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Date

Modes of Job Entry and Career Outcomes:  
How Entering a Job via Hire or Promotion Affects Gender Earnings Disparities

By

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Doctor of Philosophy

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B.A., Social Sciences, Universität Mannheim, Germany, 2007

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## Abstract

### Modes of Job Entry and Career Outcomes: How Entering a Job via Hire or Promotion Affects Gender Earnings Disparities

By

Anne-Kathrin Kronberg

While professionals change employers more frequently since the 1970s, inter-organizational mobility is associated with greater earnings increases for men than for women. As people in organizations make employment and pay decisions, this dissertation examines how organizational practices affect gender disparities among hired and promoted employees. I draw on organizational literature and conduct a longitudinal, mixed-methods case study of careers in a large U.S. employer (“B2G”). I rely on longitudinal personnel records (2005-2013) and 19 in-depth interviews with supervisors to address how organizations set hired and promoted employees’ pay, how job entry modes affect gender disparities at entry and over time, and how we can explain these patterns.

The analyses yield two important yet surprising findings. At job entry, men earn significantly more than women do. This gap is equally wide among hired and promoted employees, meaning gender differences in starting salaries are independent of job entry mode. Although previous research suggests that opportunities for disparate treatment at job entry are greater among hired than promoted employees, interviews with supervisors suggest that B2G goes to great length to ensure equitable starting salaries, possibly minimizing discretion in the hiring process.

After job entry, gender earnings disparities widen among hired employees but remain constant among promoted employees. Disparities do not emerge because of selective turnover or infrequent raises, but because hired women receive smaller pay increases than hired men do. In contrast, promoted men and women receive the same increases. Performance evaluations only partially account for widening gender disparities among hired employees. As interviews revealed greater supervisory discretion over post-entry pay increases, widening gender gaps might result from organizational processes. These results highlight the importance of examining mobility outcomes beyond the point of job entry.

This dissertation lays the foundation for an organizational perspective on gender disparities in mobility outcomes. To understand why and when inter- and intra-organizational job mobility translates into gender earnings gaps, we have to consider how organizations distribute rewards. Hence, above individual differences, organizational practice may determine how entering a job via hire or promotion affects men and women.

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As someone who has studied career outcomes for almost a decade, I firmly believe in the importance of opportunity structures. To this end, I would like to thank the many people who made this journey possible.

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## **Chapter 1**

### **Introduction**

After a sustained period of stability in the post-war years, career attainment has changed fundamentally after the 1970s. Since then, professional and managerial employees switch employers more frequently over the course of their career (Bidwell et al. 2013; Bidwell and Mollick 2014; Cappelli 1999; Farber 2008; Hollister 2011; Osterman 1999). Although firm-external mobility often results in substantial earnings increases, especially when it occurs voluntarily, in “good” jobs, and in earlier career stages (Fuller 2008; Kronberg 2013; Kronberg 2014; Topel and Ward 1992), rewards are not equally distributed. Previous research suggests that inter-organizational mobility is associated with higher rewards for men than for women (Brett and Stroh 1997; Dreher and Cox 2000; Dreher et al. 2011; Kronberg 2013; Lam and Dreher 2004). This implies that shifting career patterns may contribute to the stagnation of the gender pay gap.

Although we have begun to explore how job mobility affects men and women’s earnings, research has paid less attention to why inter-organizational mobility is associated with more gender inequality than staying with one’s employer. Previous studies on gender differences among hired employees suggest that gender disparities in work experience (e.g., Becker 1993; McDonald 2011), social capital (e.g., Belliveau 2005; Dreher et al. 2011; McDonald et al. 2009), or reasons for leaving (e.g., Keith and McWilliams 1995; Valcour and Tolbert 2003) contribute to gender disparities in mobility outcomes. In contrast, less research examined how organizations and the distribution of rewards within organizations shape men and women’s mobility outcomes (except see: Petersen and

Saporta 2004). As organizations assign rewards to people (Sørensen and Kalleberg 1981), organizational practices can create, reproduce and reduce gender differences (e.g., Acker 2006; Baron and Bielby 1980; Bielby and Baron 1986; Castilla 2015; Kanter 1977; Williams et al. 2012). Therefore, organizations may be key to understanding how modes of job entry affect gender differences in mobility outcomes.

Earlier work suggests that the hiring process is more uncertain and less transparent than the promotion process (Akerlof 1970; Bidwell 2011; Halaby 1988). Petersen and Saporta (2004) argue that greater uncertainty leaves more opportunities for discrimination among hired employees already at job entry. In support, they used longitudinal personnel data and show that earnings disparities are greatest among newly hired employees. Most importantly, Petersen and Saporta (2004) find that disparities among hired employees quickly narrowed after entry. This is consistent with economic models of learning (e.g., Jovanovic 1979) and socio-psychological research on perceptions and integration of new information (e.g., Berger et al. 1992). Both of these theories argue that as organizations, supervisors and coworkers learn more about employees' true performance and task-related attributes, other diffuse characteristics (e.g. gender) become less important. Thus, organizations may adjust pay to employees' actual performance, closing the gap between equally well performing men and women.

In contrast, literature on gendered organizational practices (e.g., Acker 2006; Burriss 1996; Ferguson 1984; Kanter 1977; Williams et al. 2012) and literature that emphasizes the inequality-producing effect of supervisory discretion (e.g., Baron and Pfeffer 1994; Bielby 2000; Castilla 2015; Kalev et al. 2006; Salancik and Pfeffer 1978; Tetlock 1985) highlight different ways in which inequality among men and women is maintained or

exaggerated in organizations post-entry. This might particularly affect hired employees, who are still establishing a record of accomplishments.

Hence, it is unclear to what extent greater gender disparities among hired employees exist already at entry and how disparities develop post-entry. Depending on when gaps emerge, organizations may play fundamentally different roles in shaping gender-specific mobility outcomes. If gender differences among externally hired employees already exist at entry, then they may be the result of processes occurring prior to or during initial pay determination. If gender differences decrease among hired employees post-entry, then organizations may be key in reducing differences. In contrast, widening disparities among hired employees post-entry would warrant further examination of pre-hire differences among hired employees and post-hire organizational mechanisms. Understanding when and how disparities arise therefore, is an important step in identifying causal mechanisms.

Unfortunately, existing studies are less suited to disaggregate disparities into entry and post-entry differences and to determine to what extent organizational processes shape gender disparities in subsequent pay increases. Previous studies relied on retrospective surveys which assessed employees' earnings and how many times respondents changed employers in the prior three years (Brett and Stroh 1997), ten years (Dreher and Cox 2000; Lam and Dreher 2004), since their first job (Dreher et al. 2011) or since age 30 (Valcour and Tolbert 2003). There may have been several years between the mobility event and current earnings. Even when using panel data (e.g., Fuller 2008; Kronberg 2013), biannual data collection and missing data (especially among mobile respondents) make it difficult to assess earnings at the point of job entry vs over time.

Fortunately, longitudinal personnel records of a large, bureaucratic U.S. employer (“BetterTogether” or “B2G”<sup>1</sup>) enable me to address this gap in the literature. Thus, similar to previous organizational studies (e.g., Kanter 1977), I combine quantitative, organizational data with 19 semi-structured interviews with supervisors from different large work organizations to examine how job entry modes affect disparities in the workplace.

### **RESEARCH QUESTIONS AND FOCUS OF THIS DISSERTATION**

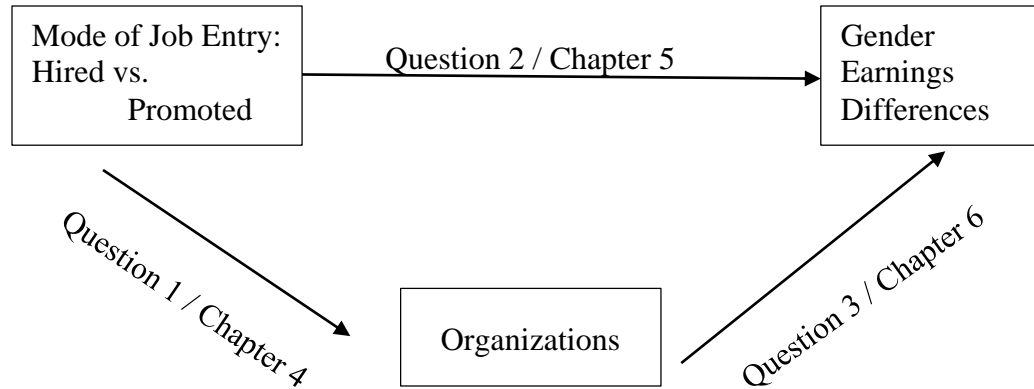
In summary, although we know that employer changes result in different outcomes for men and women, the mechanism driving these changes are less well explored. To this date, few studies have examined how mode of job entry (i.e., entering a job via hire or promotion) translates into earnings differences between men and women and whether differences widen or narrow after entry.



This dissertation addresses this gap in the literature. As people in organizations make decisions on employment and pay, this dissertation focuses specifically on the role of organizational context, policies and procedures, and how they affect gender disparities among hired and promoted employees. Therefore, I address three major questions:

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<sup>1</sup> Pseudonym to protect the organization’s confidentiality. I chose BetterTogether because the organization has a very team-oriented culture.



- 1) *How do organizations determine pay for hired and promoted employees?* As pay is the outcome of organizational (pay-setting) processes, my first question examines how supervisors determine hired and promoted employees' pay at entry and over time. I pay particular attention to procedural differences between hired and promoted employees and what implications these differences have supervisory discretion and other potential sources of disparate treatment.
- 2) *When do differences between hired and promoted employees emerge?* As previous research was less suited to distinguish between disparities at entry and over time, the second research question re-examines the association between mode of job entry and gender earnings differences. Particularly, I focus on whether disparities already exist at entry and whether they increase, decrease or remain constant after post-entry. The timing of when the gap emerges (i.e. at entry and/or over time) arguably provides important insight into the role of organizations.
- 3) *Through what mechanisms does job entry mode affect gender disparities post-entry?* By addressing this question, I aim to link mode of job entry, organizational practices and gender disparities. As I find that gender differences among hired employees emerge primarily over time, I focus on differences in pay progression

over time. I draw on major theoretical perspectives to develop and test for mechanisms that would result in smaller pay increases for hired women than for hired men. These mechanisms include work-life balance, gendered perception of fairness, occupational segregation, team size and closeness to the pay ceiling as possible explanatory factors.

Together these research questions lay the foundation for an organizational perspective on gendered mobility outcomes that describes how organizational settings shape men and women's outcomes of inter- and intra-organizational mobility. That is, above and beyond of gender differences in pre-hire characteristics, organizations may affect to what extent different modes of job entry translate into earnings differences.

### **ORGANIZATION OF THE DISSERTATION**

I organize the dissertation as follows. Chapter 2 reviews important theoretical perspectives on gender income inequality that inform my analyses. I consider human and social capital differences, implicit biases, and organization-level mechanisms that create, reproduce or reduce gender disparities. I discuss how these perspectives inform our understanding of gendered career outcomes and how they would reduce disparities.

In Chapter 3, I provide an overview of the data and methodology. To examine how organizational settings shape gender employment outcomes after job entry, I conduct a longitudinal, mixed-method case study of careers at B2G. I use multi-level modeling and event history models to analyze detailed personnel records from approximately 4,000 employees entering over 7,000 jobs in B2G between 2005 and 2013. Additionally, I use qualitative interviews with 19 male and female supervisors from several large

organizations to identify organizational mechanisms that may give rise to the patterns found in the personnel data.

Chapter 4 uses the qualitative interviews to address how supervisors and organizations go about setting pay for externally hired and internally promoted employees at entry and over time. I find that the pay-setting process does differ for hired and promoted employees and that these differences are greatest when organizations develop the starting salary. For hired employees, organizations draw on a mix of criteria (external market factors, employees' credentials, firm-internal factors). Moreover, pay is often subject to further negotiations. In contrast, starting salaries for internally promoted employees mostly depend on employees' previous pay. The interview data and literature suggests that these differences may result in greater pay disparities among hired employees at entry. At the same time however, organizations have additional practices in place aimed at minimizing disparities at entry. In contrast, much less standardization existed for subsequent pay increases leaving more room for supervisory discretion.

Chapter 5 uses the longitudinal personnel records to (re-)examine the association between job entry mode and earnings – at entry and overtime. Using hierarchical linear models and event history models, I find that the initial gender gap is equally wide among externally hired and internally promoted employees. Over time however, gender differences widen gradually among externally hired employees as hired women receive smaller pay raises than hired men. In contrast, promoted men and women receive the same pay increases. This suggests that organizational practices may be effective in minimizing disparities at entry, and that a combination of pre-hire differences and organizational mechanisms result in the widening of gender disparities among hired employees post-entry.



Chapter 6 seeks to explain what mechanisms give rise to emerging gender gaps among externally hired employees (third research question). I rely on qualitative interviews and the personnel data to examine five mechanisms: potential work-life imbalance, gendered perceptions of fairness, occupational segregation, team size and closeness to the predefined pay ceiling. None of these explanations can account for growing disparities among hired employees, suggesting that pre-hire differences or other less visible organizational processes might drive disparities.

Finally, in Chapter 7, I review the main findings and their theoretical implications for our understanding for disparate mobility outcomes. Then, I review the study's limitation and future research. The chapter concludes with a discussion of recommendations for organizations.

## **CONTRIBUTIONS**

This dissertation lays the foundation for an organizational perspective on gendered mobility outcomes, which outlines ways in which organizational settings can affect gender pay differences given a particular mode of job entry. As organizations arguably aim to find the most productive employees, they face the problem of uncertainty, i.e. it is difficult to assess how well external applicants will perform (Akerlof 1970; Halaby 1988). This problem is arguably less severe among internally promoted employees, as organizations had the opportunity to evaluate employees' fit in the past (Jovanovic 1979). Not only will it be more difficult to assess external applicants' match with the organization but also is more difficult to determine an "appropriate" salary offer. Candidates may turn job offers down if salary offers are too low. At the same time, most organizations are arguably cost-minimizing and may try to limit their wage bills by not paying more than "necessary."

Organizations may adjust pay-setting processes to deal with uncertainty in the hiring process. Likewise, organizations may design pay-setting for internal employees differently not only because there is less uncertainty regarding employees' fit and current pay, but also firms might be more concerned with retention of talent and encouragement of firm-specific human capital investment when promoting employees (e.g., Doeringer and Piore 1971). As different organizational goals and greater uncertainty become embedded in the pay-setting process, procedural differences may create opportunity for disparate mobility outcomes. Put differently, as organizations face greater uncertainty in the hiring process than in the promotion process, they may develop different practices to cope with these problems. Procedural differences may create systematically more opportunity for disparities in the hiring process when processes and criteria used in the hiring process are more gendered (e.g., Acker 1990; Acker 2006; Kanter 1977).

Most importantly mode of job entry may affect disparities not only at entry, but also several years after entry as organizational practices, such as performance evaluations and pay increases, can be inherently gendered too (e.g., Acker 1990; 2006; Castilla 2015; Kanter 1977; Williams et al. 2012). Moreover, initial differences at job entry may have a long lasting effect if future pay increases are based on initial starting salaries. Alternatively, organizations may also play a key role in reducing inequality when they close disparities post-entry.

By examining how job entry modes affect gender earnings disparities among hired and promoted employees, this dissertation makes several important contributions to the literature. First, since the earlier work on internal labor markets (e.g., Althausen and

Kalleberg 1981; Doeringer and Piore 1971; Kalleberg and Van Buren 1996; Osterman 1999; Sørensen and Kalleberg 1981) this is the first study that systematically examines the mechanisms by which different modes of job entry affect earnings disparities. That is, while previous studies discussed key differences between inter and intra-organizational mobility (e.g., Bidwell 2011; Doeringer and Piore 1971; Lazear and Oyer 2004), they have not yet identified how gender disparities between hired and promoted employees come about. Similarly, previous studies examining gender disparities in mobility outcomes rarely tested for causal factors (e.g., Brett and Stroh 1997; Dreher and Cox 2000; Kronberg 2013; Lam and Dreher 2004; except see Dreher et al. 2011). This dissertation is the first step in identifying processes that give rise to these differences.

