> 5%	> 10%	> 5%	> 10%	> 5%	> 10%	> 5%	> 10%
Women								
log(wage_sending)	0.018*** (0.000)	0.015*** (0.000)	0.015*** (0.001)	0.015*** (0.000)	0.014*** (0.000)	0.008*** (0.000)	-	-
Fixed effects from wage equation	-	-	-	-	-	-	0.034*** (0.003)	0.032*** (0.003)
age	0.001** (0.000)	0.001** (0.000)	0.001** (0.000)	0.001** (0.000)	-0.000 (0.000)	-0.002*** (0.000)	0.005** (0.000)	0.004** (0.000)
age ² /1000	-0.009 (0.004)	-0.023** (0.001)	-0.013 (0.005)	-0.032*** (0.000)	-0.002 (0.007)	0.019*** (0.000)	-0.027** (0.003)	-0.029** (0.004)
tenure	0.001* (0.000)	0.000* (0.000)	0.001* (0.000)	0.001** (0.000)	0.001* (0.000)	0.000** (0.000)	0.001* (0.000)	0.001 (0.000)
tenure ² /1000	-0.084** (0.012)	-0.030** (0.006)	-0.082** (0.010)	-0.065** (0.005)	-0.049** (0.006)	-0.014** (0.001)	-0.084** (0.014)	-0.079** (0.012)
share of white-collar women in sending firm	-0.000** (0.000)	-0.001*** (0.000)	-0.000** (0.000)	-0.001*** (0.000)	-0.002** (0.000)	-0.001*** (0.000)	-0.000** (0.000)	-0.000** (0.000)
share of white-collar women in receiving firm	-0.001** (0.000)	-0.001*** (0.000)	0.000 (0.000)	-0.001** (0.000)	0.000** (0.000)	0.001** (0.000)	-0.001** (0.000)	0.000 (0.000)
child	0.007** (0.001)	-0.000 (0.001)	0.006** (0.001)	-0.003** (0.001)	0.005* (0.002)	0.000 (0.000)	0.004** (0.001)	0.003** (0.000)
secondary	0.002* (0.000)	0.004** (0.000)	0.001 (0.001)	0.003** (0.000)	0.004*** (0.000)	0.003** (0.001)	0.013*** (0.001)	0.011*** (0.000)
tertiary	0.019*** (0.001)	0.033*** (0.001)	0.022*** (0.001)	0.035*** (0.001)	0.026*** (0.001)	0.025*** (0.000)	0.031*** (0.000)	0.032*** (0.000)
married	0.008** (0.001)	0.007** (0.000)	0.007** (0.000)	0.005*** (0.000)	0.002 (0.001)	0.002** (0.001)	0.008** (0.001)	0.007** (0.000)
foreigner	0.000 (0.002)	-0.005** (0.000)	-0.001 (0.002)	-0.005** (0.000)	-0.003 (0.001)	-0.005** (0.001)	0.000 (0.000)	-0.001 (0.000)
familiar network	0.001 (0.001)	-0.005** (0.001)	0.002 (0.001)	-0.002** (0.000)	-0.004** (0.000)	-0.004*** (0.000)	0.001 (0.001)	0.002 (0.001)
N	146,051	146,051	146,051	146,051	146,051	146,051	146,051	146,051
R ²	0.121	0.004	0.122	0.004	0.243	0.241	0.121	0.122
Men								
log(wage_sending)	0.008*** (0.001)	0.013*** (0.000)	0.006*** (0.001)	0.012*** (0.000)	0.005*** (0.001)	0.002*** (0.000)	-	-
Fixed effects from wage equation	-	-	-	-	-	-	0.021*** (0.001)	0.013*** (0.000)
age	0.002* (0.001)	0.002** (0.000)	0.002 (0.001)	0.002*** (0.000)	0.002* (0.001)	0.001** (0.000)	0.004*** (0.001)	0.003*** (0.001)
age ² /1000	-0.032** (0.010)	-0.034*** (0.001)	-0.028* (0.010)	-0.035*** (0.001)	-0.025* (0.008)	-0.021*** (0.001)	-0.046*** (0.009)	-0.036*** (0.010)
tenure	0.001*** (0.000)	0.001*** (0.000)	0.001** (0.000)	0.001*** (0.000)	0.000 (0.000)	-0.002*** (0.000)	0.001*** (0.000)	0.001** (0.000)
tenure ² /1000	-0.077** (0.010)	-0.063*** (0.003)	-0.054** (0.009)	-0.034*** (0.001)	-0.029** (0.009)	0.050*** (0.004)	-0.072** (0.011)	-0.053** (0.010)
share of white-collar women in sending firm	0.001*** (0.000)	0.001*** (0.000)	0.001*** (0.000)	0.001*** (0.000)	0.001*** (0.000)	0.000*** (0.000)	0.001*** (0.000)	0.001*** (0.000)
share of white-collar women in receiving firm	-0.001*** (0.000)	-0.000*** (0.000)	-0.000*** (0.000)	0.000*** (0.000)	0.001*** (0.000)	0.003*** (0.000)	-0.001*** (0.000)	-0.000** (0.000)
child	0.003*** (0.000)	-0.000 (0.001)	0.004*** (0.000)	0.001 (0.001)	0.003*** (0.000)	0.002*** (0.000)	0.003*** (0.000)	0.003*** (0.000)
secondary	0.001 (0.001)	0.005*** (0.000)	-0.000 (0.001)	0.003*** (0.000)	0.003** (0.000)	0.003*** (0.000)	0.008*** (0.000)	0.004** (0.001)
tertiary	0.022*** (0.000)	0.033*** (0.001)	0.019*** (0.000)	0.027*** (0.001)	0.024*** (0.000)	0.026*** (0.000)	0.029*** (0.001)	0.023*** (0.000)
married	0.002** (0.000)	0.006** (0.001)	0.001 (0.000)	0.004** (0.001)	0.001 (0.000)	0.001* (0.000)	0.002** (0.000)	0.000 (0.000)
foreigner	-0.003** (0.000)	-0.008*** (0.001)	-0.000 (0.001)	-0.008** (0.001)	-0.004*** (0.000)	-0.004*** (0.000)	-0.003** (0.000)	-0.000 (0.000)
familiar network	0.006*** (0.000)	0.010*** (0.000)	-0.001* (0.000)	0.005*** (0.000)	0.006** (0.000)	0.005** (0.000)	0.006*** (0.000)	-0.001** (0.000)
N	333,110	333,110	333,110	333,110	333,110	333,110	333,110	333,110
R ²	0.124	0.004	0.133	0.003	0.285	0.292	0.124	0.133
Hypothesis test [χ^2 ; p-value]: $\alpha_1^{women} = \alpha_1^{men}$	92.74; 0.000	167.44; 0.000	129.79; 0.000	664.13; 0.000	100.75; 0.000	5378.75; 0.000	77.60; 0.000	93.53; 0.000

Notes: All specifications include experience and experience squared, firm fixed effects, size dummies of the receiving and sending firm a full set of industry, year and occupational dummies. The standard errors are clustered at the sending firm level and at the individual level are reported in parentheses. *Statistically significant at the 0.10 level, **at the 0.05 level, and ***at the 0.01 level.