Second, much mobility literature focuses on processes prior to job entry (e.g. job search) and whether new jobs are better than previous positions (except see e.g.: Bidwell 2011; Petersen and Saporta 2004). I extend this research by focusing on what happens *after* people enter their job. What happens to employees one, two, or three years after they entered their job via external hire or internal promotion? Whether disparities increase or decrease post-entry has important implications for the role of organizational settings in shaping career outcomes. Using the quantitative personnel records, I find that gender disparities are equally wide among hired and promoted employees, but that gender disparities grow after job entry among externally hired employees, but not internally promoted employees. This suggests that studies following employees only to the point of job entry, or that measure earnings several years after entry without assessing starting salaries might mischaracterize the processes by which inequality comes about and potentially neglect the role of organizational processes and settings.

Third, this dissertation contribute to our understanding of gender differences in earnings. Extensive research has explored how gender differences emerge during the hiring process (e.g., Babcock and Laschever 2003; Belliveau 2005; Neumark et al. 1996; Sterling and Fernandez 2014) or in firm-internal advancement (e.g. Baldi and McBrier 1997; Castilla 2008; Smith 2005). Not only are these processes often discussed separately (except see e.g.: Barnett et al. 2000; Petersen and Saporta 2004), but also studies have not examined what happens to gender disparities after men and women enter via hire or promotion.

## **CONCLUSION**

As gender disparities appear to be greater among externally hired employee and as more employees switch organizations throughout their career, gender disparities in mobility outcomes may maintain or even reverse the gender pay gap. By understanding to what extent these differences arise in organizational settings will help us understand how we can go about minimizing or preventing ascriptive disparities. This dissertation lays the foundation for an organizational perspective on disparate mobility outcomes by examining how a) pay-setting procedures vary by job entry mode, b) how earnings at entry and over time vary given a particular job entry mode, and c) how processes in the workplace may generate these differences.

This study suggests that the majority of gender earnings differences arise at job entry. These differences affect hired and promoted employees equally, and may be due to noisy measures, omitted variable bias or disparities in the pay-setting process. Hence, regardless of job entry mode, gaps in starting salaries are still the greatest source of gender inequality.

Post-entry, gender disparities remain constant among promoted employees. Among hired employees however, the gender gap widens. After four years on the job, over 20% of the total gap among hired employees results from post-hire differences in pay increases that are beyond the compounded effect of initial gender disparities in starting salaries. This suggests that in addition to existing policies that prevent disparate treatment at job entry, we should focus on processes that may produce differences more gradually post-hire.

## Chapter 2

### **Theoretical Framework:**

#### **Linking Mode of Job Entry to Differences in Career Outcomes - An Organizational Perspective**

In this chapter, I discuss several theoretical frameworks that inform the dissertation. As organizations link micro-level processes and macro-level outcomes, this dissertation brings an organizational perspective to career research. For this purpose, I use longitudinal personnel data, which is particularly well suited to examine how careers evolve in an organizational setting. Although these data enable me to focus on what happens within B2G, the left-censored nature of the data<sup>2</sup> precludes me from accounting for pre-hire differences between employees. This includes employees' previous work experience (i.e., human capital), their social networks, or under what circumstances they left their job. Therefore, this dissertation will not test the effect of pre-entry differences and instead focus on what happens after employees entered in the organization. As pre-hire differences (e.g. human capital and social capital) are still important in our overall understanding, I discuss briefly these perspectives below before I go into organizational perspectives on inequality.

After briefly reviewing the different perspectives, I discuss how they inform our understanding of gendered mobility outcomes and how they would go about reducing inequality in mobility outcomes. In the final section, I provide a brief overview of how I use the frameworks in the empirical analyses.

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<sup>2</sup> This means that I have no information on employees before they enter B2G.

## **PERSPECTIVES ON GENDER INCOME INEQUALITY**

### **Part I - Human Capital, Social Capital, and Implicit Biases**

#### *Human Capital Theory*

Inequality research tends to cluster around several major theoretical perspectives: Human capital differences, social capital differences, implicit biases, and organizational processes. Human capital describes the stock of knowledge, skills and abilities individuals can draw upon to perform a job and to produce economic value (Becker 1993). The theory argues that individuals with more skills, knowledge and abilities in a certain domain are better able to perform in a job in that domain and therefore are more productive. E.g., an accountant who has an accounting degree and ten years of accounting experience might be more productive in her job than a high school graduate might with no experience in the field. Not only are individuals with more human capital expected to be more productive, but also investment into human capital is costly, e.g., getting a college degree takes time in which the ability to earn income is limited. Thus supply of employees with certain skills are limited (Becker 1962). Additionally, degrees may signal desirable abilities, backgrounds and resources employees might have (Arrow 1973; Spence 1973). In summary, human capital theory argues that earnings differences emerge because employees come into the workplace with different skills, ability and knowledge or degrees that signal these.

Hence, gender disparities in the labor market may be due to gender differences in human capital. While women have caught up to men with regard to high school and college completion (Buchmann and DiPrete 2006), they continue to be concentrated in lower-paying non-STEM jobs (Charles and Bradley 2002). Although men have been taking on an increasing share of household and child rearing tasks, women continue to carry the

majority of the domestic labor (Bianchi et al. 2006; Kornrich and Eger 2014). Consequently women's careers and labor market experiences are more likely to be intermittent (Troske and Voicu 2013). Thus, differences in earnings, promotions and turnover are partially due to gender differences in education and experience (Blau and Kahn 2007; Mincer and Polachek 1974; Tam 1996).

### *Social Capital Theory*

In contrast, social capital theory argues that differences in earnings, promotions and turnover are not due to *what* but *who* we know. Social capital describes the number and kinds of contacts individuals use to access resources such as information (Granovetter 1995; Lin 2001). Better access to job information not only increases the likelihood of applying to jobs successfully, but also helps to negotiate for higher starting salaries. After job entry, social networks can provide social-psychological support, instrumental support, and career mentoring, which then lead to faster promotions and fewer terminations (e.g., Brodt 1994; Fernandez et al. 2000; James 2000; Kmec 2007; Seidel et al. 2000). Thus, individuals with "better" social capital are more likely to hold a higher-paying job.

Homophily however, shapes individuals' networks, meaning that men and women often create gender-segregated networks (e.g., Ibarra 1992; McPherson et al. 2001). Women's networks include more strong ties with family members and fewer weak ties with job-related contacts (Moore 1990). Thus, women receive fewer job leads and have lower reference wages than men do (e.g., Belliveau 2005; McDonald 2011; McDonald et al. 2009). Hence, social capital theory argues that income differences between men and women are partially due to gender differences in social networks.



*Implicit Biases, Socio-Cognitive Processes and Interpersonal Reproduction of Inequality*

Contrary to human and social capital theory, social-psychological and inter-personal discrimination literature focuses on the role of individual behavior rooted in a larger gender belief system. This perspective argues that individuals' biases result in gender differences in earnings, even when employees have the same education and social networks. This might happen more overtly as employers act on their "tastes" or on their perceptions of typical attributes for these groups (i.e. taste and statistical discrimination) (e.g., Becker 1971).

Alternatively, disparate treatment may be the result of cognitive and affective processes (Ridgeway 2011). Cognitively, the human mind seeks to simplify information by categorizing and generalizing experiences as much as possible. In social interactions we automatically sort others into basic social categories such as male, female, Black, White, Asian and so on (Allport 1954; Fiske 1998). In the workplace for instance, mixed gender groups or gender-typed tasks are more likely to activate gender as salient category (e.g., Ridgeway 1991; Ridgeway and Correll 2004b). Once gender becomes activated as salient category, it is linked with a gender belief system, which subsequently constitutes the basis for all social interactions (Ridgeway 2011). Hence, expectation states theory argues that once situations activate gender we associate men with more competence and worthiness of rewards than women (Berger et al. 1985). These expectation are reproduced in group processes and therefore affect individuals' actual performance. Moreover, expectations states affect how employees' performance and behavior is perceived by others such that similar behavior is interpreted as more competent for men than women (Carli 1991; Ridgeway 1993).

Hence, gender differences in workplaces are partially due to the activation of cultural beliefs that can result in differential treatment and evaluation of men and women. In this regard, a large body of research has documented the role of individual-level discrimination in the workplace using audit studies, laboratory experiments and qualitative interviews (e.g., Neumark et al. 1996; Reskin 1988; Reskin and Roos 1990).

Differences in gender expectations tend to be particularly wide when they intersect with marital and parental status. For instance, marriage typically affects men's earnings positively, while women's earnings are unaffected (Chun and Lee 2001). Moreover, being a caretaker is a status characteristic on its own that is associated with low (work-related) competence and suitability (Ridgeway and Correll 2004a). As gender and caretaker status intersect, mothers in particular are perceived as less deserving of raises, promotions or jobs in general (e.g., Correll et al. 2007; Cuddy et al. 2004). Hence, having young children affects women's earnings negatively, but has little effect on men's earnings (e.g., Budig and England 2001; Gangl and Ziefle 2009; Hodges and Budig 2010). Moreover, an analysis of the National Longitudinal Study of Youth demonstrated that mothers gain less from inter-organizational job mobility than without children, even when holding constant reasons for change (Looze 2014). Thus, gender earnings disparities –especially among married fathers and mothers - are partially due to gendered effect of marital and parental status.

## **Part II - Organizational Mechanisms**

While human capital, social capital and (individual-level) discrimination theory mostly focus on the role of individuals, organizational theories stress workplace practices, procedure and context as source of inequality. Organizational practices may affect inequality in two ways: 1) Organizational practices can create or limit opportunities for employees' implicit biases; and 2) seemingly neutral organizational practices can have disparate effects in and of themselves.

While many people hold (unconscious) gendered expectations, biases do not necessarily result in discriminatory behavior. Instead, experimental research demonstrates that less ambiguity, and more accountability and transparency prevent biases from affecting behavior. For instance, participants were less likely to discriminate when being told that they have to justify their decision to someone else afterwards (Lerner and Tetlock 1999; Tetlock 1985). Similarly, Salancik and Pfeffer (1978) demonstrated in a simulated hiring situation that participants were less likely to choose job applicants that were of similar race and gender, when their name was to be publicly identified with their hiring recommendation afterwards. In another simulated hiring study, participants were also more likely to discriminate when hiring situations were more ambiguous – meaning applicants' credentials were good but not exceptional. No discrimination occurred when applicants' credentials were clearly strong or clearly weak (Dovidio and Gaertner 2000).

Applied to the work context, early sociological work by Max Weber already emphasized the importance of organizational rules in limiting the arbitrary rule of managers and business owners (Weber [1922] 1968). Subsequent organizational research demonstrates that organizations play a central role in limiting or creating space for

supervisory bias and differential treatment (e.g. Baron and Pfeffer 1994; Bielby 2000; Dobbin 2009; Huffman 1995; Kalev et al. 2006; Nelson and Bridges 1999; Reskin 2000; Reskin 2003; Reskin and McBrier 2000; Siebers 2009). For instance Kalev et al. (2006) show that organizations are most likely to increase representation of women and minorities in managerial ranks when they charge a person or department with the responsibility to monitor and increase diversity. Other measures that addressed social capital differences (i.e., mentoring and networking programs) only had a modest effect, while measures to decrease individual biases (i.e., diversity training) showed no effect at all. Similarly, Castilla (2015) demonstrates that by making the merit-increase process more transparent and by holding supervisors accountable for their decisions, gender and race disparities in merit-increases can be effectively prevented. Hence, a large body of theoretical and empirical research demonstrates that organizational practices that limit supervisory discretion and that increase accountability and transparency reduce opportunities for discrimination (however see: Ferguson 2014).

In addition to minimizing room for arbitrary decisions, neo-Marxist, feminist and *structural discrimination literature* demonstrates that seemingly neutral organizational practices can have disparate effects on different employee groups. Organizational practices are sometimes gendered and create disparate outcomes in and of themselves (e.g., Acker 1990; 2006; Burriss 1996; Ferguson 1984; Kanter 1977; Williams et al. 2012). Research taking this perspective is often rooted in conflict theory (e.g. Blalock 1967; Blumer 1958; Collins 1971) which argues that “beneficiaries of systems of inequality protect their privilege by using the resources they control to exclude members of the subordinate

groups” (Reskin 2000: p. 320). Therefore, seemingly neutral practices can serve to produce or maintain class, gender and racial inequalities within particular organizations (Acker 2006).

For instance, in her seminal work on gender in organizations, Kanter (1977) shows how seemingly neutral logics of the ideal manager were inherently gendered as they focused on traits that were generally associated with masculinity. More generally, organizations often base job descriptions on an “ideal worker” who is constantly available without any interference from his or her personal life. As women continue to perform most of the domestic labor and care-taking (Bianchi et al. 2006; Kornrich and Eger 2014), the image of the ideal worker is gendered in that it resembles male employees more closely. Formal evaluations are then biased, because organization evaluate workers against an ideal worker, resulting in worse performance ratings for women (e.g., Elvira and Town 2001).

Another example is the reliance on referrals in the hiring process. Reliance on referrals can reproduces existing gender differences in the organization through social networks (Fernandez et al. 2000; Petersen et al. 2000; Reskin and McBrier 2000). Depending on the organization, this might mean that desirable positions are harder to access for qualified women if they lack access to a referral network. Thus, neutral organizational practices can create structures that disadvantage social groups because they put greater emphasis on individual resources that are unequally distributed across demographic groups (e.g. social networks, years of tenure, ability to work after-hours), therefore systematically disadvantaging members of specific groups.

## **JOB ENTRY MODE AND INDIVIDUAL EARNINGS DIFFERENCES?**

Each of these approaches not only focuses on different causes for gender differences in career outcomes, but also suggest different solutions to minimize ascriptive inequality. For instance, human capital theory would explain greater gender differences among hired employees, by pointing to gender differences in observed and unobserved human capital. To remedy these differences, human capital theorists would emphasize similar investments into education and work experience among men and women.

Social capital theory may assume that externally hired women were less well networked with the organization and thus had less access to “inside information” than hired men (Brodt 1994). This may create gender differences in negotiation behavior, resulting in lower starting salaries for women than for externally hired men (e.g., Belliveau 2005; McDonald et al. 2009). To reduce gender disparities among externally hired employees, social capital might point towards measures that reduce gender differences in social capital, such as mentoring or network events (Arthur et al. 2005; Scandura 1992) and for firms to rely less on referrals in the hiring process.

With regard to implicit biases, expectation state theory would predict that regardless of employees’ education or social networks, greater biases in the hiring process are unavoidable as long as gender affects cognition in social situations and as long as cultural believe systems associate men with more competence and deservingness than women. As existing status believes are informed by existing distributions of rewards (Ridgeway 1991; Ridgeway et al. 1998), changing cultural believe systems and the importance of gender in social interactions will arguably be a slow process.

Unlike human capital, social capital, and expectation state theory, organizational literature suggests that because pay is set in organizations, changing individuals' skills, social networks or biases may have limited effect on earnings disparities. Thus, taking an organizational perspective on gender inequality (e.g., Bielby 2000; Bridges and Nelson 1989; Dencker 2008; Kanter 1977; Petersen and Saporta 2004; Pfeffer and Ross 1990; Reskin 2000; Risman 2004; Siebers 2009; Sørensen and Kalleberg 1981; Stainback et al. 2010; Williams et al. 2012), suggests inequality originates from the process that distribute rewards among organizational members. Differences in the criteria used to determine hired and promoted employees' salary and practices that allow more disparities in the hiring process may be the proximate cause of inequality (Reskin 2000). Consequently, addressing implicit biases and gender differences in social and human capital will have a limited effect if disparities are produced and maintained by organizational practices (Kalev et al. 2006).

Fortunately, previous studies demonstrated that changes in organizational practices could dramatically limit the effect of disparities in employees' human and social capital. Likewise, changes in how organizations distribute rewards cannot only limit the effect of implicit biases (Bielby 2000; Castilla 2015; Tetlock 1985), but also change cultural believe systems in the long-run (Ridgeway 1991; Ridgeway et al. 1998). In summary, organizations can reduce inequality among externally hired employees by either reducing the opportunity for employees' biases and/or by changing seemingly neutral practices that have disparate effects on men and women in the workplace.

Hence, organizations may be key in understanding how inequality comes about and how we can minimize ascriptive differences in the future. However, previous research on men's

and women's returns to inter-organizational mobility has given less attention to the role of organizations in the generation and reduction of inequality and instead focused more on other factors such as the job search process (e.g., Dreher et al. 2011). It remains unclear how gender inequality among hired and promoted employees unfolds within organizational settings and how organizations can enable or minimize differences.