Table 5: The Sorting models results, with estimations with alternative definitions of the dependent and the ranking variables

	Profits, Fixed Effects		Profits (> 10%)		Aver. Profits (> 10%)		Past Profits (> 10%)		Value Added (> 10%)	
	5%	10%	Total	Per Worker	Total	Per Worker	Total	Per Worker	Total	Per Worker
log(wage_lag)	-	-	0.006***	0.012***	0.008***	0.013***	0.009***	0.010***	0.021***	0.019***
female	-0.003**	-0.003**	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
log(wage_lag)*female	(0.001)	(0.000)	-0.002**	-0.006***	-0.002**	-0.007***	0.001*	-0.007***	-0.023***	-0.021***
	-	-	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
	-	-	0.004***	0.010***	0.005***	0.013***	0.008***	0.012***	0.019***	0.015***
	(0.000)	(0.000)	(0.001)	(0.001)	(0.000)	(0.000)	(0.001)	(0.000)	(0.000)	(0.000)
Fixed effects from wage equation	0.024***	0.024***	-	-	-	-	-	-	-	-
	(0.002)	(0.002)	-	-	-	-	-	-	-	-
(Fixed effects from wage equation)* female	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-
age	0.004***	0.004**	0.001	0.001**	0.001***	0.001***	0.001**	0.002**	0.004***	0.004***
	(0.000)	(0.000)	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
age ² /1000	-0.036**	-0.037**	-0.021*	-0.033***	-0.019***	-0.027***	-0.014**	-0.030**	-0.069***	-0.070***
	(0.007)	(0.007)	(0.009)	(0.001)	(0.000)	(0.000)	(0.002)	(0.003)	(0.001)	(0.001)
tenure	0.001**	0.001**	0.000	0.000**	0.001***	0.002***	0.001***	0.002***	0.000*	0.000*
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
tenure ² /1000	-0.075**	-0.075**	-0.042***	-0.032***	-0.040***	-0.039***	-0.032***	-0.085***	0.004	-0.009
	(0.002)	(0.002)	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)	(0.000)	(0.005)	(0.004)
share of white-collar women in sending firm	0.001***	0.001***	0.001***	0.000***	-0.000***	0.000	0.000**	-0.000*	-0.001***	-0.001***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
share of white-collar women in receiving firm	-0.001**	-0.001**	0.001***	-0.000***	0.001***	-0.001***	0.000	-0.001***	0.000**	0.000**
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
child	0.003***	0.003***	0.004**	0.000	0.002**	0.001**	0.003**	0.004***	0.003**	0.002**
	(0.000)	(0.000)	(0.001)	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.000)
secondary	0.009***	0.009***	0.001	0.003***	0.000	-0.000	-0.002**	-0.001***	0.006***	0.006***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
tertiary	0.029***	0.029***	0.021***	0.029***	0.024***	0.027***	0.019***	0.017***	0.054***	0.055***
	(0.001)	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.001)
married	0.003***	0.003***	0.003***	0.004**	0.004***	0.007**	0.004***	0.006***	0.006**	0.006**
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)
foreigner	-0.001*	-0.002**	-0.000	-0.010***	-0.002***	-0.004***	-0.005**	-0.006**	-0.017***	-0.018***
	(0.000)	(0.000)	(0.001)	(0.000)	(0.000)	(0.000)	(0.001)	(0.001)	(0.000)	(0.000)
familiar network	0.004**	0.004**	-0.000	0.003***	0.003***	0.000	-0.003***	0.001	0.007***	0.008***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
N	479,161	479,161	479,161	479,161	479,161	479,161	479,161	479,161	479,161	479,161
R ²	0.122	0.122	0.128	0.003	0.160	0.003	0.102	0.002	0.013	0.013

Notes: All specifications include experience and experience squared, sending firm fixed effects, size dummies of the receiving and sending firms, and year and occupational dummies. The standard errors are reported in parentheses and are clustered at the sending firm level and at the individual level. *Statistically significant at the 0.10 level, **at the 0.05 level, and ***at the 0.01 level.

Table 6: Sorting models estimated separately for men and women: results by type of transitions

	Transition to a better occupational level		Transition to the same occupational level	
	Profits > 5%	Profits > 10%	Profits > 5%	Profits > 10%
<i>Women</i>				
log(wage_sending)	0.008*** (0.000)	0.014*** (0.001)	0.020*** (0.001)	0.014*** (0.001)
N	21,055	21,055	106,242	106,242
R ²	0.116	0.118	0.129	0.129
<i>Men</i>				
log(wage_sending)	0.006*** (0.000)	0.005*** (0.001)	0.009*** (0.002)	0.006*** (0.002)
N	46,396	46,396	247,178	247,178
R ²	0.121	0.126	0.127	0.138
Hypothesis test [χ^2 ; p-value]: $\alpha_1^{women} = \alpha_1^{men}$	123.77; 0.000	140.96; 0.0008	43.58; 0.000	30.55; 0.000
With a wage improvement				
	Profits > 5%	Profits > 10%		
<i>Women</i>				
log(wage_sending)	0.022*** (0.004)	0.018*** (0.004)		
N	51,881	51,881		
R ²	0.164	0.163		
<i>Men</i>				
log(wage_sending)	0.004*** (0.001)	0.004*** (0.001)		
N	102,494	102,494		
R ²	0.143	0.151		
Hypothesis test [χ^2 ; p-value]: $\alpha_1^{women} = \alpha_1^{men}$	100.54; 0.000	81.02; 0.000		

Notes: All specifications include age, age squared, tenure, tenure squared, work experience, work experience squared, foreigner status, marital status, parental status, education, occupation, a familiar network dummy, sending firm fixed effects, share of women, size dummies of the receiving and sending firms, and a full set of industry and year dummies. The standard errors are reported in parentheses and are clustered at the sending firm level and at the individual level, a part from the model on transition 2 years before a firm exit, in which the clustering is at the individual level only. *Statistically significant at the 0.10 level, **at the 0.05 level, and ***at the 0.01 level.

Table 7: Sorting models estimated separately for men and women: results by other relevant types of transitions

	Transition without unemployment		All Transitions, including firm exit	
	Profits > 5%	Profits > 10%	Profits > 5%	Profits > 10%
<i>Women</i>				
log(wage_sending)	0.017*** (0.001)	0.016*** (0.002)	0.016*** (0.001)	0.013*** (0.001)
N	91,235	91,235	171,704	171,704
R ²	0.134	0.135	0.118	0.119
<i>Men</i>				
log(wage_sending)	0.011*** (0.002)	0.009*** (0.002)	0.008*** (0.001)	0.006*** (0.001)
N	228,088	228,088	389,463	389,463
R ²	0.122	0.133	0.122	0.132
Hypothesis test [χ^2 ; p-value]: $\alpha_1^{women} = \alpha_1^{men}$	23.62; 0.000	27.50; 0.000	817.46; 0.000	481.52; 0.000
	Transition from a firm exit		Transition 2 years before a firm exit	
	Profits > 5%	Profits > 10%	Profits > 5%	Profits > 10%
<i>Women</i>				
log(wage_sending)	0.008*** (0.001)	0.006*** (0.001)	0.026* (0.015)	0.030* (0.015)
N	25,653	25,653	3,585	3,585
R ²	0.071	0.085	0.139	0.125
<i>Men</i>				
log(wage_sending)	0.007*** (0.002)	0.010*** (0.002)	0.015 (0.010)	0.003 (0.010)
N	56,353	56,353	10,033	10,033
R ²	0.093	0.119	0.144	0.157
Hypothesis test [χ^2 ; p-value]: $\alpha_1^{women} = \alpha_1^{men}$	0.06; 0.8064	46.62; 0.000	0.34; 0.5583	2.16; 0.1416

Notes: All specifications include age, age squared, tenure, tenure squared, work experience, work experience squared, foreigner status, marital status, parental status, education, occupation, a familiar network dummy, sending firm fixed effects, share of women, size dummies of the receiving and sending firms, and a full set of industry and year dummies. The standard errors are reported in parentheses and are clustered at the sending firm level and at the individual level, a part from the model on transition 2 years before a firm exit, in which the clustering is at the individual level only. *Statistically significant at the 0.10 level, **at the 0.05 level, and ***at the 0.01 level.

Table 8: Sorting models estimated separately for men and women: results by age, occupation and education

	Under 35 years		Between 35 and 50 years		More than 50 years	
	Profits > 5%	Profits > 10%	Profits > 5%	Profits > 10%	Profits > 5%	Profits > 10%
<i>Women</i>						
log(wage_sending)	0.014*** (0.000)	0.012*** (0.001)	0.028*** (0.000)	0.021*** (0.001)	0.023*** (0.001)	0.020*** (0.001)
N	81,238	81,238	49,926	49,926	14,887	14,887
R ²	0.115	0.116	0.136	0.137	0.197	0.202
<i>Men</i>						
log(wage_sending)	0.007*** (0.001)	0.004*** (0.001)	0.010*** (0.003)	0.007*** (0.003)	0.009** (0.001)	0.006 (0.004)
N	173,415	173,415	118,429	118,429	41,266	41,266
R ²	0.129	0.136	0.121	0.131	0.129	0.157
Hypothesis test [χ^2 ; p-value]: $\alpha_1^{women} = \alpha_1^{men}$	64.31; 0.000	393.20; 0.000	180.15; 0.000	86.85; 0.000	7.04; 0.0080	5.67; 0.0173
	Blue-collar		Middle manager		Manager	
	Profits > 5%	Profits > 10%	Profits > 5%	Profits > 10%	Profits > 5%	Profits > 10%
<i>Women</i>						
log(wage_sending)	0.019*** (0.000)	0.016*** (0.001)	0.011** (0.002)	0.010*** (0.003)	0.017 (0.006)	-.024 (0.004)
N	108,355	108,355	34,437	34,437	3,279	3,279
R ²	0.129	0.129	0.106	0.107	0.168	0.160
<i>Men</i>						
log(wage_sending)	0.009*** (0.001)	0.008*** (0.001)	0.011** (0.001)	0.003*** (0.001)	-0.017* (0.001)	-0.005 (0.001)
N	249,468	249,468	71,373	71,373	12,269	12,269
R ²	0.136	0.145	0.094	0.100	0.103	0.110
Hypothesis test [χ^2 ; p-value]: $\alpha_1^{women} = \alpha_1^{men}$	57.56; 0.000	68.58; 0.000	0.04; 0.8343	976.28; 0.000	14.83; 0.000	2.85; 0.111
	Primary education		Secondary education		Tertiary education	
	Profits > 5%	Profits > 10%	Profits > 5%	Profits > 10%	Profits > 5%	Profits > 10%
<i>Women</i>						
log(wage_sending)	0.020*** (0.000)	0.017*** (0.001)	0.017*** (0.001)	0.014*** (0.000)	0.011*** (0.004)	0.013*** (0.002)
N	55,552	55,552	81,236	81,236	9,263	9,263
R ²	0.141	0.141	0.112	0.114	0.115	0.112
<i>Men</i>						
log(wage_sending)	0.007*** (0.001)	0.006*** (0.000)	0.008*** (0.002)	0.005*** (0.002)	0.013*** (0.002)	0.012*** (0.002)
N	106,035	106,035	210,720	210,720	16,355	16,355
R ²	0.151	0.156	0.116	0.127	0.106	0.112
Hypothesis test [χ^2 ; p-value]: $\alpha_1^{women} = \alpha_1^{men}$	810.41; 0.000	1.0e+05; 0.000	25.63; 0.000	30.81; 0.000	1.52; 0.2169	30.64; 0.000

Notes: All specifications include age, age squared, tenure, tenure squared, work experience, work experience squared, foreigner status, marital status, parental status, education, occupation, a familiar network dummy, sending firm fixed effects, share of women, size dummies of the receiving and sending firms, and a full set of industry and year dummies. The standard errors are reported in parentheses and are clustered at the sending firm level and at the individual level. *Statistically significant at the 0.10 level, **at the 0.05 level, and ***at the 0.01 level.

Table 9: Sorting models estimated separately for men and women: results by relevant individual characteristics

	Married or cohabiting		Single	
	Profits > 5%	Profits > 10%	Profits > 5%	Profits > 10%
<i>Women</i>				
log(wage_sending)	0.019*** (0.000)	0.017*** (0.000)	0.017*** (0.002)	0.012*** (0.002)
N	101,377	101,377	44,674	44,674
R ²	0.125	0.126	0.113	0.115
<i>Men</i>				
log(wage_sending)	0.007*** (0.001)	0.004*** (0.001)	0.009*** (0.002)	0.008*** (0.001)
N	222,919	222,919	110,191	110,191
R ²	0.119	0.130	0.132	0.130
Hypothesis test [χ^2 ; p-value]: $\alpha_1^{women} = \alpha_1^{men}$	23.04; 0.000	29.08; 0.000	25.13; 0.000	5.54; 0.0186
Transition without change in residence				
	Profits > 5%	Profits > 10%	Profits > 5%	Profits > 10%
<i>Women</i>				
log(wage_sending)	0.018*** (0.001)	0.014*** (0.001)	-0.007 (0.006)	-0.004 (0.006)
N	56,617	56,617	11,293	11,293
R ²	0.100	0.107	0.102	0.115
<i>Men</i>				
log(wage_sending)	0.009*** (0.000)	0.004*** (0.000)	0.007 (0.003)	0.004* (0.001)
N	131,864	131,864	14,830	14,830
R ²	0.120	0.131	0.109	0.134
Hypothesis test [χ^2 ; p-value]: $\alpha_1^{women} = \alpha_1^{men}$	4775.14; 0.000	1244.41; 0.000	2.25; 0.1332	1.71; 0.1913

Notes: All specifications include age, age squared, tenure, tenure squared, work experience, work experience squared, foreigner status, marital status, parental status, education, occupation, a familiar network dummy, sending firm fixed effects, share of women, size dummies of the receiving and sending firms, and a full set of industry and year dummies. The standard errors are reported in parentheses and are clustered at the sending firm level and at the individual level. *Statistically significant at the 0.10 level, **at the 0.05 level, and ***at the 0.01 level.

Table 10: Sorting models estimated separately for men and women: results by relevant individual characteristics

	With child (0-3 years)		Without child (0-3 years)	
	Profits > 5%	Profits > 10%	Profits > 5%	Profits > 10%
<i>Women</i>				
log(wage_sending)	0.016*** (0.001)	0.015*** (0.001)	0.018*** (0.002)	0.015*** (0.003)
N	20,012	20,012	126,039	126,039
R ²	0.124	0.122	0.121	0.122
<i>Men</i>				
log(wage_sending)	0.006*** (0.000)	0.002*** (0.000)	0.008*** (0.002)	0.006*** (0.002)
N	44,682	44,682	288,428	288,428
R ²	0.120	0.127	0.125	0.134
Hypothesis test [χ^2 ; p-value]: $\alpha_1^{women} = \alpha_1^{men}$	21.41; 0.000	43.16; 0.000	135.56; 0.000	187.33; 0.000
	Before child (0-3 years)		After child (0-3 years)	
	Profits > 5%	Profits > 10%	Profits > 5%	Profits > 10%
<i>Women</i>				
log(wage_sending)	0.021*** (0.001)	0.020*** (0.001)	0.021*** (0.001)	0.019*** (0.001)
N	8,149	8,149	11,686	11,686
R ²	0.113	0.119	0.109	0.110
<i>Men</i>				
log(wage_sending)	-0.007 (0.004)	-0.005 (0.003)	0.007*** (0.001)	0.007*** (0.000)
N	15,513	15,513	27,711	27,711
R ²	0.125	0.126	0.113	0.122
Hypothesis test [χ^2 ; p-value]: $\alpha_1^{women} = \alpha_1^{men}$	25.59; 0.000	23.75; 0.000	23.01; 0.000	24.16; 0.000

Notes: All specifications include age, age squared, tenure, tenure squared, work experience, work experience squared, foreigner status, marital status, parental status, education, occupation, a familiar network dummy, sending firm fixed effects, share of women, size dummies of the receiving and sending firms, and a full set of industry and year dummies. The standard errors are reported in parentheses and are clustered at the sending firm level and at the individual level. *Statistically significant at the 0.10 level, **at the 0.05 level, and ***at the 0.01 level.