By building on recent research that examines how uncertainty affects pay differences between hired and promoted employees in general (e.g., Bidwell 2011; Chan 2006), I bring an organizational perspective to our understanding of gender disparities in career outcomes. This dissertation examines to what extent uncertainty in the hiring process becomes embedded in organizational pay-setting processes and whether these procedural differences create, reproduce or reduce inequality given a particular job entry mode. As organizations set pay not only at point of job entry but also over time via pay increases, I pay particular attention to gender disparities at job entry vs. how gaps develop over time. By doing so, I improve upon previous studies that examined the gendered effect of inter-organizational mobility (Brett and Stroh 1997; Dreher and Cox 2000; Dreher et al. 2011; Kronberg 2013; Lam and Dreher 2004) and distinguish between gender gaps in starting salaries and subsequent pay increases.

Understanding to what extent inequality emerges at entry and over time has important implications for subsequent efforts to reduce income inequality. For instance, if gender disparities are already greater among hired than promoted employees at job entry, but they do not change post-entry, then future research should focus on sources of disparities at the point of job entry. E.g., greater gender disparities among hired employees at job entry may



imply that men and women select into inter-organizational mobility with more variation in backgrounds than employees who select into intra-organizational mobility. The pay-setting processes may then translate greater gender differences among hired employees into greater pay differences at job entry. Alternatively, there are no selection effects, but the pay-setting process leaves more room for supervisory discretion among hired employees, whereas it may leave less room for discretion in the promotion process.

Given greater gaps in starting salaries among externally promoted employees, gaps may narrow or widen post-entry among externally hired employees. If gaps narrowed, then organizational settings and processes might help reduce differences between hired men and women. If greater inequality among externally hired employees was to arise primarily over time, then previous studies that only examined entry wages missed an important part of the picture, as mode of job entry would continue to affect employees beyond the point of entry. Such a finding would warrant further exploration into which processes enable gaps to close or open after entry.

## **EMPIRICAL IMPLICATIONS**

I use the different frameworks outlined above to understand how modes of job entry affect employees' earnings and apply the perspectives above to the empirical analyses as follows. Chapter 4, examines the pay-setting process for hired and promoted employees. Using 19 semi-structured interviews, I examine how formalized organizations go about determining starting salaries and subsequent pay increases. Are there differences in how organizations set pay for hired and promoted employees? Do these procedural differences create room for disparate outcomes? By focusing on differences in criteria, I draw on the structural discrimination literature, which demonstrates that seemingly neutral processes can put

greater emphasis on resources that are unequally distributed among employees (e.g., Acker 2006; Kanter 1977). Moreover, by looking for differences in processes (e.g., how consistently different criteria are used and whether pay determination involves different steps), I draw on the discretion literature that demonstrated that organizations can limit earnings disparities by limiting supervisory discretion (Castilla 2015; Kalev et al. 2006; Salancik and Pfeffer 1978).

Chapter 5 builds on Chapter 4, and uses longitudinal personnel data to examine how men's and women's starting salaries and subsequent raises differ given a particular mode of job entry. I use (but not test) the frameworks outlined above to develop hypotheses whether greater gender inequality among externally hired employees exists at entry and to what extent disparities emerge over time.

Chapter 6 explores what organizational mechanisms can explain the emerging gender gap among hired employees after job entry. I draw on the frameworks outline above to develop testable hypotheses: On the individual level, I draw on what people bring into the workplace (time on leave), and on expectation state theory (e.g. hiring bonuses are perceived to be less fair for women). Additionally I examine whether externally hired women are exposed to supervisory discretion (e.g., because they work in greater teams) and to what extent differences result from structural factors (e.g., occupational segregation, closer location to jobs' pay ceiling).

## **CONCLUSION**

To understand how mode of job entry translates into earnings differences, this chapter reviewed several broad perspectives on the causes of inequality. First, individual wage differences are attributable to what employees bring into the labor market. In this regard,

human and social capital theory point to disparities in educational attainment and social network formation, both of which greatly affect earning. Second, wage differences are attributable to how others perceive ascribed characteristics such as gender. Finally, organizational scholars demonstrate that workplace practices moderate the effect of individual-level differences and resources. For example, policies that create accountability in the pay-setting process, limit the opportunity for individual-level discriminatory behavior. Similarly, certain policies can be discriminatory in and of themselves when they put emphasis on resources that are unequally distributed across the workforce (e.g. recruitment via referral networks), thereby creating structural disadvantages for minority groups.

## **Chapter 3**

### **Methodology:**

#### **Careers in the organizational context – A longitudinal, mixed-methods case study**

#### **OVERALL RESEARCH DESIGN**

##### *Overview*

To examine the role of organizational setting in creating, reproducing and reducing gender disparities among hired and promoted employees, I employ a longitudinal, mixed-method, longitudinal case study of careers in a large, bureaucratic work organization in the service industry (“BetterTogether” or “B2G”).<sup>3</sup> Similar to previous studies of organizations and career outcomes (e.g., Bidwell 2011; Chan 2006; Gerhart 1990; Petersen and Saporta 2004), I use longitudinal personnel records between 2005 and 2013. These data are particularly well suited to explore and establish the relationship between mode of job entry and subsequent changes in earnings within the organization.

Similar to previous work on gendered organizations (e.g., Kanter 1977), I combine quantitative personnel data with semi-structured interviews with 19 supervisors. Interviews are particularly well suited to explore organizational mechanisms (e.g. how firms set pay) that may affect men and women differently given a particular job entry mode. Supervisors work in several large bureaucratic organizations enabling an exploration of organizational mechanisms at B2G and other, similarly formalized organizations. I collected interviews between March and November 2014.

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<sup>3</sup> I use a pseudonym to protect the organizations’ anonymity.

### *Why a case study?*

I focus on organizations and B2G specifically, because organizations play a central role in generating and alleviating income inequality. Not only do organizations assign rewards to positions but also employees to jobs (e.g., Althaus and Kalleberg 1981). In this regard, the literature discussed in Chapter 3 suggests that the design of work processes and reward distribution can create, reproduce or reduce ascriptive earnings differences (AckerCastilla 2015; Kalev et al. 2006). As Kanter's (1977) seminal work demonstrated, organizational case studies enable the researcher to explore how organizational context affects employees within. In this regard, I will examine how B2G and similar organizations set pay for hired and promoted employees and to what extent this is associated with gender disparities in starting salaries and subsequent earnings increases.

### *Why BetterTogether (B2G)?*

The longitudinal personnel records and several interviews focus on B2G, which is a large, private employer with approximately 9,000 employees. B2G's workforce grew in the past 40 years, prompting it to fill its ranks regularly with external hires, while preserving internal opportunities to retain qualified personnel in the same positions. On average, 32% of B2G's jobs are filled via promotion, while 38% are filled via external hire.<sup>4</sup> Additionally, B2G filled 31% of jobs via internal transfers from other departments and units.<sup>5</sup> This makes it an ideal site to examine how different modes of job entry affect subsequent career outcomes of men and women in the organization. I focus on a large

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<sup>4</sup> Which includes 9% of the jobs being filled via rehire.

<sup>5</sup> While this dissertation will focus on the earnings effects of being hired vs. promoted, future studies should also include transferred employees and how transfers between departments affect employees.

employer because over 50% of all employees in the U.S. work in large firms with more than 500 employees (SUSB 2008) where internal career ladders used to be most prominent.

*Why focus on professional and managerial employees?*

Similar to previous studies on mobility outcomes (e.g., Brett and Stroh 1997; Dreher and Cox 2000; Dreher et al. 2011; Lam and Dreher 2004; Petersen and Saporta 2004; Valcour and Tolbert 2003), this study focuses exclusively on professional and managerial employees. I do so because externalization of job mobility had a substantively greater effect on college graduates' earnings (Kronberg 2014) and second, changes in career patterns primarily affected the gender gap among professionals (Kim 2013; Kronberg 2013). Therefore, this study on professional and managerial employees in B2G.

For the purpose of annual EEOC reporting, B2G classifies all employees into one of 10 major occupational groups. I combine managerial and professional employees as "professionals," which constitute approximately 44% of the entire workforce. I categorize all other EEOC occupations (sales workers, administrative support workers, craft workers, operatives, laborers, helper and service workers) as "non-professional."

**CONFIDENTIALITY AND IRB APPROVAL**

In order to obtain access to the quantitative data, I was required to sign a Confidentiality Agreement and follow accepted procedures so that I could not ascertain the identity of B2G or any of its employees. I took several steps to protect the confidentiality of the personnel records and qualitative interviews. Regarding the personnel records, B2G de-identified the personnel records before I received them. This means they removed any identifying information such as names or employee ID numbers and replaced them with new ID

numbers for to link employees' records over time. To prevent identification of employees based on their job title, B2G only provided employees' general job function. For example, the records would identify a "Director of Compensation" as "Human Resources Employee" along with all other employees who work in human resources functions. To protect B2G's identity, I use a pseudonym and only general descriptions of the organization. Upon signing a Non-Disclosure Agreement, I received written permission to use the personnel data in October 2012.

Regarding the qualitative interviews, I use pseudonyms to identify participants and do not keep a record that links pseudonyms with interviewees' identity. I also removed any identifying information (name of the employer, departments, job title, names, and places) from the interview transcripts. After interview transcription, I deleted the audio recordings. I keep all interview transcripts on a password-protected computer as well as a password-protected hard-drive. Because the personnel data is de-identified, I do not link qualitative interviews of B2G employees to their personnel records.<sup>6</sup>

I submitted a description of my research and the confidentiality protocols outlined above to the Emory Institutional Review Board (IRB) in summer 2012. My initial IRB materials included the personnel data 1997-2012 and qualitative interviews with current and past B2G employees. The Emory IRB declared the study as "expedited approval" on July 23, 2012 as the study posed minimal risk to participants. Expedited approval status indicates

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<sup>6</sup> Additionally, the attempt to identify employees in the personnel record would violate the Confidentiality Agreement made with B2G. Therefore, I did not ask employees about any information that would allow me to identify them (e.g. specific job title or department).

that after the initial approval a renewal of the application is necessary every 12 months, which I submitted and received approval for in summer 2013 and 2014.

On February 24 2014, the IRB approved an amendment that enabled interviews with supervisors in B2G and other large organizations. Additionally, I obtained a waiver of documentation of informed consent. This allowed participants to provide verbal instead of written consent, therefore preventing the attachment of participants' names or any identifiable information to any documentation. To inform interviewees of the study's risks and benefits, I provided them with an informed consent information sheet. I include a copy of the information sheet in Appendix A and the script for oral consent in Appendix B.

## **LONGITUDINAL PERSONNEL DATA**

### **Data**

#### *Why personnel records?*

To examine how mode of job entry affects subsequent income, I use longitudinal personnel records from 1997-2013. Generally, studies on hired and promoted employees either used self-collected or publicly available longitudinal employee surveys (e.g., Dreher and Cox 2000; Fuller 2008; Park and Sandefur 2003; Wilson et al. 1999), or longitudinal personnel data (e.g. Acosta 2010; Bidwell 2011; Chan 2006; Petersen and Saporta 2004).

There are two disadvantages of using personnel data over survey data: First, personnel data is left and right censored, meaning that no employment information is available prior to employees' entry or after their exit from the organization. This is not the case with panel data such as the PSID, where respondents usually complete an initial "background / history" questionnaire in addition to the annual survey about the most recent changes. I control for observable differences in employees characteristics (e.g. demographics, education, approximate years of experience) to minimize selections effects.



Similarly, I control for employees' turnover hazards to account for selective attrition (Castilla 2008).

Second, generalizability is most suited for large, formal work organizations in the U.S. Not only are large employers subject to EEO/AA regulation, but also increased professionalization of the HR occupation resulted in a convergence of human resource practices (Brewster et al. 2006; Dobbin et al. 1993; Mazza and Alvarez 2000; Mizruchi and Fein 1999). Additionally, I build on previous studies of job mobility which use a nationally representative employee surveys or other organizational data (e.g., Bidwell 2011; Brett and Stroh 1997; Chan 2006; Fuller 2008; Kronberg 2013; Kronberg 2014). This provides me with a benchmark to which I can compare the findings of the personnel data.

Detailed information on job mobility and work context included in the personnel records however, outweigh left- and right-censored data and limited generalizability. Mobility and employment information in household surveys are often internally inconsistent and the coding of mobility comes with measurement error (Brown and Light 1992). Personnel data records transitions more reliably, and in more detail, making it possible to distinguish between different types of internal moves (e.g. promotions, demotions, transfers) (Chan 1996; Gerlach and Hubler 2009).

Additionally, focusing on employees of a single organization provides a more homogenous population and environment, which is particularly advantageous to isolating causal mechanisms. Ranks and job titles are easier to interpret than in household surveys where job titles and ranks have different meanings depending on the employing organizations (Gorman and Kmec 2009). Finally, job mobility is embedded in social and

organizational context (Kmec 2007; Mitchell et al. 2001). Current surveys however, include little information that would enable me to examine the effect of organizational characteristics (Acosta 2010).

### *The employment records*

B2G creates an initial record for each new employee and adds a new record when any employment aspects change (e.g. change of supervisor, change of pay, promotion). Each of these records include a detailed code that indicates why HR departments added a new record, the effective date, detailed job information (e.g. job function, exempt status and annual pay) and demographic characteristics of the employee.

In the analyses, I focus on job spells, which are distinct jobs held by a person. A job spell begins when an employee enters a new job (e.g. via hire or promotion) and ends when that employee changes jobs again, e.g. because he or she receives a promotion, is transferred, fired or because he/she quits.

### *The sample*

Although the employment records span the years 1997-2013, B2G did not record performance evaluations before 2005, thus this dissertation uses the personnel records 2005-2013. I exclude temporary and part-time employees, as they may not experience the same earnings growth as regular employees. When temporary employees transition to regular status, they enter a new job spell and are then included in my analyses. I also exclude employees who have missing information on key variables such as annual earnings, job title, department, gender and education. Finally, similar to previous studies

(e.g., Acosta 2010; Bidwell 2011; Chan 2006), I only focus on employees who entered B2G in or after 1997 as I am unable to construct a complete employment history (e.g. job tenure, number of previous promotions) for employees who started before 1997.<sup>7</sup>

## **Measures**

### *Dependent variable*

I use the natural log of annual full-time equivalent earnings from wages and salaries (excluding bonuses) in 2013 dollars. Full-time equivalent earnings is the income an employee would earn after one year of full-time employment in that position, meaning that full-time equivalent earnings are the earnings rate independent of how many weeks and hours employees actually worked. Similar to Mouw and Kalleberg (2010), I exclude outliers with extremely high earnings (over \$400 per hour) as outliers bias the estimates. Table 3-1 provides an overview of all variables included in the analyses, while Table 3-2 shows the zero-order correlations.

\*\*\* Table 3-1 and 3-2 here \*\*\*

### *Key Explanatory Variables*

**Employees' Gender** is self-recorded during the initial hiring process. If employees do not specify their sex, supervisors enter the missing information into the database as male or female.

**Mode of job entry.** The mode of job entry describes the avenue through which employees entered their current job. *New hires* are employees who enter B2G for the first time via external hire. *Rehired* employees also enter their jobs via a hiring process, but they have

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<sup>7</sup> From the original sample, I drop 19.9% because they entered before 1997, 69% because employees work part-time, are temporary or non-professional employees, 4.7% because they have missing information on education, job function, pay grade, earnings, race, gender .

worked for the organization before (e.g. as temporary employee). B2G records both the original and most recent hiring date. I classify hires as new hires when the original hiring date matches the most recent date. When the original date is before the most recent hire date, employees are re-hired. As rehired employees are arguably different from newly hired employees (e.g. because they already know the organization and because they often only stay for a short period), I keep these groups separated and use new hires as the reference category in all analyses.

In addition to external hires, employees can enter jobs via different internal moves. To distinguish between types of internal job changes, I rely on mobility information provided in the personnel records and on changes in pay grades. For instance, when an employee enters a new job via promotion, B2G adds a new record, which contains the reason for the addition (e.g. promotion) and the effective date of the change. I classify job changes as *promotion* when B2G labeled the change as a “promotion”. Additionally, I code changes labeled as “job reclassifications” as a promotion when employees’ pay grade increases with the reclassification.<sup>8</sup> Reversely, I code a job change as demotion when B2G labeled it as “demotion” or when B2G labeled it as “job reclassification” and lowered employees’ pay grade.

In addition to upward or downward movement, employees can also transfer between departments. I code job changes as *transfers* when B2G classified changes as “transfer” (e.g. between departments) or when employees’ job was reclassified, but there was no change in pay grade. Transfers can happen by themselves (i.e. a move without

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<sup>8</sup> Bidwell (2011) and Chan (2006) rely on changes in earnings and classify a change as a promotion when employees also experience a 7% or 10% pay increase, respectively. Instead of relying on changes in pay, I use changes in pay grades, because a change in pay grade presumably signals a change of position in the pay structure.

change in pay grade) or in combination with promotions or demotions (e.g. when employees switch departments to take a leadership role).

Table 3-3 provides an overview of how employees entered their jobs at B2G between 2005 and 2013: Over a third of all jobs are entered via hire or rehire, additionally employees entered 28 % of jobs via simple promotion. Because only few employees experience a promotion and transfer at the same time,<sup>9</sup> I combine simple promotions and promotions with transfers in the analyses. Similarly, Table 3-3 indicates that demotions occur rarely (2% of all moves are demotions). Therefore, I combine them with the simple transfers.

\*\*\* Table 3-3 here \*\*\*

As B2G transferred employees between departments when it reorganized the structure of divisions (especially in IT), I also record whether job mobility occurred in the context of a reorganization. Similar to Bidwell (2011), I code a job change as part of an internal *reorganization* when sending or receiving departments grew or declined by more than 10% within a time span of 3 months (a quarter). If departments consisted of 10 employees or less, then transitions were counted as reorganization, when more than 50% of the work force came or left. Reorganizations can co-occur with any of the other job changes (hire, rehire, promotion, transfer or demotion).

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<sup>9</sup> This is similar to Bidwell (2011). In his data, 32% of the jobs were filled via external hire, 55% via simple internal promotion, 3% via promotion with transfer, and 10% via simple transfer. Some of these differences in frequencies may be due to differences in how I coded promotions (by looking at pay grades vs. changes in income). I.e. even when transferred employees receive a substantial pay raise, I code them as promoted only if they have a higher grade.

### *Controls*

**Employee characteristics.** I control for employees' race, which is self-recorded during the initial hiring process. B2G records race using the standard EEOC categories, which are Black/African American, Asian/ Pacific Islander, Native American, White, Other/Unspecified. Ethnicity is recorded as Hispanic vs. Non-Hispanic. My analyses include controls for being *Black*, *Asian* or of *Other Race*. White is the reference category. I combine Native American, employees of Hispanic ethnicity and employees who specified other or no race into the "other race" category (less than 4% of the workforce).

I measure education in terms of *highest degree* distinguishing between less than college, Bachelor's degree, Masters or professional degree and PhD. I assess overall potential *labor market experiences* by subtracting years of education (based on highest degree) from age (5-year category). As women are more likely to have intermittent careers than men do, this measure is more accurate for men than for women. As B2G does not record employees' actual years of experience, this is the best approximation. To avoid collinearity with tenure, I use years of labor market experience at job entry (i.e. at the point of hire or promotion).

I gauge firm-specific experience using *firm tenure* and *job tenure*. Firm tenure assesses the total years an employee has worked for B2G, excluding time during employment breaks and unpaid leaves of absences. Similar to labor market experience, I only record firm tenure at the point of job entry. Job tenure assesses the number of years an employee has worked in a specific job (excluding time on unpaid leave). Job tenure

resets when employees enter a new job via rehire, promotion, transfer or reorganization.<sup>10</sup> All models include square terms for experience, firm tenure and job tenure. Finally, I include eight *age-group dummies* (5-year categories) and five *birth cohort* dummies, to control for age and cohort effects, as the study has an observation.

As employees' *performance* has a strong impact on pay and pay increases, I control for employees' most recent performance evaluation. Supervisors conduct performance evaluations annually, where they score employees on a scale from 1 to 5. A rating of 1 indicates "unacceptable", 2 "below expectations", 3 "meets expectations", 4 "exceeds expectations" and 5 "far exceeds expectations". Table 3-4 shows how performance evaluations are distributed. "Unacceptable" and "below expectation" ratings are very rare with 0.06% and 1.46% respectively.<sup>11</sup> About 31%, 38% and 19% of all employees receive a rating of 3, 4 or 5 respectively. To control for performance evaluations, I include two dummy variables: "exceeds expectation" (performance rating of 4) and "far exceeds expectations" (performance rating of 5), which I compare to employees who receive a performance rating of three or less. That is, because ratings of 1 and 2 occur so rarely, I combine them with employees who receive a "meets expectation."<sup>12</sup> I use this group as reference category, to examine the effect of performing above and well above expectations.

\*\*\* Table 3-4 here \*\*

Table 3-4 also shows that approximately 11% of the workforce has no performance rating on record in a given year. This might happen when supervisors forget to record the

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<sup>10</sup> In additional analyses, I tested whether the effect of job tenure is curvilinear by adding a square-term. They showed that neither the squared term for tenure nor the interactions of tenure-squared, gender or job mode entry reached conventional levels of significance.

<sup>11</sup> Several supervisors mentioned that a rating of 1 usually means that employees will be let go. A rating of 2 is very severe and supervisors have to put employees on a performance improvement plan that is agreed upon by both parties and the HR department.

<sup>12</sup> I also ran the analyses with a separate dummy for those who got a 2 or 1, but results did not change.

evaluation score electronically even though they have done an evaluation on paper or because supervisors did not evaluate that employee. As I do not want to drop these employees from the sample, I include them and add a separate dummy variable that indicates that employees' performance ratings are missing.

Similar to Castilla (2008), I control for *individual turnover risk*. This measure considers how aggregate gender gaps among hired and promoted employees might change because of differential attrition (e.g., women are more likely to quit). To gauge individual's risk of job exits, I use a piecewise exponential event history regression to predict the hazards for turnover (voluntary and involuntary), promotions and transfers respectively, controlling for individual and job characteristics. Table 3-5 shows that women are more likely to quit and be discharged, controlling for employee and job characteristics. Moreover, promoted employees are more likely to quit. There is a small interaction between gender and job entry mode, which shows that promoted women are slightly more likely to quit than hired women do. However, as the effect size is very small and because no interactions are significant when looking at the other outcomes, evidence suggests that *there are little gender differences in turnover among hired and promoted employees*. To account for existing patterns of attrition, I use the hazard rates estimated in these models as control variable in the earnings analyses.<sup>13</sup>

\*\*\* Table 3-5 here \*\*\*

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<sup>13</sup> In additional analyses not shown here, I also added interactions with performance, pay and education with gender and mode of job entry, to examine whether high performing employees of a particular gender and job entry mode are more likely to exit (e.g. high-performing newly hired women are promoted faster than high-performing hired men). None of the interactions reached conventional levels of significance.



**Job characteristics.** Professionals work in 11 *job functions* such as finance, communication, HR, IT or general manager. Additionally, B2G assigns a *pay grade* to each job based on the jobs' responsibilities and requirements. Pay grades define the minimum and maximum hourly, monthly, and annual pay for jobs in these grades. As employees are on different pay grade systems, I created a new pay grade measure that combines all the scales into one (based on grades' mid-point salary). The new measure ranges from grade 1-21 and I enter fixed-effects for each job grade. To protect the anonymity of the personnel data, it does not include specific job titles. Therefore, I consider employees to be in similar jobs when they work in the same job function, pay grade and unit.

**Other controls.** B2G has 32 *business units* that act relatively autonomous and differ in size, growth pattern and the amount of revenues generated, which affects compensation levels as well as turnover. I include fixed-effects for each business unit. To account for economic changes, I control for the monthly (or annual when looking at annual data) unadjusted state *unemployment rate* (provided by Bureau of Labor Statistics) and a dummy indicating an *economic recession* (i.e., 12/2007-06/2009, based on NBER definition).

When I examine when employees receive the next pay increase, I also control for *starting month*, as employees hired shortly before the annual performance reviews probably will not get a raise right away, but have to wait until the next cycle. I account for *time since last raise or position change* when assessing the size of raises. I do so because employees omitted for a past raise (e.g., because they were just hired) might receive a greater raise now as they had to wait longer. Finally, I also control for the *type of raise* someone received. Based on the information in the personnel records, I distinguish between merit-

raises, market-adjustments (i.e. adjusting employees' salary to the current market rate) and other pay adjustments.

### **Analytic strategy**

I use two methods to examine how mode of job entry affects subsequent earnings. When focusing on overall earnings and earnings growth, I use *hierarchical linear modeling* (HLM), to account for the nested nature of the data. Depending on whether I examine earnings differences at job entry or subsequent earnings growth, I use a two- or three-level model.<sup>14</sup> HLM takes into account error clustering within and between individuals and thus give better estimates than OLS estimation. This is particularly true when there are only few time points per job spell – in this case, a maximum likelihood method would miss-estimate the effect of employee characteristics, such as gender, and job spell characteristics, such as mode of job entry (Raudenbush and Bryk 2002; Singer and Willet 2003). Below I explain the HLM approach for the three level model that estimates the percentage increase in earnings:

The **repeated observations model (level 1)** predicts the percentage increases in earnings for person  $i$ , in job spell  $j$ , at time  $t$  and includes all variables that vary over time (e.g. unemployment rate, age).<sup>15</sup> Here, pay increases are a function of the intercept, which is the average pay increase, when all other controls take a value of 0 ( $\pi_0$ ) plus the effect of other time-varying variables ( $\pi_1$ ). When I estimate differences in earnings trajectories

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<sup>14</sup> Earnings at job entry: A single employee (level 2) can enter multiple jobs (level 1). Earnings over time: A single employee (level 3) can enter multiple jobs (level 2) in which they have repeated observations over time (level 1)

<sup>15</sup> In the growth curve models I used for the final table 8, tenure is a key variable in the repeated observation model.

overtime (i.e. growth curve models), an important time-varying variable is “job tenure”, which indicates the average change in earnings for each year employees stay in the job.

$$Pay\ Increase_{ijt} = \pi_0 + \pi_1(X_1)_{ijt} + \dots + \varepsilon_{ijt} \quad [1]$$

To address job spell-level variation, the **job-level model (level 2)** introduces all measures that are time-constant over the course of a job spell, such as *mode of job entry*. Level 1 slopes and intercepts now become a function of time-invariant job spell characteristics. For instance, equation 2 shows that average pay increases ( $\pi_0$ ) are a function of average increases for hired employees ( $\beta_{00}$ ) plus the differences between hired and promoted employees ( $\beta_{01}$ ).

$$\pi_0 = \beta_{00} + \beta_{01}(Promoted)_{ij} + \dots + r_{0ij} \quad [2]$$

To address between-employee variation, the **person-level model (level 3)** introduces all variables that are constant within employees, such as *gender*. Level 2 slopes and intercepts now become a function of time-constant person characteristics such as gender. For instance average increases for hired employees ( $\beta_{00}$ ) become a function of average increases of hired men ( $\gamma_{000}$ ) plus the gender difference in starting salaries among hired employees ( $\gamma_{001}$ ). Likewise, the average effect of being promoted on pay increases ( $\beta_{01}$ ) now becomes a function of average increases for promoted men ( $\gamma_{010}$ ) plus the gender difference in starting salaries among promoted employees ( $\gamma_{011}$ ).

$$\beta_{00} = \gamma_{000} + \gamma_{001}(Female)_i + \dots + \mu_{00i} \quad [3]$$

$$\beta_{01} = \gamma_{010} + \gamma_{011}(Female)_i + \dots + \mu_{01i} \quad [4]$$

...

When substituting the job- and person-level equations and into the repeated-observation-level equation, the result is the combined equation 5. It demonstrates that by decomposing

intercepts and slopes by mode of job entry and gender, I model a cross-level interaction (Raudenbush and Bryk 2002). I introduce the cross-level interactions to examine whether the effect of gender on earnings increases depends on job entry mode.

In the HLM models that look at differences in growth trajectories (growth curve models), I include “job tenure” in the repeated observation model (level 1) and interact it with “female” and “promoted.” This is equivalent to a three-way interaction effect between time, gender and mode of job entry. Here, the main effects indicate initial differences at job entry (e.g. female = average gender gap at job entry), while the interactions with job tenure indicate how initial gaps change over time depending on gender and mode of job entry (e.g. female\*tenure = average difference of earnings growth between men and women).

$$\begin{aligned}
 \text{Pay Increase}_{ijt} & & [5] \\
 &= \gamma_{000} + \gamma_{001}(\text{Female})_{ijt} + \gamma_{010}(\text{Promoted})_{ijt} \\
 &+ \gamma_{011}(\text{Female} * \text{Promoted})_{ijt} + \gamma_{100}(X_1)_{ijt} + \dots
 \end{aligned}$$

In addition to differences in earnings and raises, I also examine the timing of pay increases and subsequent job mobility. For this purpose I use a *piecewise constant exponential event history model*. Similar to other event history models, the piecewise exponential model assess the rate at which “failure” occurs given that it has not occurred yet. Because the rate of pay increases and turnover varies over time, the piecewise exponential method accounts for time-dependent changes in the baseline transition rates by splitting the time axis into time periods and assumes that transition rates within each piece are constant (Blossfeld et al. 2007).

$$\begin{aligned} hazard_{ijt} = & \alpha_t + \beta_1(Female)_{ij} + \beta_2(Promoted)_{ij} \\ & + \beta_3(Female * Promoted)_{ij} + \dots + \mu_{ij} \end{aligned} \quad [6]$$

Hazards (e.g. of getting a raise) of person  $i$ , in job spell  $j$  at time  $t$  are a function of the period-specific intercepts ( $\alpha_t$ ) for each of the  $t$  timepieces, gender ( $\beta_1$ ), mode of job entry ( $\beta_2$ ) and the intersection between them ( $\beta_3$ ). I include the interaction to determine whether the effect of gender depends on the mode of job entry.

## **SEMI-STRUCTURED INTERVIEWS**

### **Research Design**

To gauge organizational mechanisms that might give rise to patterns observed in the quantitative data, I conduct semi-structured interviews with 19 supervisors between March and November 2014. As this study is primarily exploratory and explanatory in nature, qualitative interviews are most suitable to discover themes. That is, the key strength of in-depth interviews is that the researcher gains a comprehensive perspective on a social phenomenon, which is especially advantageous when exploring new causal mechanisms (Lofland et al. 2005; Miles and Huberman 1994; Weiss 1994).

### **Sample**

Although hired and promoted employees themselves provide important insights into the hiring and promotion process, they may have less insight into the “behind-the-scene” processes such as how their pay was determined. Thus, similar to previous studies on wages and employment decisions, this study focuses on *supervisors as knowledgeable informants* (Weiss 1994: p. 19) For instance, to examine what criteria organizations consider in pay determination Levine (1993) and interviewed compensation executives, while Galuscak et

al. (2012) surveyed chief human resource offices of over 15,000 European companies. Similarly Bewley (1995), Moss and Tilly (1996) and Kirschenman and Neckerman (1991) conducted open-ended interviews with a smaller sample supervisors and “key decision makers” to examine how they make employment and pay decisions.

As supervisors and managers make hiring, promotion and raise decisions, they can give insight into how they navigated company practices. Although supervisors might perceive the same employee and their performance differently, their perceptions have real consequences as supervisors make pay, promotion and hiring decisions based on these perceptions and understandings. Put differently, I seek to understand mechanisms that drive individual earnings differences by interviewing individuals responsible for hiring, promotions and annual pay increases (Tilly 1998). While most of the interviews focused on supervisors as experts on employment outcomes of others, supervisors are also employees and sometimes shared their personal experience with previous promotions and employer changes. Thus, occasionally supervisors became *representatives of the workforce*.

Similarly to Bewley (1995), I used purposive sampling, the goal of which is not to construct a representative sample, but to select theoretically important cases that allow the generation of new theory (Lofland et al. 2005; Weiss 1994). To study institutional mechanisms, I focus on recruiting male and female supervisors in different occupations and different organizations to get a multitude of perspectives (Weiss 1994). Specifically the interviews targeted three occupations: human resources (HR), information technology (IT), and finance and accounting (F&A). These occupations are typically present in large,

bureaucratic organizations (e.g., Dobbin 1998; Dobbin 2009; Zorn 2004), and vary in gender make-up. In 2012 women made up about 72% of human resources, 53.5% of finance and accounting and 26.8% of IT professionals (BLS 2013).