Table 11: Sorting models estimated separately for men and women: results by type of transitions

	With familiar network		Without familiar network	
	Profits > 5%	Profits > 10%	Profits > 5%	Profits > 10%
<i>Women</i>				
log(wage_sending)	0.025*** (0.000)	0.025*** (0.000)	0.018*** (0.000)	0.015*** (0.001)
N	7,471	7,471	138,580	138,580
R ²	0.115	0.112	0.122	0.126
<i>Men</i>				
log(wage_sending)	0.004*** (0.001)	-0.001*** (0.000)	0.008*** (0.002)	0.006*** (0.001)
N	15,791	15,791	318,777	318,777
R ²	0.112	0.120	0.124	0.133
Hypothesis test [χ^2 ; p-value]: $\alpha_1^{women} = \alpha_1^{men}$	98.71; 0.000	99.21; 0.000	59.96; 0.000	75.11; 0.000
Transition to female-friendly firms		Transition not to female-friendly firms		
	Profits > 5%	Profits > 10%	Profits > 5%	Profits > 10%
<i>Women</i>				
log(wage_sending)	0.013*** (0.001)	0.007*** (0.001)	0.021*** (0.001)	0.020*** (0.002)
N	56,783	56,783	89,268	89,268
R ²	0.161	0.159	0.098	0.100
<i>Men</i>				
log(wage_sending)	0.008*** (0.001)	0.007*** (0.001)	0.007*** (0.001)	0.004*** (0.000)
N	153,350	153,350	179,760	179,760
R ²	0.144	0.154	0.104	0.111
Hypothesis test [χ^2 ; p-value]: $\alpha_1^{women} = \alpha_1^{men}$	4.31; 0.0379	0.00; 0.9597	157.69; 0.000	144.21; 0.000
Transition within the same industry		Transition to a different industry		
	Profits > 5%	Profits > 10%	Profits > 5%	Profits > 10%
<i>Women</i>				
log(wage_sending)	0.017*** (0.000)	0.016*** (0.001)	0.016*** (0.000)	0.012*** (0.000)
N	73,345	73,345	72,706	72,706
R ²	0.179	0.179	0.120	0.123
<i>Men</i>				
log(wage_sending)	0.006*** (0.002)	0.006*** (0.001)	0.010*** (0.000)	0.006*** (0.000)
N	163,457	163,457	169,653	169,653
R ²	0.138	0.151	0.134	0.140
Hypothesis test [χ^2 ; p-value]: $\alpha_1^{women} = \alpha_1^{men}$	15.11; 0.0001	37.37; 0.000	3265.63; 0.000	257.52; 0.000

Notes: All specifications include age, age squared, tenure, tenure squared, work experience, work experience squared, foreigner status, marital status, parental status, education, occupation, a familiar network dummy, sending firm fixed effects, share of women, size dummies of the receiving and sending firms, and a full set of industry and year dummies. The standard errors are reported in parentheses and are clustered at the sending firm level and at the individual level. Female-friendly firms are those with a share of white-collar women that is higher than the industrial mean. *Statistically significant at the 0.10 level, **at the 0.05 level, and ***at the 0.01 level.

Table 12: Sorting models estimated separately for men and women: results by the size of sending firm and the industry of the receiving firm

	Firm size: 20-49 employees		Firm size: 50-99 employees		Firm size: more than 99 employees	
	Profits > 5%	Profits > 10%	Profits > 5%	Profits > 10%	Profits > 5%	Profits > 10%
<i>Women</i>						
log(wage_sending)	0.015*** (0.001)	0.020*** (0.001)	0.015*** (0.001)	0.006*** (0.002)	0.017*** (0.000)	0.013*** (0.000)
N	21,195	21,195	16,672	16,672	108,184	108,184
R ²	0.012	0.007	0.017	0.005	0.045	0.038
<i>Men</i>						
log(wage_sending)	0.009*** (0.001)	0.005*** (0.001)	0.010*** (0.000)	0.006*** (0.000)	0.003 (0.002)	0.001 (0.001)
N	65,241	65,241	46,648	46,648	221,221	221,221
R ²	0.008	0.004	0.008	0.005	0.019	0.022
Hypothesis test [χ^2 ; p-value]: $\alpha_1^{women} = \alpha_1^{men}$	64.84; 0.000	163.95; 0.000	230.44; 0.000	0.06; 0.8131	24.96; 0.000	27.27; 0.0000
Manufacturing		Construction		Wholesale trade		
	Profits > 5%	Profits > 10%	Profits > 5%	Profits > 10%	Profits > 5%	Profits > 10%
<i>Women</i>						
log(wage_sending)	0.014*** (0.002)	0.016*** (0.001)	-0.024*** (0.002)	-0.014*** (0.000)	0.013*** (0.000)	0.005*** (0.000)
N	52,148	52,148	3,374	3,374	47,232	47,232
R ²	0.130	0.126	0.132	0.145	0.110	0.119
<i>Men</i>						
log(wage_sending)	0.003*** (0.000)	-0.000** (0.000)	0.012*** (0.000)	0.004*** (0.000)	0.003*** (0.000)	0.003*** (0.000)
N	137,302	137,302	54,925	54,925	66,418	66,418
R ²	0.137	0.140	0.133	0.150	0.109	0.118
Hypothesis test [χ^2 ; p-value]: $\alpha_1^{women} = \alpha_1^{men}$	50.96; 0.000	125.95; 0.000	612.39; 0.000	181.32; 0.000	8205.30; 0.000	20.21; 0.000
Transport		Business and financial				
	Profits > 5%	Profits > 10%	Profits > 5%	Profits > 10%		
<i>Women</i>						
log(wage_sending)	0.019*** (0.000)	0.013*** (0.001)	0.021** (0.001)	0.015*** (0.000)		
N	22,195	22,195	21,045	21,045		
R ²	0.513	0.524	0.083	0.086		
<i>Men</i>						
log(wage_sending)	0.004* (0.001)	0.008*** (0.000)	0.014*** (0.000)	0.015*** (0.000)		
N	41,449	41,449	32,428	32,428		
R ²	0.392	0.410	0.087	0.086		
Hypothesis test [χ^2 ; p-value]: $\alpha_1^{women} = \alpha_1^{men}$	57.54; 0.000	32.51; 0.000	24.89; 0.000	0.11; 0.7391		

Notes: All specifications include age, age squared, tenure, tenure squared, work experience, work experience squared, foreigner status, marital status, parental status, education, occupation, a familiar network dummy, sending firm fixed effects, share of women, size dummies of the receiving and sending firms, and a full set of industry and year dummies. The standard errors are reported in parentheses and are clustered at the sending firm level and at the individual level. *Statistically significant at the 0.10 level, **at the 0.05 level, and ***at the 0.01 level.

Table 13: Promotion models estimated for all sample and separately for men and women: main results