I include supervisors from a number of fields instead of just focusing on organizations' compensation specialists, because I want to examine how the individual supervisors make pay decisions and to what extent they made these decisions independently or in conjunction with other organizational actors such as the HR department or EEO officers. That is, while most large organizations have HR policies in place that guide supervisors, supervisors may vary in how they navigate these policies, which may have important implications for employees' pay. Therefore, my sample includes a wide variety of supervisors, including two compensation specialists.

Within each occupation, I aimed to have equal numbers of male and female supervisors. Likewise, I focused on supervisors in large, bureaucratic organizations (i.e. with several thousand employees) that are similar to B2G. Moreover, I typically tried to interview multiple people from the same organization to "triangulate" supervisors' perceptions of processes and policies.

### **Recruitment**

I recruited participants through various channels between March and November 2014: In the initial stage, I recruited participants in my personal and professional networks, which resulted in one to two interviews in each occupational group. Similar to Bewley (1995), I then proceeded to snowball sampling to recruit the remainder of the sample. I relied on

snowball sampling, because “cold-contacting” managers was unsuccessful. But, with introductions from other supervisors I was able to recruit participants.

To recruit via snowball sampling, I asked participants to share my recruitment email with any other supervisors in the three occupations, who have hired or promoted employees in the past year (see Appendix C for recruitment email). These referrals usually resulted in one to three new participants (I am not sure how many people respondents contacted since I asked participants to keep the identity of contacted individuals confidential). Given the heavy reliance on snowball sampling, participants might be similar in management style and employment norms (e.g. importance of equity). As all my initial contacts were women, most of my sample was initially female. To increase the number of male supervisors in the sample, I re-contacted individuals who provided references before and explicitly asked them for referrals for male supervisors in their occupation, which balanced the sample.

Once participants responded to my recruitment email, we agreed on a time for the interview. Depending on participant’s geographic location, I conducted interviews via telephone or in-person (in meeting rooms in the building or sometimes in participants’ offices). Interviews lasted between 60 and 150 minutes, with an average duration of 90 minutes. Participants received a \$25 Amazon gift card and I audio-recorded all interviews for later transcription.

### **Data collection and Operationalization**

I conducted qualitative interviews using a semi-structured interview guide (see Appendix D for full version and Appendix E for short version). The guide consists of 5 modules: The



first module (part A) gathered background information on participants' history with their current employer and their current supervisory responsibilities. In the second and third module (part B and C), I ask participants to walk me through the steps they took to hire or promote their most recent external hire or internal hire, respectively. In all interviews, I asked about hired employees first and then about promoted employees. In the fourth module (part D), assesses how supervisors go about giving pay increases and performance evaluations if applicable. Finally, in the fifth module (part E) we delved into the comparison of hired and promoted employees, what challenges they face, and how their mode of job entry might be advantageous. I also showed the different earnings scenarios (see Appendix F) to supervisors in this section.

During the data collection phase my research focus shifted slightly: The first six interviews primarily focused on the process of hiring, promotion and subsequent merit increases (Parts A-D). As supervisor's descriptions of the mechanisms were very consistent, later interviews focused more on what happens after employees entered their job (i.e. Part E). That is, I added the different income scenarios, more detailed questions about the challenges involved with being a hired and promoted employee, and more detailed questions on performance evaluations and supervisors' notion of successful vs. less successful employees in the organization. To keep the length of the interview under two hours, I still asked participants about the hiring and promotion process but focused the probes on pay-setting and negotiation processes. Additionally, four interviewees only had one hour for the interview. For these respondents I used a shortened version of the guide that exclusively focuses on what happens to hired and promoted employees after entry, skipping parts B and C (see Appendix E). To gather basic demographic information on

respondents such as their age, race and ethnicity, highest education, marital status and age and number of children, I gave them a short “survey” before we started with the interview (see Appendix G).

### **Positionality of the researcher**

It is important to note that my position as researcher and organizational outsider might have influenced the data in unknown ways. I introduced myself as a sociology graduate student from Emory University who would like to learn what it means to add hired and promoted employees to one’s team. I mentioned that I started graduate school immediately after undergraduate studies and have not worked in a corporate environment before. I was therefore seeking people with hands-on experience of how entering a job via hire or promotion affects employees. Thus, I presented myself as outsider to the organization and the world of work (Lofland et al. 2005).

Interview questions addressed some sensitive areas such as how supervisors went about hiring or promoting employees and how they determined employees’ subsequent pay increases. Given that I portrayed myself as outsider, employees might have felt hesitant to share details or may have portrayed processes and decisions in more socially accepted ways and more “by-the-book” than they actually were. While some initial questions about confidentiality might indicate guardedness, supervisors also frequently emphasized that they participated because they have written a MA or PhD thesis before and wanted to help. Likewise, with employees who indicated they had an MBA on the demographic survey, I mentioned my previous assistance in MBA courses. This often resulted in a conversation about their MBA experience and made the interview situation more relaxed.

Thus, although I was an outsider to their workplace, we connected based on their educational attainment. Given that several supervisors gave accounts of situations in which they navigated around rigid policies and that supervisors accounts were very consistent within organizations, I believe that biases are minimal and at the least reflect official company procedure. Additionally, accounts of what constituted by-the-book procedures was very insightful, especially when comparing with supervisors from the same organization.

### **Analysis**

All audio-recordings were transcribed verbatim capturing things said by the interviewer and participant. To preserve important meaning and context to what was being said, transcripts preserved emotions such as laughter, pauses, fillers and emphasis (Hennink et al. 2011). Additionally, I de-identified any names, places or other identifying information in the transcripts to protect participants' anonymity.

In the first analysis step, I focused on summarizing information via coding the transcripts using the MaxQDA software. Codes are labels for assigning units of meaning to descriptive or inferential information compiled during my study (Miles and Huberman 1994). They are the “link to what respondents say in their interview to theoretical concepts and categories” (Weiss 1994: 154).

My analysis used a mix of deductive and inductive coding. That is, when developing an initial code list, existing research on hiring and promotion processes, and firm internal advancement informed my coding. For instance, previous research indicates

that both firm-specific experience and firm-internal social networks are important for firm internal advancement (e.g., Baldi and McBrier 1997; Carmichael 1983; Ishida et al. 2002) and thus, I had a code for “learning internal processes” and “building social networks.” While coding the transcripts, I inductively revised and added codes based on emerging themes (Lofland et al. 2005; Miles and Huberman 1994; Weiss 1994) such as “shadow of the past”. Once I coded the last interview, I re-read earlier interviews to revise and update the coding in these transcripts. I primarily conducted an issue focused analysis, meaning I looked for common themes on specific issues (e.g. criteria used for promoted employees) across all respondents (Weiss 1994).

In the second step, I focused on reconceptualizing and aggregating the data. Using analytical memos, my goal was to identify themes in the overall data. To identify larger themes, I used local integration, meaning within specific topics (e.g. challenges for external employee) I organized more detailed codes that emerged from the transcripts into larger themes and looked for commonalities in other subthemes (e.g. challenges for internal promotions, and advantages for hired/promoted employees). E.g. based on the interviews, common challenges for externally hired employees were “being heard”, “building trust” and “becoming visible” which I combined into a larger theme of “trust and perceptions” which I then linked to codes for advantages among promoted employees “know what you get” and “already has a track-record.” Using visual tools and analytical memos, I repeated this process as I re-read interviews to ensure that the transcripts reflected my representation of the themes and mechanisms.

### **Participant overview**

Table 3-6 provides an overview of all interviewees. As I tried to interview both men and women in each occupation, the 19 supervisors include 10 women and 9 men. However, all but three employees were white. The age of the participants ranged from 31 to 57, with the majority being in their 40s and early 50s. With the exception of three employees, who had a Bachelor's degree, all participants had either a Master's degree (MBA, MA) or a doctoral degree. Thus, the sample is highly educated, which was in part due to organizations requiring advanced degrees for leadership positions.

\*\*\* Table 3-6 here \*\*\*

With regard to their occupation, six participants worked in HR positions, seven in IT, five in finance and accounting, and one was in a customer care role. Participants represent different hierarchical levels such as front-line supervisors (i.e. managers or senior managers), mid-level managers (i.e. directors or senior directors) and upper-level management (i.e. assistant vice presidents and chief business officers). I did not take into account employees' hierarchical rank when recruiting employees as my recruitment criteria were already complex (male, female, in specific occupation in large organization having hired or promoted employees in the previous year). Oftentimes, I learned participants' rank and job title during the interview. Unfortunately, this resulted in an uneven distribution of ranks across the three occupational groups such that front-line managers are overrepresented among IT professionals, whereas upper-level management is overrepresented among the F&A employees (which is in part due to who my initial contact persons were in these occupations).

**CONCLUSION**

This chapter discusses my overall research design, which combines longitudinal personnel data of thousands of employees, with semi-structured interviews with 19 supervisors across different organizations. I reviewed the advantage of using personnel data, how I constructed my measures and how I analyzed the quantitative data. Similarly, I discussed sampling and recruitment of supervisors for the qualitative interviews, the interview instruments and sample characteristics. In addition, I addressed steps taken to protect the confidentiality of the data.

In Chapter 4, I use the qualitative interviews to examine how hired and promoted employees' pay is set in organizations. Using the quantitative personnel records, Chapter 5 explores how mode of job entry affects earnings of men and women at job entry and over time. Finally, I draw on both the qualitative and quantitative data in Chapter 6, to test different explanations for patterns found in Chapter 5.

## TABLES AND FIGURES

Table 3-1. Personnel data. Variable description

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<b><u>Dependent Variable</u></b>	
ln(earnings)	the natural logarithm of employees' annual full-time equivalent earnings rate from salaries and wages (excluding bonuses) in 2013 dollars
<b><u>Independent Variables</u></b>	
female	Dummy: 1 = female, 0 = male
hired	Dummy: 1=employee entered current job spell via external hire
promoted	Dummy: 1=employee entered current job spell via internal promotion
<b><u>Control Variables</u></b>	
<i>Employee Characteristics</i>	
race	Set of 4 dummies: White/ Caucasian (reference), Black/ African, Asian/ Pacific Islander, and Other (including Native Americans, employees of Hispanic ethnicity, and employees who specified Other or No Race)
highest degree	Set of 4 dummies: less than college (reference); Bachelor's; Master's; PhD
lm experience	Years of potential labor market experience (age-6 - years of education), at point of job entry
firm tenure	Years employee has worked for org, excluding employment breaks, at point of job entry
job tenure	Years in current job spell
age	8 age dummies: less than 25, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55+
generation	5 generations: born before or during WWII (reference), Baby Boomers (46-64), Early Generation X (65-73), Late Generation X (74-81), Millennials (82 and later)
exit hazards	predicted hazard rates of a voluntary quit or involuntary termination
promotion hazards	predicted hazard rates of being promoted
transfer hazards	predicted hazard rates of being transferred
performance: 4 of 5	Dummy: 1 = overall annual performance rating was 4 out of 5
performance: 5 of 5	Dummy: 1 = overall annual performance rating was 5 out of 5
performance: missing	Dummy: 1 = overall annual performance rating was missing
<i>Job and Division Characteristics</i>	
reorganization	Dummy: 1= sending departments lose at least 10% of workforce and receiving departments gain more than 10% (50% if less than 10 employees) within a quarter (3 months).
job function	13 dummies for broader occupational groups (e.g. finance, HR, IT)
pay grade	21 dummies for individual pay grades
business unit	32 dummies for each business unit
division size	annual number of employees in business unit
<i>Labor Market Characteristics</i>	
unemployment rate	annual state unemployment rate
recession	Dummy: 1= 12/2007-06/2009

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Table 3-2. Zero-order correlations

	Mean	Std. Dev.	1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)	12)	13)
1) salary in 2013 dollars	64064	24832	1												
2) female	0.7	-	-0.17	1											
3) externally hired	0.3	-	-0.05	-0.02	1										
4) internally promoted	0.3	-	-0.02	0.05	-0.49	1									
5) white	0.6	-	0.13	-0.07	-0.01	0.01	1								
6) black	0.3	-	-0.12	0.11	-0.02	0.00	-0.77	1							
7) asian	0.1	-	0.01	-0.05	0.01	0.01	-0.35	-0.17	1						
8) other race/ ethnicity	0.0	-	-0.07	-0.01	0.05	-0.02	-0.26	-0.13	-0.06	1					
9) less than bachelor	0.1	-	-0.07	-0.07	-0.08	0.02	-0.06	0.12	-0.07	-0.02	1				
10) bachelor's	0.4	-	-0.13	0.02	-0.01	0.05	0.05	-0.03	-0.05	0.02	-0.34	1			
11) master's	0.4	-	0.12	0.05	0.07	-0.06	-0.02	-0.02	0.08	0.00	-0.30	-0.69	1		
12) phd	0.1	-	0.12	-0.04	-0.01	-0.01	0.02	-0.06	0.06	0.00	-0.09	-0.21	-0.19	1	
13) labor market experience	16.8	10.01	0.30	0.04	-0.16	0.02	0.04	0.03	-0.08	-0.06	0.27	-0.03	-0.13	-0.05	1
14) firm tenure	4.4	3.79	0.14	0.03	-0.56	0.33	0.02	0.02	-0.03	-0.05	0.09	0.00	-0.07	0.02	0.29
15) job tenure	1.5	1.54	0.03	0.04	-0.01	0.04	0.00	0.01	-0.02	-0.02	0.03	-0.01	-0.01	-0.01	0.08
16) age categories	4.3	1.95	0.34	0.05	-0.15	0.01	0.04	0.02	-0.06	-0.07	0.14	-0.09	-0.03	0.05	0.96
17) generation	3.3	1.02	-0.34	-0.05	0.15	-0.02	-0.03	-0.04	0.07	0.07	-0.14	0.07	0.04	-0.04	-0.90
18) turnover hazard: exit	0.4	0.11	-0.39	0.03	0.33	-0.25	-0.04	-0.01	0.04	0.06	-0.10	0.10	-0.02	-0.03	-0.57
19) turnover hazard: promotion	0.8	0.29	-0.38	0.03	-0.07	-0.05	0.03	-0.03	-0.02	0.02	-0.14	0.06	0.04	0.00	-0.41
20) turnover hazard: transfer	1.7	0.62	0.15	-0.07	-0.19	-0.06	-0.05	0.06	0.02	-0.04	0.15	-0.03	-0.05	-0.06	0.12
21) performance: 4 of 5	0.4	-	0.01	0.02	-0.09	0.07	0.02	-0.01	-0.02	-0.01	0.00	0.03	-0.02	0.00	0.00
22) performance: 5 of 5	0.2	-	0.09	0.05	-0.10	0.13	0.06	-0.08	0.03	-0.01	-0.01	-0.03	0.03	0.01	0.02
24) performance: missing	0.1	-	-0.04	-0.01	0.28	-0.19	0.01	-0.01	0.00	0.01	-0.06	-0.01	0.04	0.02	-0.11
25) reorganization	0.2	-	0.12	-0.06	-0.38	-0.29	0.00	0.04	-0.03	-0.03	0.09	0.00	-0.05	-0.03	0.14
26) division size	2491	3192	-0.05	0.13	0.04	0.01	-0.09	0.06	0.06	0.00	-0.02	-0.01	0.04	-0.03	0.01
27) unemployment rate	8.1	2.03	0.09	-0.04	-0.05	0.00	-0.01	-0.01	0.00	0.03	0.00	-0.01	0.01	0.00	0.07
28) recession	0.2	-	-0.02	-0.01	0.00	-0.04	0.01	0.00	0.00	-0.02	0.02	0.01	-0.03	0.00	-0.02

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	14)	15)	16)	17)	18)	19)	20)	21)	22)	23)	24)	25)	26)
14) firm tenure	1												
15) job tenure	0.40	1											
16) age categories	0.33	0.21	1										
17) generation	-0.29	-0.14	-0.91	1									
18) turnover hazard: exit	-0.41	-0.22	-0.63	0.61	1								
19) turnover hazard: promotion	-0.20	-0.32	-0.47	0.33	0.25	1							
20) turnover hazard: transfer	-0.02	-0.31	0.02	-0.14	-0.16	0.31	1						
21) performance: 4 of 5	0.09	0.06	0.00	0.01	-0.06	0.00	-0.04	1					
22) performance: 5 of 5	0.14	0.11	0.04	0.00	-0.09	-0.11	-0.06	-0.38	1				
24) performance: missing	-0.31	-0.19	-0.13	0.11	0.21	0.06	-0.01	-0.27	-0.17	1			
25) reorganization	0.22	-0.02	0.12	-0.13	-0.15	0.10	0.35	0.03	-0.04	-0.10	1		
26) division size	-0.01	0.02	0.02	-0.02	0.17	-0.09	-0.08	-0.01	0.04	0.03	-0.11	1	
27) unemployment rate	0.18	0.22	0.10	0.06	-0.22	-0.19	-0.05	0.08	0.22	-0.12	0.06	-0.01	1
28) recession	-0.08	-0.09	-0.04	-0.04	0.04	0.08	0.33	-0.02	-0.03	0.01	0.06	0.01	-0.16