	Better Occupation		Manager		Better Occupation		Manager	
	All sample				Women	Men	Women	Men
log(wage_sending)	0.014*** (0.002)	0.013*** (0.002)	0.006*** (0.000)	0.006*** (0.000)	0.008*** (0.002)	0.016*** (0.002)	0.003*** (0.000)	0.008*** (0.000)
female	-0.009*** (0.001)	-0.009*** (0.001)	-0.002*** (0.000)	-0.002*** (0.000)	-	-	-	-
female*log(wage_sending)	-	-0.009*** (0.000)	-	-0.005*** (0.000)	-	-	-	-
age	0.002*** (0.000)	0.002*** (0.000)	0.000 (0.000)	-0.000 (0.000)	0.001*** (0.000)	0.003*** (0.000)	0.000*** (0.000)	-0.000** (0.000)
age ² /1000	-0.028*** (0.002)	-0.028*** (0.002)	0.001*** (0.000)	0.001*** (0.000)	-0.019*** (0.001)	-0.033*** (0.003)	-0.001*** (0.000)	0.003*** (0.000)
tenure	-0.001*** (0.000)	-0.001*** (0.000)	-0.000*** (0.000)	-0.000*** (0.000)	-0.001*** (0.000)	-0.001*** (0.000)	-0.000*** (0.000)	-0.000*** (0.000)
tenure ² /1000	0.041*** (0.005)	0.041*** (0.005)	0.010*** (0.002)	0.010*** (0.001)	0.027*** (0.004)	0.047*** (0.006)	0.005*** (0.001)	0.012*** (0.002)
share of white-collar women in the firm	0.759*** (0.026)	0.759*** (0.026)	0.038*** (0.002)	0.038*** (0.002)	0.807*** (0.034)	0.711*** (0.020)	0.025*** (0.005)	0.044*** (0.004)
child	0.001** (0.000)	0.000* (0.000)	0.000** (0.000)	-0.000 (0.000)	-0.000 (0.000)	0.000 (0.000)	0.000** (0.000)	-0.000** (0.000)
married	0.004*** (0.000)	0.004*** (0.000)	0.001*** (0.000)	0.001*** (0.000)	0.000 (0.000)	0.005*** (0.000)	-0.000 (0.000)	0.001*** (0.000)
secondary	0.006*** (0.000)	0.006*** (0.000)	0.001*** (0.000)	0.001*** (0.000)	0.004*** (0.000)	0.008*** (0.001)	0.001*** (0.000)	0.002*** (0.000)
tertiary	0.031*** (0.003)	0.030*** (0.003)	0.010*** (0.001)	0.010*** (0.001)	0.028*** (0.002)	0.032*** (0.003)	0.006*** (0.000)	0.012*** (0.001)
foreigner	-0.009*** (0.000)	-0.009*** (0.001)	-0.001*** (0.000)	-0.002*** (0.000)	-0.002*** (0.001)	-0.009*** (0.001)	-0.000 (0.000)	-0.002*** (0.000)
familiar network	0.008*** (0.001)	0.008*** (0.000)	0.001*** (0.000)	0.001*** (0.000)	0.006*** (0.001)	0.009*** (0.000)	0.000** (0.000)	0.002*** (0.000)
N	4,658,374	4,658,374	4,658,374	4,658,374	1,519,041	3,138,119	1,519,012	3,139,362
R ²	0.018	0.018	0.015	0.016	0.017	0.017	0.006	0.019
Hypothesis test [χ^2 ; p-value]:								
$\alpha_1^{women} = \alpha_1^{men}$	-	-	-	-	153.18; 0.000		593.36; 0.000	

Notes: All specifications include experience and experience squared, firm fixed effects, size dummies of the receiving firm, and a full set of industry and year dummies. The standard errors are reported in parentheses and are clustered at the sending firm level and at the individual level. *Statistically significant at the 0.10 level, **at the 0.05 level, and ***at the 0.01 level.

Table 14: Promotion models estimated separately for men and women: results by age and education

Promotion to Better Occupation			
	Under 35 years	Between 35 and 50 years	More than 50 years
<i>Women</i>			
log(wage_sending)	0.009*** (0.001)	0.016*** (0.002)	0.017*** (0.002)
N	605,745	634,392	234,995
R ²	0.016	0.019	0.016
<i>Men</i>			
log(wage_sending)	0.013*** (0.001)	0.028*** (0.003)	0.039*** (0.002)
N	1,009,596	1,298,172	598,309
R ²	0.012	0.022	0.027
Hypothesis test [χ^2 ; p-value]: $\alpha_1^{women} = \alpha_1^{men}$	164.44; 0.000	140.37; 0.000	1440.48; 0.000
Promotion to Better Occupation			
	Primary education	Secondary education	Promotion to Manager Tertiary education
<i>Women</i>			
log(wage_sending)	0.009*** (0.002)	0.013*** (0.002)	0.006*** (0.001)
N	605,979	817,036	95,976
R ²	0.015	0.015	0.007
<i>Men</i>			
log(wage_sending)	0.013*** (0.001)	0.023*** (0.003)	0.011*** (0.001)
N	1,009,621	1,962,734	166,458
R ²	0.012	0.017	0.032
Hypothesis test [χ^2 ; p-value]: $\alpha_1^{women} = \alpha_1^{men}$	252.91; 0.000	66.45; 0.000	13.12; 0.0003

Notes: The dependent variable is a dummy that takes the value of one, if the worker is, within the same firm, promoted to a better occupational level (or, to a managerial position for the tertiary education sample). All specifications include age, age squared, tenure, tenure squared, work experience, work experience squared, foreigner status, marital status, parental status, education, occupation, a familiar network dummy, firm fixed effects, receiving firm share of women, size dummies, and a full set of industry and year dummies. The standard errors are reported in parentheses and are clustered at the sending firm level and at the individual level. *Statistically significant at the 0.10 level, **at the 0.05 level, and ***at the 0.01 level.

Table 15: Promotion models estimated separately for men and women: results by civil status and parenthood

Promotion to Better Occupation			
	Married or cohabiting	Single	Without child (0-3 years)
<i>Women</i>			
log(wage_sending)	0.010*** (0.002)	0.004*** (0.001)	0.008*** (0.002)
N	1,142,548	376,464	1,337,556
R ²	0.017	0.017	0.017
<i>Men</i>			
log(wage_sending)	0.023*** (0.002)	0.004*** (0.001)	0.016*** (0.002)
N	2,245,098	894,264	2,774,507
R ²	0.020	0.010	0.018
Hypothesis test [χ^2 ; p-value]: $\alpha_1^{women} = \alpha_1^{men}$	161.34; 0.000	0.07; 0.7982	204.73; 0.000
Promotion to Better Occupation			
	With child (0-3 years)	Before Child	After Child
<i>Women</i>			
log(wage_sending)	0.009*** (0.001)	0.004*** (0.001)	0.012*** (0.002)
N	181,430	106,456	161,196
R ²	0.015	0.20	0.017
<i>Men</i>			
log(wage_sending)	0.016*** (0.002)	0.006*** (0.001)	0.018*** (0.003)
N	365,179	209,709	322,431
R ²	0.017	0.020	0.012
Hypothesis test [χ^2 ; p-value]: $\alpha_1^{women} = \alpha_1^{men}$	19.83; 0.000	2.22; 0.1364	10.99; 0.0009

Notes: The dependent variable is a dummy that takes the value of one, if the worker is, within the same firm, promoted to a better occupational level. All specifications include age, age squared, tenure, tenure squared, work experience, work experience squared, foreigner status, marital status, parental status, education, occupation, a familiar network dummy, firm fixed effects, receiving firm share of women, size dummies, and a full set of industry and year dummies. The standard errors are reported in parentheses and are clustered at the sending firm level and at the individual level. *Statistically significant at the 0.10 level, **at the 0.05 level, and ***at the 0.01 level.

Table 16: Promotion models estimated separately for men and women: results based on the female-friendliness of firms

Promotion to Better Occupation			
	Female-friendly firms	Non-female-friendly firms	Female-sought firms
	<i>Women</i>		
log(wage_sending)	0.009*** (0.002)	0.008*** (0.001)	0.009*** (0.002)
N	527,903	991,421	461,989
R ²	0.012	0.008	0.020
	<i>Men</i>		
log(wage_sending)	0.006*** (0.002)	0.019*** (0.002)	0.005** (0.002)
N	651,470	2,487,942	521,571
R ²	0.015	0.019	0.016
Hypothesis test [χ^2 ; p-value]: $\alpha_1^{women} = \alpha_1^{men}$	5.53; 0.0187	162.53; 0.000	53.46; 0.000
Promotion to Managerial Position			
	Female-friendly firms	Not female-friendly firms	Female-sought firms
	<i>Women</i>		
log(wage_sending)	0.004*** (0.000)	0.002*** (0.000)	0.004*** (0.000)
N	527,591	991,421	461,989
R ²	0.011	0.004	0.009
	<i>Men</i>		
log(wage_sending)	0.008*** (0.000)	0.008*** (0.000)	0.008*** (0.002)
N	651,420	2,487,942	521,571
R ²	0.021	0.019	0.021
Hypothesis test [χ^2 ; p-value]: $\alpha_1^{women} = \alpha_1^{men}$	398.69; 0.000	660.88; 0.000	436.59; 0.000

Notes: The dependent variable is a dummy that takes the value of one, if the worker is, within the same firm, promoted to a better occupational level. All specifications include age, age squared, tenure, tenure squared, work experience, work experience squared, foreigner status, marital status, parental status, education, occupation, a familiar network dummy, firm fixed effects, receiving firm share of women, size dummies, and a full set of industry and year dummies. The standard errors are reported in parentheses and are clustered at the sending firm level and at the individual level. Female-friendly firms are those with a share of white-collar women that is higher than the industrial mean. Female-sought firms only include the destination firms of the job to job transitions model, whose share of white-collar women is higher than the industrial mean that hired at least one woman in the sorting model. *Statistically significant at the 0.10 level, **at the 0.05 level, and ***at the 0.01 level.