Table 3-3. Job spells by mode of job entry

External Hire	29% ( 2,113 )
Rehire	9% ( 620 )
Promotion	28% ( 2,003 )
Promotion w/ Transfer	4% ( 279 )
Transfer	29% ( 2,089 )
Demotion	2% ( 135 )
<b>TOTAL</b>	<b>100% ( 7,239 )</b>

Table 3-4. Job spell-years by performance evaluation

1 "Unacceptable"	0% ( 14 )
2 "Below Expectation"	1% ( 331 )
3 "Meets Expectations"	31% ( 6,976 )
4 "Exceeds Expectations"	38% ( 8,679 )
5 "Far Exceeds Expectations"	19% ( 4,309 )
Missing Rating	11% ( 2,421 )
<b>TOTAL</b>	<b>100% ( 22,730 )</b>

Table 3-5. EHA. Time to quit, termination, promotion and transfer

	Quit	Terminated	Promoted	Transferred
<b>Time Piece</b>				
0 -7 months	0.016 ***	0.001 ***	0.008 ***	0.014 ***
8 -12 months	0.036 ***	0.002 ***	0.017 ***	0.021 ***
13 - 24 months	0.039 ***	0.004 **	0.021 ***	0.020 ***
25+ months	0.045 ***	0.004 **	0.026 **	0.017 ***
<b>Gender * Job Entry</b>				
female	1.0003 ***	1.0003 ***	1.000	1.000
promoted	0.648 ***	0.678	0.944	1.162
promoted*female	1.00004 *	1.000	1.000	1.000
<b>Employee Characteristics</b>				
black	0.944	1.735 ***	0.794 ***	0.864 *
asian	1.187	0.978	0.963	0.899
other race	1.109	1.401	0.799	1.022
bachelor	1.389 *	0.819	1.514 ***	0.941
master	1.285	0.881	1.720 ***	0.958
phd	1.272	1.037	2.122 ***	1.013
LM exp. at entry	0.909 ***	1.055	0.972	0.967
LM exp. at entry 2	1.002 ***	0.998	1.000	1.000
firm tenure at entry	0.996	0.853	0.985	1.048
firm tenure at entry 2	1.031	0.890	0.986	0.997
performance: 4 of 5	0.651 ***	0.312 ***	1.490 ***	0.852 *
performance: 5 of 5	0.662 ***	0.212 ***	1.952 ***	0.785 **
performance: missing	1.362 ***	1.323	0.913	1.004
turnover hazards	yes	yes	yes	yes
age	yes	yes	yes	yes
generation	yes	yes	yes	yes
<b>Job Characteristics</b>	yes	yes	yes	yes
<b>Recession and Unemployment</b>	yes	yes	yes	yes
N (job spell-months)	156,007	156,007	156,007	156,007
N (job spells)	7,224	7,224	7,224	7,224
N (employees)	4,270	4,270	4,270	4,270
N (failure)	1,330	314	1,387	167
LL	-3,546	-1,187	-3,582	-4,599

Note: \*p<0.05, \*\*p<0.01, \*\*\* p<0.001. Errors clustered by employee, job controls include: fixed effects for pay grade, unit, job function and size of unit.

Table 3-6. Overview of supervisors

Name <sup>16</sup>	Gender	Race/ Ethnicity	Occupation	Level	Mode of Job Entry	Age	Education
Rebecca	female	white	F&A	upper	promotion	40s	MBA
Pamela	female	white	F&A	upper	promotion	50s	PhD
Lauren	female	white	F&A	mid	promotion	30s	MBA
Cole	male	white	F&A	upper	hired	40s	MBA
Jeremy	male	white	F&A	upper	promoted	40s	MA
Betty	female	white	HR	upper	promotion	50s	MBA
Donna	female	white	HR	mid	promotion	50s	PhD
Cynthia	female	white	HR	front	promoted	30s	MBA
Mark	male	white	HR	mid	hired	40s	MA
David	male	white	HR	mid	hired	40s	PhD
Emmanuel	male	Hispanic	HR	mid	hired	30s	MBA
Emily	female	white	IT	front	hired	40s	MBA
Joyce	female	black	IT	front	promoted	50s	MBA
Melissa	female	white	IT	mid	promoted	50s	J.D.
Michael	male	white	IT	front	promoted	50s	BS
Eric	male	Asian	IT	front	hired	40s	MA
Bob	male	white	IT	front	promoted	50s	BS
Jack	male	white	IT	front	promoted	30s	BS
Samantha	female	white	other	upper	promotion	50s	PhD

<sup>16</sup> Names are pseudonyms

## Chapter 4

### Embedded Uncertainty: Setting Hired and Promoted Employees' Pay

*[Developing a salary offer] is actually more flexible with external candidates than it is with internal candidates, because you don't have as much information about how they're being compensated. They disclose information to you, but you don't know if it's accurate, right? The salary negotiation process is substantially more involved with external hires than with internal hires, because internal hires – they know we know how much they're getting paid. (laughs).*

- Lauren

*I have a problem with the way [we] value employees internally because it's almost always based on your prior position, your prior pay. So whenever you entered [the employer], at whatever time, everything goes right back to that. Whereas an external person, they [the organization] don't know exactly what they're paid to begin with but they're valuing the position and putting a compensation amount to the position. Whereas with the internal hire, they're basing it off of where the person is currently paid. Well, if the person's going to do the same job that you're hiring somebody in for, then they should be compensated at that rate, not where they are.*

- Jeremy

This chapter examines how formalized work organizations determine earnings of hired and promoted employees at job entry and over time. I use 19 in-depth interviews with supervisors from several bureaucratic employers to address the following two questions:

- a) How does the pay-setting process differ for hired and promoted employees?
- b) How might differences create, reproduce or reduce disparities in outcomes?

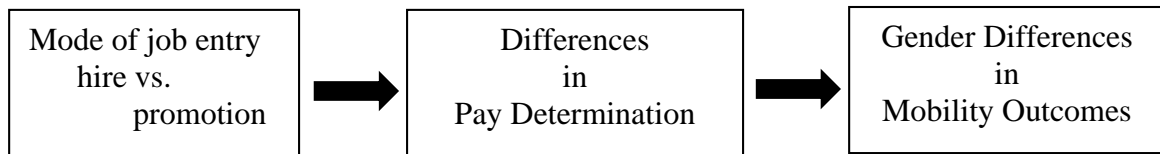
These questions explore whether and how greater uncertainty in the hiring process shapes organizational routines that assign rewards among hired and promoted employees. Hiring organizations often have less certainty about employees' true performance and future fit with the organization (Akerlof 1970; Halaby 1988). In contrast, organizations and employees can evaluate how well employees fit after job entry (Jovanovic 1979), making the promotion process less uncertain. As firms are uncertain about hired employees'

background and future performance, they may also be uncertain how much salary to offer hired employees. Candidates may reject the offer if the salary is too low, while offers too high would increase organizations' wage-bills more than "necessary." To minimize uncertainty, organizations may adopt different strategies to determine employees' pay for internal and external employees. For instance, firms may consider educational credentials (e.g., Arrow 1973; Becker 1962; Spence 1973), or average pay for similar employees in other organizations (Lazear and Oyer 2004), to approximate employees' pay. In contrast, pay for internally promoted employees may be more strongly affected by firm-internal bureaucratic rules, internal equity norms and investment in firm-specific human capital investment (e.g., Doeringer and Piore 1971).

Similarly, uncertainty in the hiring process might result in more frequent salary negotiations at job entry (than during the promotion process), as employees' pay expectation and organizations' pay may not match. In contrast, firms already know employees' current pay and performance and therefore may be less willing to negotiate pay and employees may feel less legitimated to initiate negotiations.

Given the differences in the hiring and promotion situation, pay for hired and promoted employees may therefore be set using different procedures and criteria. These differences might affect men and women differently. For instance, if processes allow for less supervisory discretion, men and women's mobility outcomes may be more similar. Additionally, some processes might exaggerate or reproduce gender disparities by "importing" inequality from other domains. For instance, gender research shows that women earn on average less (Blau and Kahn 2007). By focusing on previous pay, organizations "import" inequalities produced in the labor market into the organization. The

objective of this chapter is therefore to examine how the pay-setting process differs for hired and promoted employees and to what extent these differences create, reproduce or reduce gender disparities among hired and promoted employees.



This chapter contributes to the literature by integrating several bodies of research to develop an *organizational theory of gendered career outcomes*. I build on research that addresses pay-setting in the hiring process (e.g., Becker 1993; Katz 1986) and the pay-setting process in internal labor markets (e.g., Doeringer and Piore 1971) to compare the pay-setting process for hired and promoted employees side-by-side in a large non-unionized organization. Then, I apply Petersen and Saporta’s (2004) idea of “opportunity structure for discrimination” and examine how procedural differences may create, reproduce or reduce disparate outcomes. To do so, I draw on the discretion literature (e.g., Baron and Pfeffer 1994; Castilla 2015; Kalev et al. 2006; Ridgeway 1997; Salancik and Pfeffer 1978; Tetlock 1985) and the gendered organization (e.g., Acker 2006; Kanter 1977) to evaluate the potential effect of differences.

Therefore, I structured this chapter as follows. The following section reviews the literature on pay determination among hired and promoted employees. Then, I present how the 19 supervisors went about determining pay. In the final section, I draw on evidence in the interviews and on processes suggested in the literature to discuss how these procedural

differences may create, reproduce or reduce gender differences among hired and promoted employees.

## **BACKGROUND**

### **What criteria affect the pay of internal vs. external employees?**

Previous literature highlights several differences between external hires and internal promotions. Literature suggests that large organizations use promotions to reward and incentivize employees' effort and investment in firm-specific human capital (e.g., Wachter and Wright 1990). Thus, internal markets tend to shield internal salaries from external market shifts making them less sensitive to unemployment rates or demand increases (Baker et al. 1994; Doeringer and Piore 1971). Instead, pay determination for internally promoted employees may focus on firm-internal considerations such as seniority, collective bargaining agreements and other bureaucratic rules that serve to maintain pay differences (Althausser and Kalleberg 1981; Doeringer and Piore 1971; Lazear and Oyer 2004; Osterman 1999).

In contrast, information asymmetry is more prevalent among externally hired employees (Akerlof 1970; Bidwell 2011; Halaby 1988). This means that performance information is unavailable, or difficult and costly to assess. Consequently, organizations know less about external applicants and how well they will fit with the organization (Jovanovic 1979). Organizations may therefore draw on other information to make an informed guess on employees' salary offer. For instance, educational credentials such as a college degree might indicate a greater accumulation of human capital (Becker 1993). Moreover, credentials also signal other more subtle differences between employees such



as ability, or their access to social networks they may have accumulated or for which universities screened (Arrow 1973; Hall 2011; Spence 1973; Sullivan 2001). Analyzing career trajectories of 1,426 lawyers after the dissolution of six large law firms, Rider (2014) demonstrates that lawyers' with degrees from more prestigious schools regain employment at higher-paying employers than lawyers with less prestigious schools, which was particularly the case for lawyers with fewer years of experience.

Firms may also rely on the average pay for similar employees in the local labor market to determine an "appropriate" starting salary. In this regard, labor economics argue that market shifts affect wages of external applicants more than promoted employees (e.g., Cappelli 1999; Doeringer and Piore 1971; Katz and Murphy 1992; Lazear and Oyer 2004; Osterman 1999). This suggests that external applicant's earnings may be sensitive to changes in labor demand and supply. As supply of similar employees increases and demand decreases, starting salaries for hired employees in that occupation should decline (Katz and Murphy 1992).

Other literature suggests that similar to promoted employees, firm-internal factors also affect hired employees. For instance, vacancy competition theory posits that organizations assign rewards to positions independent of the individuals holding the position (e.g., Fioretti 2010; Rosenfeld 1992; Sørensen and Kalleberg 1981). Put differently, educational credentials only have an indirect effect on wages such that they provide access, but organizations may ultimately determine employees' earnings based on the rewards that they previously assigned to specific positions.

Additionally, firm-internal equity concerns and perceptions of fairness may affect hired employees' pay (Bewley 1995; Galuscak et al. 2012; Katz 1986; Krueger and Summers 1988; Levine 1993). That is, firms may try to reduce the perception of unfair compensation to prevent employee turnover or low morale (e.g., Bewley 1995; Bewley 1999; Levine 1993). For instance, a survey of 139 U.S. compensation specialists showed that organizations were reluctant to adjust one occupation's pay to higher market pay when this adjustment would have changed relative pay differences between similar occupations in the organization (Levine 1993). Similarly, a longitudinal study of a state pay system demonstrated that organizations reacted very slowly to market shifts for particular occupations because they were reluctant to change between-occupation pay differences.

The literature discussed above suggests that large firms may consider both internal and external factors to determine pay. In support, a survey of 15,000 European employers found that organizations considered external market factors, such as unemployment and market wage, as well as internal factors, such as equity between employees and collective bargaining agreements, for externally hired employees (Galuscak et al. 2012). *In summary, research points to a number of criteria for initial pay determination such as internal factors, external factors or employees' credentials. Instead, firm-internal considerations such bureaucratic rules and maintenance of internal pay equity may determine promoted employee's pay.* As some of this research has been conducted in unionized European countries (Galuscak et al. 2012) or in the U.S. several decades ago (e.g., Bewley 1995), this study expands the research by reexamining the question of how pay is determined for

hired and promoted employees and to what extent processes differ, within the context of several large U.S. employers.

**Differences in process and mechanisms post-entry**

Although research has focused extensively on pay criteria for hired and promoted employee, less research addressed other procedural differences between hired and promoted employees. One difference might be the frequency of pay negotiations. Arguably, negotiation might occur more frequently in the hiring process. That is, candidates' salary expectation and companies' ability to pay may diverge more among hired employees, making it more likely that employees contest pay. In this regard, O'Shea and Bush (2002) show that recent college graduates were more likely to negotiate when they perceived the offer as unfair. Promoted employees, possibly aligned their salary expectations to what the organizations tends to pay (especially when organizations publish guidelines for pay increases). Similarly, internal incumbents are less likely to have alternative offers and therefore may feel it is more risky to negotiate. In this regard Blackaby et al. (2005) demonstrated that outside offers significantly increase employees' earnings.

Hence although no direct evidence exists (to my knowledge) that shows that promoted employees are less likely to negotiate, tangential literature on negotiation suggests that promoted employees are less likely than hired employees to initiate pay negotiations before accepting a job offer. Similarly, little literature discusses how mode of job entry may affect subsequent pay increases. Hence, below I draw on the 19 interviews to examine how bureaucratic organizations set pay for hired and promoted employees at

entry and over time, before I discuss the implications of these differences in the final section.

### **USING QUALITATIVE INTERVIEWS TO EXAMINE PAY DETERMINATION**

I use 19 in-depth interviews collected between March and November of 2014 to examine how organizations set pay for hired and promoted employees' pay. Similar to previous studies that examined pay-setting processes, I focus on supervisors as they have unique insight into the pay-setting process (e.g., Bewley 1995; Kirschenman and Neckerman 1991; Moss and Tilly 1996).<sup>17</sup> Please see the Chapter 3 for more details on my methodology. Below I discuss how I assessed pay-setting mechanisms and room for bias in the interviews and how I identified important concepts (e.g. different types of resources or room for discretion in the transcripts. For more details on the sample, recruitment and methodology please see Chapter 3.

I asked supervisors to walk me through the hiring and promotion process for their most recent hire and promotion respectively, starting at when supervisors first thought about hiring or promoting an employee to when that employee entered the job (see Appendix D for interview guide).<sup>18</sup> I probed for how supervisors went about developing initial salary offers and whether candidates negotiated. If supervisors mentioned pay grades, I asked how they assigned paygrades to jobs, and how they went about developing a salary offer for their final candidates.