Table 17: Firm profitability and non-discrimination

	FE(1)	FE(2)	FE(3)
Female-sought firm	0.034** (0.012)	0.033** (0.012)	0.027** (0.012)
log of capital stock		0.027*** (0.004)	0.038*** (0.004)
average age of employees			0.000 (0.001)
average tenure of employees			0.001 (0.002)
average experience of employees			-0.002* (0.001)
share of managers			-0.040 (0.032)
share of middle managers			-0.012 (0.014)
share of employees with secondary education			0.019* (0.011)
share of employees with tertiary education			-0.005 (0.030)
share of women			0.041 (0.071)
N	62,599	62,596	62,596
R^2	0.013	0.014	0.025

Notes: The dependent variable is the log of profits per employee. All specifications include firm fixed effects, firm size dummies, and a full set of industry and year dummies. *Statistically significant at the 0.10 level, **at the 0.05 level, and ***at the 0.01 level.

Table 18: Promotion models estimated separately for men and women: results by female friendliness of firms before and after children

Promotion to Better Occupation				
	Female-friendly firms		Not female-friendly firms	
	Before Child	After Child	Before Child	After Child
<i>Women</i>				
log(wage_sending)	-0.009*** (0.002)	0.016*** (0.004)	0.005*** (0.001)	0.010*** (0.001)
N	41,304	61,149	82,141	117,573
R ²	0.020	0.009	0.012	0.010
<i>Men</i>				
log(wage_sending)	-0.015*** (0.002)	0.011*** (0.002)	0.008*** (0.001)	0.021*** (0.002)
N	50,412	77,086	193,001	286,499
R ²	0.204	0.007	0.019	0.014
Hypothesis test [χ^2 ; p-value]: $\alpha_1^{women} = \alpha_1^{men}$	2.89; 0.0890	3.82; 0.0507	2.65; 0.1037	37.15; 0.000
Promotion to Better Occupation				
	Female-sought Firms		Not female-sought firms	
	Before Child	After Child	Before Child	After Child
<i>Women</i>				
log(wage_sending)	0.000 (0.005)	0.028*** (0.006)	0.004** (0.002)	0.009*** (0.002)
N	6,728	9,449	15,269	21,330
R ²	0.019	0.021	0.008	0.010
<i>Men</i>				
log(wage_sending)	0.004 (0.003)	0.017*** (0.003)	0.008*** (0.001)	0.015*** (0.002)
N	16,381	22,509	71,596	97,672
R ²	0.021	0.009	0.018	0.110
Hypothesis test [χ^2 ; p-value]: $\alpha_1^{women} = \alpha_1^{men}$	0.53; 0.4680	7.11; 0.0077	4.43; 0.0354	16.01; 0.0001

Notes: The dependent variable is a dummy that takes the value of one, if the worker is, within the same firm, promoted to a better occupational level within the same firm. All specifications include age, age squared, tenure, tenure squared, work experience, work experience squared, foreigner status, marital status, parental status, education, occupation, a familiar network dummy, firm fixed effects, receiving firm share of women and size and a full set of industry and year dummies. Standard errors are reported in parentheses and are clustered at the sending firm level and at the individual level. Female-friendly firms are those with a share of white-collar women higher than the industrial mean. Female-sought firms only include the destination firms of the job to job transitions model whose share of white-collar women is higher than the industrial mean that hired at least a woman in the sorting model. *Statistically significant at the 0.10 level, **at the 0.05 level, ***at the 0.01 level.

Table 19: Promotion models estimated separately for men and women: results baes on the female-friendliness of firms before and after children

Promotion to Managerial Position				
	Female-friendly firms		Non-female-friendly firms	
	Before Child	After Child	Before Child	After Child
<i>Women</i>				
log(wage_sending)	0.004*** (0.001)	0.002*** (0.000)	0.001*** (0.000)	0.002*** (0.000)
N	41,304	61,149	82,141	117,573
R ²	0.013	0.004	0.003	0.005
<i>Men</i>				
log(wage_sending)	0.007*** (0.001)	0.006*** (0.001)	0.004*** (0.000)	0.005*** (0.000)
N	50,412	77,086	193,001	286,449
R ²	0.020	0.007	0.012	0.008
Hypothesis test [χ^2 ; p-value]: $\alpha_1^{women} = \alpha_1^{men}$	5.16; 0.0232	13.43; 0.0002	51.48; 0.000	27.21; 0.000
Promotion to Managerial Position				
	Female-sought Firms		Non-female-sought firms	
	Before Child	After Child	Before Child	After Child
<i>Women</i>				
log(wage_sending)	0.004*** (0.001)	0.005*** (0.001)	0.001** (0.000)	0.001** (0.002)
N	6728	9,449	15,269	21,330
R ²	0.009	0.012	0.004	0.006
<i>Men</i>				
log(wage_sending)	0.006*** (0.001)	0.006*** (0.001)	0.003*** (0.000)	0.003*** (0.000)
N	16,381	22,509	71,596	97,672
R ²	0.015	0.007	0.011	0.007
Hypothesis test [χ^2 ; p-value]: $\alpha_1^{women} = \alpha_1^{men}$	0.90; 0.3423	0.27; 0.6020	14.38; 0.0001	9.64; 0.0019

Notes: The dependent variable is a dummy that takes the value of one, if the worker is, within the same firm, promoted to a managerial occupational level within the same firm. All specifications include age, age squared, tenure, tenure squared, work experience, work experience squared, foreigner status, marital status, parental status, education, occupation, a familiar network dummy, firm fixed effects, receiving firm share of women, size dummies, and a full set of industry and year dummies. The standard errors are reported in parentheses and are clustered at the sending firm level and at the individual level. Female-friendly firms are those with a share of white-collar women that is higher than the industrial mean. Female-sought firms only include the destination firms of the job to job transitions model, whose share of white-collar women is higher than the industrial mean that hired at least one woman in the sorting model. *Statistically significant at the 0.10 level, **at the 0.05 level, and ***at the 0.01 level.

Table 20: Promotion models estimated separately for men and women: results by industry of receiving firm

Promotion to Better Occupation			
	Manufacturing	Construction	Wholesale trade
	<i>Women</i>		
log(wage_sending)	0.007*** (0.001)	0.007** (0.003)	0.012*** (0.001)
N	845,161	54,240	473,734
R ²	0.018	0.026	0.022
	<i>Men</i>		
log(wage_sending)	0.019*** (0.002)	0.013*** (0.001)	0.017*** (0.002)
N	1,883,927	510,320	680,699
R ²	0.023	0.015	0.025
Hypothesis test [χ^2 ; p-value]: $\alpha_1^{women} = \alpha_1^{men}$	281.05; 0.000	6.84; 0.0089	112.30; 0.000
Promotion to Better Occupation			
	Transport	Business and financial	
	<i>Women</i>		
log(wage_sending)	0.017*** (0.003)	-0.011*** (0.001)	
N	111,108	250,468	
R ²	0.019	0.524	
	<i>Men</i>		
log(wage_sending)	0.010* (0.001)	-0.022*** (0.002)	
N	236,892	301,871	
R ²	0.009	0.016	
Hypothesis test [χ^2 ; p-value]: $\alpha_1^{women} = \alpha_1^{men}$	10.05; 0.0015	59.93; 0.000	

Notes: The dependent variable is a dummy that takes the value of one, if the worker is, within the same firm, promoted to a better occupational level within the same firm. All specifications include age, age squared, tenure, tenure squared, work experience, work experience squared, foreigner status, marital status, parental status, education, occupation, a familiar network dummy, firm fixed effects, receiving firm share of women, size dummies, and a full set of industry and year dummies. The standard errors are reported in parentheses and are clustered at the sending firm level and at the individual level. *Statistically significant at the 0.10 level, **at the 0.05 level, and ***at the 0.01 level.

Table 21: Promotion models estimated separately for men and women: results by industry of receiving firm

Promotion to Better Occupation			
	Manufacturing	Construction	Wholesale trade
	<i>Women</i>		
log(wage_sending)	0.003*** (0.000)	0.003** (0.003)	0.002*** (0.000)
N	845,161	54,240	473,734
R ²	0.006	0.007	0.009
	<i>Men</i>		
log(wage_sending)	0.010*** (0.000)	0.006*** (0.001)	0.004*** (0.000)
N	1,883,927	510,320	680,699
R ²	0.023	0.013	0.024
Hypothesis test [χ^2 ; p-value]: $\alpha_1^{women} = \alpha_1^{men}$	899.61; 0.000	99.52; 0.000	240.35; 0.000
Promotion to Better Occupation			
	Transport	Business and financial	
	<i>Women</i>		
log(wage_sending)	0.001*** (0.000)	0.001*** (0.000)	
N	111,108	250,468	
R ²	0.001	0.524	
	<i>Men</i>		
log(wage_sending)	0.001*** (0.000)	0.003*** (0.000)	
N	236,892	301,871	
R ²	0.002	0.003	
Hypothesis test [χ^2 ; p-value]: $\alpha_1^{women} = \alpha_1^{men}$	2.42; 0.12	34.56; 0.000	

Notes: The dependent variable is a dummy that takes the value of one, if the worker is, within the same firm, promoted to a better occupational level within the same firm. All specifications include age, age squared, tenure, tenure squared, work experience, work experience squared, foreigner status, marital status, parental status, education, occupation, a familiar network dummy, firm fixed effects, receiving firm share of women, size dummies, and a full set of industry and year dummies. The standard errors are reported in parentheses and are clustered at the sending firm level and at the individual level. *Statistically significant at the 0.10 level, **at the 0.05 level, and ***at the 0.01 level.

Table 22: Unemployment probability estimated for the full sample and separately for men and women: main results

	Full sample		Women	Men
log(wage_sending)	-0.005*** (0.000)	-0.005*** (0.000)	-0.001*** (0.000)	-0.007*** (0.000)
female	0.005** (0.000)	0.005** (0.000)	- -	- -
female*log(wage_sending)	- -	0.001*** (0.000)	- -	- -
age	0.006*** (0.000)	0.006*** (0.000)	0.006*** (0.000)	0.006*** (0.000)
age ² /1000	-0.057*** (0.001)	-0.057*** (0.001)	-0.057*** (0.001)	-0.054*** (0.001)
tenure	-0.009*** (0.000)	-0.009*** (0.000)	-0.011*** (0.000)	-0.009*** (0.000)
tenure ² /1000	0.349*** (0.002)	0.349*** (0.002)	0.412*** (0.004)	0.317*** (0.003)
share of white-collar women in previous firm	0.001*** (0.000)	0.001*** (0.000)	0.001*** (0.000)	0.001*** (0.000)
child	0.005*** (0.000)	0.006*** (0.000)	0.014*** (0.000)	0.002*** (0.000)
married	-0.011*** (0.000)	-0.011*** (0.000)	-0.004*** (0.000)	-0.014*** (0.000)
secondary	0.001*** (0.000)	0.001*** (0.000)	0.003*** (0.000)	0.001** (0.000)
tertiary	-0.009*** (0.000)	-0.009*** (0.000)	-0.009*** (0.001)	-0.009*** (0.000)
foreigner	0.006*** (0.000)	0.006*** (0.000)	0.000 (0.001)	0.009*** (0.000)
familiar network	-0.004*** (0.000)	-0.004*** (0.000)	-0.006*** (0.001)	-0.003*** (0.000)
N	5,595,885	5,595,885	1,948,860	3,647,025
R ²	0.020	0.020	0.018	0.021
Hypothesis test [χ^2 ; p-value]:				
$\alpha_1^{women} = \alpha_1^{men}$	-	-	303.09;	0.000

Notes: The dependent variable is a dummy that takes the value of one, if the worker is unemployed. All specifications include experience and experience squared, previous firm fixed effects, size dummies of the previous firm, and a full set of industry and year dummies. The standard errors are reported in parentheses and are clustered at the sending firm level and at the individual level. *Statistically significant at the 0.10 level, **at the 0.05 level, and ***at the 0.01 level.

Table 23: Unemployment probability estimated separately for men and women: results by age and education

	Under 35 years	Between 35 and 50 years	More than 50 years
	<i>Women</i>		
log(wage_sending)	0.002*** (0.000)	-0.016*** (0.000)	-0.014*** (0.001)
N	859,583	731,475	357,802
R ²	0.023	0.024	0.013
	<i>Men</i>		
log(wage_sending)	-0.003*** (0.002)	-0.022*** (0.000)	-0.019*** (0.000)
N	1,449,203	1,406,637	791,185
R ²	0.024	0.030	0.017
Hypothesis test [χ^2 ; p-value]: $\alpha_1^{women} = \alpha_1^{men}$	119.17; 0.000	71.59; 0.000	25.99; 0.000
	Primary education	Secondary education	Tertiary education
	<i>Women</i>		
log(wage_sending)	0.003*** (0.000)	-0.010*** (0.000)	-0.012*** (0.001)
N	887,595	953,563	107,702
R ²	0.021	0.019	0.016
	<i>Men</i>		
log(wage_sending)	-0.003*** (0.000)	-0.016*** (0.000)	-0.012*** (0.000)
N	1,311,120	2,157,851	178,054
R ²	0.025	0.022	0.015
Hypothesis test [χ^2 ; p-value]: $\alpha_1^{women} = \alpha_1^{men}$	147.40; 0.000	148.09; 0.0003	0.11; 0.7370

Notes: The dependent variable is a dummy that takes the value of one, if the worker is unemployed. All specifications include age, age squared, tenure, tenure squared, work experience, work experience squared, foreigner status, marital status, parental status, education, occupation, a familiar network dummy, previous firm fixed effects, previous firm share of women, size dummies, and a full set of industry and year dummies. Standard errors are reported in parentheses and are clustered at the sending firm level and at the individual level. *Statistically significant at the 0.10 level, **at the 0.05 level, and ***at the 0.01 level.

Table 24: Unemployment probability estimated separately for men and women: results by other relevant subgroups

	Married or cohabiting	Single	Without child (0-3 years)
		<i>Women</i>	
log(wage_sending)	-0.007*** (0.000)	0.001** (0.000)	-0.001*** (0.000)
N	1,354,799	594,061	1,746,508
R ²	0.018	0.023	0.017
		<i>Men</i>	
log(wage_sending)	-0.014*** (0.000)	-0.005*** (0.000)	-.008*** (0.000)
N	2,472,063	1,174,962	3,256,335
R ²	0.017	0.027	0.020
Hypothesis test [χ^2 ; p-value]: $\alpha_1^{women} = \alpha_1^{men}$	196.28; 0.000	131.47; 0.000	412.73; 0.000
		With child (0-3 years)	Before child (0-3 years)
		<i>Women</i>	
log(wage_sending)		-0.012*** (0.001)	-0.0005*** (0.000)
N		202,352	102,514
R ²		0.026	0.081
		<i>Men</i>	
log(wage_sending)		-0.017*** (0.000)	-0.0002** (0.000)
N		390,690	202,732
R ²		0.026	0.086
Hypothesis test [χ^2 ; p-value]: $\alpha_1^{women} = \alpha_1^{men}$		16.89; 0.000	7.98; 0.0047
		27.84; 0.000	
		Female-friendly firms	Not female-friendly firms
		<i>Women</i>	
log(wage_sending)		-0.003*** (0.000)	-0.001*** (0.000)
N		1,106,363	842,497
R ²		0.016	0.021
		<i>Men</i>	
log(wage_sending)		-0.008*** (0.000)	-0.010*** (0.000)
N		1,620,291	2,026,734
R ²		0.018	0.023
Hypothesis test [χ^2 ; p-value]: $\alpha_1^{women} = \alpha_1^{men}$		85.13; 0.000	274.25; 0.000