To assess how supervisors conduct pay increases after employees entered their job, I ask the following questions: “Next, I would like talk about what happens once employees

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<sup>17</sup> I interviewed supervisors from different occupations (HR, IT, F&A), their accounts of the pay-setting process was similar. Therefore, I will not discuss differences between occupations below.

<sup>18</sup> In all interviews, I asked about the hiring process first and the promotion process second, unless they did not hire any employees in the previous year.

enter their job and how they advance over time. Thinking back to the most recent pay increase you gave, can you tell me how you went about giving employees merit increases?” When necessary, I probed for different aspects and criteria that supervisors or the organization considered in determining pay increases.

In the analysis, I first identified themes in the responses using open coding.<sup>19</sup> I then organized codes into three larger themes emerged: Education and experience, firm-internal and firm-external factors. With regard to education and experience, I included any discussion on employees’ educational degrees (“she had a Master’s so we needed to pay her a bit more”), years of experience (“since he had more than 10 years he made more than the previous person”), specific experience (“she was an accountant for PwC for over three years”), or any discussion of HR departments looking at these factors (“HR looks at the CV and based on the type of degree and years of experience they come up with a salary”).

I identified firm-external factors by looking for supervisors’ discussion of HR compensation surveys, mentioning of “what the market is,” discussions of salary surveys published by professional organization, and references to what similar employees at competitors and previous employers made. Similarly, I looked for any mentions of (external) candidates’ salary expectations and how candidates’ current value may affect wages. This may include the perception of the market being very competitive (“you can’t afford to have a DBA on your pay role”) or not very competitive (“we hired her for cheap during the recession”).

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<sup>19</sup> I.e. I did not have a coding scheme but created codes for all the different themes that emerged.

In contrast, firm-internal factors may include a discussion of equity between similar employees (“I pay all my guys the same salary”), and the boundaries set by pay ranges (“we could not offer more because she was already at the top of her range”). Similarly, I was looking for discussions of internal policies that determine pay independent of changes in the market such as automatic pay increases with each jump.

To gauge how much discretion supervisors had over the hiring and promotion process, I probed for how much influence supervisors felt they had on different steps of pay determination. For instance, when supervisors mentioned that HR compensation professionals determined candidates’ starting salary, then I asked how binding these recommendations were and if they could tell me about an instance where they wanted to offer more. Similarly, when supervisors mentioned that the HR department assigned each job to a specific pay grade, I asked to what extent supervisors had influence on that assignment and if they ever disagreed with the classification of particular jobs. Thus, to assess whether supervisors have more discretion in the hiring or promotion process, I compare supervisors’ description of the overall process. Unfortunately, the qualitative interviews are less suited to examine to what extent existing practices and pay structures are gendered in and of themselves. However, the quantitative personnel data enables me to examine whether certain practices have gender-specific effects.

I consider supervisors to have more discretion when they discussed the lack of guidelines (“I leave it up to my managers how they want to distribute the pool”), when they could easily get around existing policy (e.g. “there is a policy, but I just have to write a letter and they’ll approve it”), when they talked about inconsistencies between departments

(“we do it this way, but I know other managers have a different philosophy”) or inconsistencies in their own decision-making (“sometimes we slow people down when they get close to the ceiling and sometimes we look around to see if there is more money – it’s a case-by-case decision”).

In contrast, I regard employees to have little discretion when they talked about policies as binding (“I can’t pay more than the max”), when other actors have “veto” rights (“ultimately HR has to approve it”), or when they unsuccessfully contested rules (“we tried to re-grade the position, but HR told us to come back when the director actually has a direct report to supervise”) or when supervisors can’t influence outcomes (“pay raise raises are handed down from the corner office to us”).

### **PAY DETERMINATION: HIRED vs. PROMOTED EMPLOYEES**

In this section, I examine how a) pay is determined for externally hired employees, b) how internal employees differ and c) how supervisors made sense of these differences.

#### **Pay determination for external hires**

Interviews suggest that organizations determine externally hired employees’ pay in four steps (see Figure 4-1). In the first step, supervisors define the position. This includes a definition of the position’s responsibilities, job title and its location in the pay structure. In the second step, supervisors fill the position and determine incumbents’ appropriate position within the pay grade. In the third step, employees may negotiate for higher pay. Finally, after job entry, subsequent earnings increases affect employees’ pay.

\*\*\* Figure 4-1 here \*\*\*

#### *Defining the position*

Consistent with vacancy competition theory (Sørensen and Kalleberg 1981), supervisors discussed needing to (re-)define their position before being able to fill it. At this point,

supervisors assessed what their greatest needs were and what responsibilities and requirements the position would entail. For instance, Rebecca<sup>20</sup> said, “I wanted to step back and really look at when we hired three years ago, we needed this type of skill set and this type of role. But, that was three years ago. What do we need today?” This illustrates how supervisors evaluate their needs. Similarly, supervisors identified necessary job requirements such as minimum educational credentials and years of experience.

Based on jobs’ responsibilities and requirements, supervisors then located the job in the organizations’ pay structure. All supervisors discussed a formalized pay structure in which HR assigns each job a pay grade. These grades typically define the minimum and maximum pay for positions in that grade. Pamela explains: “[E]ach job is graded and there is a range –it’s published on the intranet, and every job is graded. Within that grade, let’s say that the low-end is \$35,000 and the high-end is \$52,500.” Thus, by assigning a job to a pay grade, organizations assign rewards to jobs.

To determine jobs’ pay grade, all supervisors in the sample involved their HR department. HR departments seemed to assign grades to jobs based on job responsibilities and salary earned by similar employees outside of the organization. With regard to job responsibilities, Joyce explains: “[The employer] has a giant list of jobs and they’re all assigned to a pay grade. So when you decide what you need, then we work with human resources [to determine the grade].” Similarly, Samantha points to responsibilities such as supervisory and budgetary responsibilities that affect which pay grade a job is in: “[HR] looks at how much responsibility the job has, does it supervise anybody? Does it have a budget responsibility? Will it have a lot of evenings and weekends? Will it have autonomy

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<sup>20</sup> All names are pseudonyms.



in decision-making?” Additionally, Betty, Donna and Lauren explain that the HR compensation department in their organization compared newly created jobs with similar jobs in other organizations to determine how to compensate similar employees in their organization.

*In summary, before supervisors fill positions, they (re-)evaluate jobs’ responsibilities and rewards (i.e. pay grade). This process was independent of whether supervisors were going to fill the position internally or externally.*

#### *Developing a salary offer for job external candidates*

Once organizations approved job descriptions, titles and pay grades, supervisors began to recruit.<sup>21</sup> After they decided on a candidate, supervisors tended to work with the HR compensation department to determine the exact salary offer. That is, because most organizations assign wide pay ranges to each job, supervisors had to determine where in the range employees should fall.

When asked how supervisors and HR departments determine appropriate starting salaries, responses equally addressed three themes (see Table 4-1): Employees’ credentials, external market forces and firm-internal practices. Of the 11 supervisors who hired new employees<sup>22</sup> in the previous year, 5 mentioned *educational credentials and previous work experience*. For instance, Samantha explained: “[When I want to make an offer], I go to human resources and I say this is the person we want to offer, give us a salary

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<sup>21</sup> In many instances, supervisors decide before whether they had an internal candidate or if they wanted to recruit externally.

<sup>22</sup> Of the 19 supervisors, only 11 provided an example of a recent hired. Of the other respondents, 4 only promoted employees in the previous year. Additionally, I gave 4 respondents the abbreviated version of the interview (due to time constraints) which did not address the hiring and promotion process.

recommendation. So they look at that person's experience, education, the position and give us an idea of what to offer as a salary." This is consistent with previous labor market research that demonstrates that education and experience result in higher compensation (e.g., Becker 1993; Rider 2014).

\*\*\* Table 4-1 here \*\*\*

With regard to *external factors*, four supervisors discussed applicant's salary expectations and shifts in the market. When asked how she developed the initial salary offer, Betty explained: "[The applicant] was coming from a situation where he had pay and bonus and so we had to consider that in developing the offer." Similarly, Cole explained that he considered how much his previous company paid in similar jobs: "When I started here, I benchmarked against what I already paid [my direct reports at the competitor]." Similarly, Melissa expresses her frustration with temporary spikes in salaries for certain jobs: "Five years from now it's going to be incredibly difficult to hire some other thing, and so we will pay a ton of money for that. Now after five years, should that person be making that, because maybe that's not as hot a skill anymore?" These quotes illustrate, that consistent with economic theories of equilibrium wage (Katz and Murphy 1992), shifts in labor supply and demand affect how much organizations are willing to offer externally hired employees.

Consistent with survey of hiring agents in European work organizations (Galuscak et al. 2012) , vacancy competition theory (e.g., Fioretti 2010; Rosenfeld 1992; Sørensen and Kalleberg 1981), and studies on pay equity (Levine 1993), supervisors also discussed *firm-internal influences* on salary offers. Internal factors included a discussion of preexisting

pay ranges, equity and budget. Preexisting pay ranges tended to limit the effect of market shifts by imposing a pay floor and ceiling. For instance, Emily explained how pay ranges prevented supervisors from paying very high salaries for occupations in high demand:

Let's say a database architect, there was a point when those people were just untouchable. You almost couldn't afford to have them on staff. If you ran across one, the market said that person should make this salary but if you paid that person that salary, it throws the entire pay scale for the entire company out of whack, so HR won't go along with it. [Our company] has salary guidelines that they use, so you know, you have to stay within certain ranges.

Supervisors also mentioned budget constraints and paid new employee as much as the previous person, to avoid a budgetary review. For instance, Eric says, "I'm kind of limited because I know going into the interview what the maximum amount is, because it's based on the last person's salary, right? So anything above that – if I find the perfect candidate and he's \$5,000 more, I'll have to go talk to HR."

Finally, comparability with employees in similar jobs within the organization played a large role. For instance, Emily says, "We have three levels of technician here. [...] And so anybody that I brought in at that top level, I brought in at the same salary amount." These quotes exemplify different ways in which supervisors (have to) take into account firm-internal pay structures, when determining pay. This is consistent with previous studies that examine the role of equity concerns in organizations (Galuscak et al. 2012; Levine 1993).

*In summary, the interviews suggested that organizations consider three major factors to determine where to locate externally hired employees within the pay range: individual merit (i.e., education and previous work experience), external market factors (i.e., shifts in*

*labor supply and demand and market wages) and firm-internal factors (i.e., pay ranges and equity with similar employees).*

### *Negotiations*

Once supervisors made salary offers to prospective candidates, employees' position in the range changed further if candidates engaged in subsequent pay negotiation. Of the eleven supervisors who recently hired an employee, all mentioned salary negotiations. Seven supervisors negotiated with candidates and subsequently offered a higher salary (or signing bonus), while the other three either did not engage in salary negotiation or engaged but did not change salary.<sup>23</sup> Most importantly, supervisors offered unsolicited explanations when they did not negotiate with externally hired employees. This might indicate that negotiations are taken-for-granted among externally hired employees.

In summary, interviews suggest that salary negotiations are a frequent and important step in the pay determination process among externally hired employees. Most supervisors negotiated with external candidates and many changed the salary or at least offered a sign-on bonus. This suggests that employees' can contest their allocated position in the predefined pay range by contesting the offer.

### *Subsequent pay increases*

While the first three steps in the pay-setting processes describe how organizations determine salaries at job entry, employees' pay changes further with subsequent pay increases after job entry. Below I examine what organizational practices determined pay

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<sup>23</sup> Also, one supervisor could not remember whether or not they negotiated as her original salary offer was already at the maximum amount she could afford.

raises. When asked what criteria affected employees' earnings increases, three themes emerged: budget availability, performance evaluations and equity.

Of the 17 supervisors who talked about pay increases, 13 mentioned the importance of departmental *budgets*, meaning that their organization's financial performance in the previous year determined how large the "merit pool" is. For instance, Lauren illustrates how her organization determines how much funds to allocate towards salary increases: "So we do annual merit increases depending on [our] financial performance. There have been years over the last ten where we didn't do annual merit increases."

All supervisors named *performance ratings* as the central criteria for merit-increases. For example, when asked how he distributes the raise pool, David explains the formulaic process: "Just based on their [performance] review. There's a pretty cut and dry formula between the score you get on your performance review and the amount of merit increase you can get." As pay increases are often tied to performance ratings, employees with the same supervisor essentially compete against each other for the best performance rating and highest pay increases. Samantha describes the situation as very competitive:

The challenge is that you have a pool of say 4% and say you have, 18 people, everything has to equal out to 4%. So people are working against one another. You can't have too many people that are exceptional, because you can't honor them with the raise.

Along these lines, many supervisors graded their employees on a curve. For instance, Cole says: "Most people are threes [average performance rating] - five percent are fives. You know, maybe 20 percent or 15 percent are fours. It's a bell curve, at least it's supposed to be." Hence, supervisors distribute pay increases based on employees' performance rating, which they give competitively.

In addition to performance ratings, 10 (of 17) supervisors accounted *for employee's relative position in the pay range*. This means that these supervisors give relatively greater pay increases to employees who are lower in their range than equally well-performing employees higher in the range. For instance, Melissa describes boosting employees below the mid-point, while taxing employees above the mid-point: "If [you are] below the midpoint, you actually get a 0.25% or 0.5% higher than that 2%, and if it's above the midpoint, you actually get less." This illustrates how some supervisors account for employees' relative position in the range and compress the gap.

*In summary, post-entry employees' pay may change further as they receive subsequent pay increases. Organizations seemed to rely on three major criteria to determine subsequent increases: budget restrictions, performance evaluations and employees' position in the range.*

#### **Differences between hired and promoted employees**

Interviews suggest that pay determination is unaffected by mode of job entry in the first and fourth step as jobs are assigned to specific pay grades independent of whether that job is subsequently filled via external hire or internal promotion. Similarly, supervisors appear to use the same criteria (budget availability, performance ratings and position in range) to determine pay increases for previously hired and promoted employees. In contrast, pay determination varied most when organizations determine starting salaries within a predefined pay range (i.e. step 2 and step3). I describe the differences below:

*Developing a salary offer for internal incumbents*

In contrast to external hires whose pay was set relying equally on experience, internal and external factors, supervisors primarily relied on firm internal criteria to determine promoted employees' pay (see Table 4-2). The most frequently mentioned criteria was employees' current salary in their job and how many paygrades employees jumped. Of the 11 supervisors who provided an example of a recent promotion,<sup>24</sup> 7 mentioned that pay increases are a function of current earnings and the number of grades a person is moving up. Two examples below illustrate the formulaic process organizations use to determine how much internal incumbents make after their promotion. Mark says:

When you are promoted here, you get a 4% to 8% pay increase. So if someone, was a level 12 and they're – the new job they were going into was a 13, based off of [our] policy and procedure, they're going to get between 4% and 8%.

Similarly, Donna explains:

If you're being promoted internally, there is a range of an increase per pay grade that you go up. So [for recent promoted employee] it was a two pay grade jump. There's a limit as to what you can offer as a new salary based on that. I think, whatever – X percent and if you're going two pay grades up, then it's up to two times X percent and you can give less than that but you can't give more than that. It's against the policy.

These two quotes show that organizations prescribe supervisor a range in which they can increase salaries for promoted employees. This is consistent with previous literature on internal labor markets, which argues that wages in internal labor markets are determined by bureaucratic rules (Doeringer and Piore 1971), such as percentage increases per paygrade.

\*\*\*Table 4-2 here \*\*\*

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<sup>24</sup> Of the 19 supervisors, only 11 provided an example of a recent promotion. 4 respondents only hired employees in the previous year and the other 4 did the short interview.

Also in support of this literature, three supervisors mentioned taking into account internal equity concerns when determining promoted employees' starting salaries. This included giving employees with relatively lower pay a larger raise. For instance, Lauren gave a bigger promotional raise to someone because the employee was low in the previous range:

My guideline is to give an eight percent increase. [But] this individual was moving from a lower job grade to a higher job grade and – and wasn't well compensated in their previous role, and so I brought them only up to the minimum, but it was a substantial increase for the individual to more than ten percent increase for the individual.

To summarize, consistent with theories on internal labor markets (e.g., Doeringer and Piore 1971) and studies on internal equity (e.g., Bewley 1995; Levine 1993), pay for promoted employees is primarily determined by bureaucratic policies (e.g. 4% increase per jump) and internal equity concerns.