Notes: The dependent variable is a dummy that takes the value of one, if the worker is unemployed. All specifications include age, age squared, tenure, tenure squared, work experience, work experience squared, foreigner status, marital status, parental status, education, occupation, a familiar network dummy, previous firm fixed effects, previous firm share of women, size dummies, and a full set of industry and year dummies. Female-friendly firms are those with a share of white-collar women that is higher than the industrial mean. The standard errors are reported in parentheses and are clustered at the sending firm level and at the individual level. *Statistically significant at the 0.10 level, **at the 0.05 level, and ***at the 0.01 level.

Table 25: Self-employment probability estimated for full sample and separately for men and women: main results

	Full sample		Women	Men
log(wage_sending)	-0.001*** (0.000)	-0.001*** (0.000)	-0.0006*** (0.000)	-0.0011*** (0.000)
female	-0.004*** (0.000)	-0.004*** (0.000)	-	-
female*log(wage_sending)	-	-0.001*** (0.000)	-	-
age	0.001*** (0.000)	0.001*** (0.000)	0.001*** (0.000)	0.001*** (0.000)
age ² /1000	-0.011*** (0.000)	-0.011*** (0.000)	-0.010*** (0.000)	-0.013*** (0.000)
tenure	-0.001*** (0.000)	-0.001*** (0.000)	-0.001*** (0.000)	-0.002*** (0.000)
tenure ² /1000	0.048*** (0.001)	0.048*** (0.001)	0.027*** (0.001)	0.058*** (0.001)
share of white-collar women in receiving firm	-0.000*** (0.000)	-0.000*** (0.000)	0.000 (0.000)	-0.000*** (0.000)
child	0.001*** (0.000)	0.001*** (0.000)	0.000** (0.000)	0.001*** (0.000)
married	0.001*** (0.000)	0.001*** (0.000)	0.000* (0.000)	0.001*** (0.000)
secondary	0.001*** (0.000)	0.001*** (0.000)	0.000** (0.000)	0.001*** (0.000)
tertiary	-0.001*** (0.000)	-0.001*** (0.000)	-0.000 (0.000)	-0.001*** (0.000)
foreigner	0.000*** (0.000)	0.000*** (0.000)	-0.000 (0.000)	0.001** (0.000)
familiar network	0.001*** (0.000)	0.001*** (0.000)	0.001** (0.000)	0.002*** (0.000)
N	5,701,433	5,701,433	1,994,818	3,706,615
R ²	0.003	0.003	0.001	0.004
Hypothesis test [χ^2 ; p-value]: $\alpha_1^{women} = \alpha_1^{men}$	-	-	10.01; 0.0016	

Notes: The dependent variable is a dummy that takes the value of one, if the worker is self-employed. All specifications include experience and experience squared, previous firm fixed effects, size dummies of the previous firm, and a full set of industry and year dummies. The standard errors are reported in parentheses and are clustered at the sending firm level and at the individual level. *Statistically significant at the 0.10 level, **at the 0.05 level, and ***at the 0.01 level.

Table 26: Self-employment probability estimated separately for men and women: results by age and education

	Under 35 years	Between 35 and 50 years	More than 50 years
	<i>Women</i>		
log(wage_sending)	-0.0003*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)
N	898,088	738,878	357,852
R ²	0.002	0.002	0.002
	<i>Men</i>		
log(wage_sending)	-0.0006*** (0.000)	-0.003*** (0.000)	-0.003*** (0.000)
N	1,499,236	1,416,097	791,282
R ²	0.004	0.003	0.003
Hypothesis test [χ^2 ; p-value]: $\alpha_1^{women} = \alpha_1^{men}$	1.84; 0.1754	19.33; 0.000	2.92; 0.0874
	Primary education	Secondary education	Tertiary education
	<i>Women</i>		
log(wage_sending)	-0.0005*** (0.000)	-0.001*** (0.000)	-0.001** (0.000)
N	914,915	966,674	113,229
R ²	0.001	0.001	0.002
	<i>Men</i>		
log(wage_sending)	-0.0004*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)
N	1,343,890	2,176,778	185,947
R ²	0.003	0.003	0.003
Hypothesis test [χ^2 ; p-value]: $\alpha_1^{women} = \alpha_1^{men}$	0.39; 0.5316	15.68; 0.0001	3.22; 0.0727

Notes: The dependent variable is a dummy that takes the value of one, if the worker is self-employed. All specifications include age, age squared, tenure, tenure squared, work experience, work experience squared, foreigner status, marital status, parental status, education, occupation, a familiar network dummy, previous firm fixed effects, previous firm share of women, size dummies, and a full set of industry and year dummies. The standard errors are reported in parentheses and are clustered at the sending firm level and at the individual level. *Statistically significant at the 0.10 level, **at the 0.05 level, and ***at the 0.01 level.

Table 27: Self-employment probability estimated separately for men and women: results by other relevant subgroups

	Married or cohabiting	Single	Without child (0-3 years)
	<i>Women</i>		
log(wage_sending)	-0.001*** (0.000)	-0.0005*** (0.000)	-.0006*** (0.000)
N	1,374,085	620,733	1,787,364
R ²	0.001	0.002	0.001
	<i>Men</i>		
log(wage_sending)	-0.002*** (0.000)	-0.0002** (0.000)	-0.0010*** (0.000)
N	2,494,224	1,212,391	3,309,696
R ²	0.003	0.003	0.003
Hypothesis test [χ^2 ; p-value]: $\alpha_1^{women} = \alpha_1^{men}$	27.82; 0.000	1.42; 0.2341	7.38; 0.0066
	With child (0-3 years)	Before child (0-3 years)	After child (0-3 years)
	<i>Women</i>		
log(wage_sending)	-0.001*** (0.000)	0.000 (0.000)	-.00015*** (0.000)
N	207,454	104,203	158,018
R ²	0.002	0.017	0.015
	<i>Men</i>		
log(wage_sending)	-0.003*** (0.000)	0.000 (0.000)	-.00020*** (0.000)
N	396,919	205,016	317,195
R ²	0.004	0.017	0.007
Hypothesis test [χ^2 ; p-value]: $\alpha_1^{women} = \alpha_1^{men}$	12.99; 0.0003	0.01; 0.9102	3.76; 0.0523
	Female-friendly firms	Not female-friendly firms	
	<i>Women</i>		
log(wage_sending)	-.0008*** (0.000)	-0.0006*** (0.000)	
N	1,131,726	863,092	
R ²	0.002	0.001	
	<i>Men</i>		
log(wage_sending)	-.0006*** (0.000)	-0.0014*** (0.000)	
N	1,645,943	2,060,672	
R ²	0.002	0.003	
Hypothesis test [χ^2 ; p-value]: $\alpha_1^{women} = \alpha_1^{men}$	0.65; 0.4186	15.70; 0.0001	

Notes: The dependent variable is a dummy that takes the value of one, if the worker is self-employed. All specifications include age, age squared, tenure, tenure squared, work experience, work experience squared, foreigner status, marital status, parental status, education, occupation, a familiar network dummy, previous firm fixed effects, previous firm share of women, size dummies, and a full set of industry and year dummies. The standard errors are reported in parentheses and are clustered at the sending firm level and at the individual level. *Statistically significant at the 0.10 level, **at the 0.05 level, and ***at the 0.01 level.