In contrast, the discussion of education, experience, and performance was noticeably absent from the determination of promoted employees' salary. Although human capital and performance were key in getting a promotion,<sup>25</sup> only two supervisors mentioned considering it for pay.<sup>26</sup> This is consistent with the idea that observable indicators of productivity such as educational credentials and external wages become less important for the wage-setting process among promoted employees as the organization learns about employees' actual productivity (Jovanovic 1979).<sup>27</sup> In support, using interviews with 139

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<sup>25</sup> Several supervisors discussed examples where they could not promote employees, because candidates did not have the necessary education, years of experience or performance history.

<sup>26</sup> The base salary (i.e. the salary before the promotion) may reflect human capital differences and performance as employees' starting salary at entry depended on their education and years of experiences. If they performed well afterwards, their base salary will be systematically higher than if they had not performed well.

<sup>27</sup> While education, years of experience and performance ratings seemed to play a lesser role in the salary determination among promoted employees, they were still necessary criteria for a promotion. For instance, certain job titles and upper level positions require a certain degree (e.g. MA or MBA) and number of years of experience. There were several instances, in which supervisors could not promote an employee either because he/she had a lower performance evaluation, because she did not have a BA.



HR professionals and hiring managers at 6 firms, Bills (1988) finds that educational credentials are more important for hiring decisions than for subsequent promotion.

### *Negotiations*

Of 11 supervisors, only 5 brought up negotiations when discussing the promotion process, compared to 11 of 11 supervisors discussing externally hired employees. Among the 5 supervisors who addressed negotiations in the promotion process, 4 did not negotiate. For instance, when asked whether promoted employees tried to negotiate their salary offer, Betty says: “Not really, nuh-uh. No.” Similarly, Jack says: “There was no negotiation. She said yes, thank you.” What was remarkable was that none of the supervisors elaborated why promoted employees did not negotiate. This was quite different from when supervisors described the hiring process, meaning they provided unsolicited explanations when they did not negotiate with hired employees. It is even more striking as supervisors did have some discretion over the magnitude of pay increases (e.g. 4-8%). For instance when asked how much increases supervisors generally give, Donna acknowledged that supervisors have some freedom to pick a percentage, especially when employees jump more than one grade:

Yeah, I think it's somewhere between 3 and 6%, I don't think you can give them less than 3 or more than 6, so you've got – you've still got some wiggle room. In this case, the most she [the promoted employee] could have gotten was a 12% increase. The least she could have gotten was a 6% increase.

Some of these differences between hired and promoted might be due to the specific gender make-up in my sample. That is, of the 11 examples of recent promotion events, 9 were female candidates and only two on male candidate. In contrast, of the 11 discussed hiring events, 5 focused on female and 6 on male external hires. This means that women were

over represented in the promotion examples (at B2G men and women enter jobs via promotion at almost equal rates). The literature suggests that women are less likely to engage in pay negotiation (e.g., Babcock and Laschever 2003; Barron 2003). Thus, more frequent discussion of negotiations in the hiring process might be due to the gender mix in the examples and not related to mode of job entry. Hired women however, were more likely to negotiate than promoted women were. Additionally, O'Shea and Bush (2002) found that employees are more likely to negotiate when they perceive offers as unfair, which may be less likely among promoted employees given that they may have aligned salary expectations already. This may suggest that salary negotiations are more common in the hiring process than in the promotion process, however future research should examine this relationship using a more representative sample.

#### **How supervisors made sense of procedural differences**

To summarize, supervisors relied very heavily on internal salary structures and bureaucratic rules to set pay for internally promoted employees, while an even mix of internal factors, external factors and employees' human capital affected earnings of externally hired employees. Consistent with theories on information asymmetry (Akerlof 1970; Halaby 1988) and matching (Jovanovic 1979), respondents suggest that organizations rely on different criteria because assessing employees' future performance and fit is more difficult for external hires. In the absence of performance and salary history, organizations draw on other information such as average market pay for similar employees and employees' observable human capital.

In contrast, supervisors can gauge existing employees' future fit as employees are already with the organization. For the same reasons, supervisors also know employees'

current compensation. For instance, Lauren explains that she cannot be sure whether external candidates report their salary accurately, while she has access to salary data for internal incumbents. When asked how she determined pay for her promoted employee, she describes pay determination for internal incumbents as more formulaic and less flexible than external pay determination. Most importantly, she identifies greater uncertainty as the reason why the external process is (or has to be) more flexible:

So [pay determination for promoted employees] is fairly formulaic. It is actually more flexible with external candidates than it is with internal candidates, because you don't have as much information about how they're being compensated. Now, they [external candidates] disclose information to you, but you don't necessarily know if it's accurate, right? And so with the internal hire, it's fairly simple to say, okay, well you're now this grade range. My guideline is to give an eight percent increase.

Jeremy also emphasizes certainty of promoted employees' pay as the main reason for relying on different criteria for promoted employees.

I have a problem with the way [the employer] values its employees internally because it's almost always based on your prior position, your prior pay. So whenever you entered [the employer], at whatever time, everything goes right back to that, because everything's based on well, what are they paid now? Whereas an external person, [the employer] doesn't know exactly what they're paid to begin with but they're valuing the position and putting a compensation amount to the position. Whereas with the internal hire, they're basing it off of where the person is currently paid.

These quotes demonstrate that uncertainty in the external hiring process has important implications for how organizations go about determining pay, as there is uncertainty regarding employees' future fit and their actual past salary.

Similarly, interviews suggested that salary negotiations may be taken-for-granted in the hiring process, while promoted employees are less likely to negotiate. As my sample consists of supervisors and not employees, I have less insight into why promoted employees did not initiate negotiations. One explanation might be that promoted

employees are less likely to have alternative job offers that they can leverage. Similarly, without alternative job offers, a negative negotiation outcome might be detrimental as it might create tension in the future or even result in the denial of the promotion. In addition to these reasons, however, the interviews highlighted that transparency of the pay-setting process for promoted employees, and supervisors' knowledge of employees' current salary might contribute to less frequent salary negotiations in the promotion process. When asked about the negotiation process, supervisors pointed explicitly to low uncertainty. For instance, Lauren discusses how uncertainty and information asymmetry in the external hiring process prompts more negotiations than among promoted employees:

The salary negotiation process is substantially more involved with external hires than with internal hires, because internal hires – they know we know how much they're getting paid. (laughs). So because they have less of an opportunity, and we have very clearly stated policies around what you are entitled to. So they know the grade. They know the range. But for external candidates, there is no information on our website indicating the salary range of any position [...] so the external salary negotiation process tends to be more involved.

Therefore less frequent negotiations among internally promoted employees might be due to less uncertainty around how much they are “entitled” to (although there is still a range). This greater transparency might result in fewer negotiations in two ways. Matching theory posits that employees and organizations learn about the “true” match quality post-entry. If the match turns out to be bad, then employees arguably quit or are terminated (Jovanovic 1979). If only employees satisfied with the salary (or without alternatives) stay, then they may be more likely to perceive pay to be fair. In this regard, O'Shea and Bush (2002) demonstrate that employees are less likely to negotiate when they perceive the pay as fair. Thus, self-selection of candidates whose salary expectations align with the organization (or who have no alternative offers) may reduce the likelihood of negotiations among promoted

employees. Alternatively, the seemingly formulaic and transparent nature of salary determination might discourage employees from initiating negotiations, as requests for higher pay are harder to legitimate when supervisors have full information on employees' current salary.

Even if employees do initiate negotiations, supervisors seemed less open to entertain negotiations in the promotion process. David's example illustrates this well. He describes a situation in which a newly promoted employee tried to negotiate for a higher starting salary, but David denied the request. David explained that he already knew how much the employee made before and that the new salary constituted a salary increase:

He [the promoted employee] tried to negotiate and I told him, I said there is no negotiation. You take it or leave it. And he quickly said oh, okay, I'll take it. I already knew what he was making in his last job and this was a raise for him from his last job, so I already knew it was a good thing.

This suggests that David's certainty regarding his employee's previous salary made him less willing to respond to the employee's demands. David knew of the salary because the employee already worked for the organization. Overall, it was remarkable that supervisors like David, Lauren and Jeremy kept coming back to certainty about pay, but did not mention other factors such as employees' bargaining power or lack thereof. This may suggest that uncertainty at least partially affects the initiation of negotiations by employees and how supervisors respond.

### **HOW PROCEDURAL DIFFERENCES AFFECT MEN AND WOMEN'S PAY**

Below I discuss how each step in the pay-setting process may create, reproduce or reduce gender disparities in outcomes. I begin by discussing the initial step in which organizations assign paygrades to jobs (step 1), then I examine the process by which supervisors

determine employees' position in the pay grade (step 2 and 3), and finally I focus on subsequent pay increases (step 4). As discussed in Chapter 2, disparate outcomes can be created, reproduced or reduced in two ways: Processes reduce ascriptive inequality when they leave less supervisory discretion or when they emphasize criteria that are more equally distributed across men and women (i.e. practices have no disparate impact in and of themselves).

### **Defining the position (Step 1)**

Organizations did not seem to leave much room for discretion when associating pay grades with jobs and many supervisors pointed to the central role of their HR department in this process. The exchange with Donna below illustrates the centrality of HR. After asking her how she assigns grades to positions, she says:

Compensation tells me (laughs). I don't make that decision, they make it. They tell me. They know what the pay grade is. I mean if it's an existing job, then it's already slotted. [...] But there was another job that was a brand new job that was being created [...] So I worked with the compensation department within HR."

Thus, supervisors appeared to have had little discretion over how jobs were graded. Few supervisors however, provided instances where they attempted to "re-grade" jobs, meaning they attempted to re-negotiate jobs' grade and titles with their HR department. This was especially the case when they felt that the existing pay range limited their ability to make competitive salary offers. Cole recalls an exchange with the HR department in which he asked HR to re-grade his positions so that he make higher salary offers.

If I have the budget and this person makes this salary now coming in, why do you care what I pay them, if I can afford it? She [HR employee] said, well, we have fixed ranges for those grades. I said, then change the grade. Well, that doesn't match the title name. I don't care! I am like, this sounds like you're letting the HR software dictate what we should do as a – as a business matter and I just was like, I'm not having this!

This illustrates that supervisors contest what rewards should be assigned to positions. It appears that in the short-run contesting job's grading was not very successful. For example, Donna asked HR to re-grade a position in her department because they were going to add a direct report under it, therefore requiring supervisory responsibilities. HR denied her request because there was no direct report yet.

Supervisors were more successful in adjusting or changing policies over the long-run by going through a longer period of contestation. Cole recounts re-grading positions in his department, which involved a change in job descriptions and organizational politics. "I mean, the [new] pay grades fit inside of a – an existing framework, but I was able to fit in my titles. I was able to work around that, but it took me literally having to write all this from scratch and having to have sort of direct – very direct phone calls." Hence, supervisors appeared to have little discretion over how HR professionals graded their jobs. Any changes to the pay grade system required substantial time, effort and resources. While the interviews did not provide any evidence that supervisors with more resources are more successful in re-grading positions, Bridges and Nelson (1989) show that predominantly male occupations had better access to organizational resources and thus were able to index their positions to the market more frequently, resulting in higher pay. This suggests that while supervisors have little immediate discretion over what pay grade is attached to jobs, structural differences between men and women's jobs could affect pay if organizational resources and access to organizational power make challenges to jobs' grading more successful.

Additionally, gender differences may arise when job descriptions vary systematically between predominantly male and female occupations. In an analyses of the job classification system for the Oregon state employment system, Acker (1989) found that predominantly female jobs had very different job descriptions that predominantly male jobs. Male jobs were described in more detail and divided into more specific job titles. In contrast, women's jobs were described more generically and jobs that did include higher-level tasks such as supervisory responsibility, budget planning or strategic decision-making were lumped together with other tasks into much broader job categories. This resulted in systematic gender differences in pay as organizations graded jobs based on the job description (as described by the supervisors in my sample as well). As women's jobs were more likely to be lumped together into more general descriptions, they were located in lower grades overall. In contrast, men doing higher-level tasks held a specialized job titles that allowed a more detailed description of their tasks. Based on these more detailed job descriptions, organizations assigned men's jobs to systematically higher pay grades than women doing similar tasks.

In summary, interviews suggested that supervisors in different organizations have little discretion over how organizations assign jobs to pay grades. This may reducing the potential for supervisory discretion. The broader literature on organizational politics and gendering of job descriptions however, suggest that gender differences in pay may still arise if occupations with more resources are more successful in "up-grading" jobs and if job descriptions for male and female jobs vary systematically with regard to their specificity.



### **Locating employees in the pay range (Step 2 and 3)**

The analyses above demonstrated that procedures for hired and promoted employees differ most when the supervisors locate candidates within pay ranges. Below I examine how procedural differences may affect men and women's employment outcomes. Table 4-3 below summarizes how procedural differences in Step 2 and 3 might result in disparate outcomes and how other organizational practices may counteract the potentially inequality-producing effect of hiring externally.

\*\*\* Table 4-3 here \*\*\*

With regard to internally promoted employees, most respondents pointed to (formal or informal) policies that prescribed by how much employees' earnings can increase. In many instances, supervisors from the same organization reported similar percentage increases (e.g., 3% per grade increase), indicating a consistent usage of these policies. In organizations with less consistent rules on pay increases, disparities may emerge at this point. This suggests that consistent enforcement of similar pay increases can prevent growing disparities.<sup>28</sup> The only inconsistency that emerged from the interviews was the degree to which supervisors accounted for promoted employees' position their range, meaning it was unclear if all employees lower in the range would receive greater increases or if it was left up to the supervisor to lift employees lower in the range.

With regard to externally hired employees, reliance on easily observable human capital characteristics such as education and years of experience, may reduce the importance of

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<sup>28</sup> However, by giving everyone the same pay increases total earnings differences between employees will increase.

other characteristics such as gender (Berger et al. 1992) – especially compared to a scenario where pay for externally hired employees was entirely up to supervisors. However, it was unclear how organizations deal with qualitative differences in employees' experiences. For instance, in analyzing patterns in lateral hiring among lawyers, (Rider and Tan 2015) find that employees in high-status firms often switch to (lower-status firms) that are able to offer atypically high compensation. Along these lines, Rebecca distinguishes clearly between accountants with “general experience” and accountants who worked for major accounting firms.

The financial analyst position here requires like six years of experience. Well, I was finding great candidates who had three years with a major, you know, firm, like KPMG, PricewaterhouseCoopers, I'm like three years with one of those firms is much more than 10 years sometimes anywhere else.

This demonstrate that qualitative differences in work experiences matter. However, in the evaluation of these qualitative differences biases may emerge. For instance, Steinpreis et al. (1999) gave 238 employees CV to see if they would hire or promote candidates. The CVs were identical with the exception of the names, which indicated either a male or female job candidate. The experiment showed that participants were more likely to perceive men's CVs as adequate for hiring and promotions than women's CV even though both CVs were identical. In a similar experiment in which Castilla and Benard (2010) gave participants simulated performance reviews which only varied in the gender of the name, participants assigned greater pay increases to male employees. This is consistent with social-psychological expectation state theory (e.g., Ridgeway 1997; Ridgeway 2011), which suggests that women are perceived to be less competent and less deserving of rewards than comparable men are (Berger et al. 1985). These experiments imply that

especially the evaluation of qualitative difference in work experience exposes hired women to different outcomes.

Similarly, by relying on average salaries in the market may reproduce and “import” gender disparities into the organization as women’s earnings are on average lower than men’s earnings (Blau and Kahn 2007). Similarly, as previously mentioned, job titles and descriptions can be gendered (Acker 1989; Bielby and Baron 1986; Tomaskovic-Devey and Skaggs 1999). As internal jobs are arguably compared to external jobs based on their job titles, organizations might reproduce and “import” disparities from the market, as predominantly female occupations are paid less (England et al. 2002).

The hiring process not only differed with regard to the criteria considered, but also in the frequency with which hired employees initiated salary negotiations. Literature demonstrates that women are on average less likely to initiate negotiations (Babcock and Laschever 2003), have lower salary expectations and ask for a lower salary than men do (Barron 2003; Belliveau 2005). Similarly, Ayres and Siegelman (1995) suggest that hiring managers may offer lower wages to women. The interviews are consistent with this literature. When looking at candidates’ gender in the examples provided by supervisors, negotiations occurred more frequently when candidates were male than when candidates were female (both among hired and promoted employees).

*In summary, literature and the interviews suggests that pay determination in the hiring process is characterized by markedly more risk for supervisory discretion than the internal promotion process. This risks stems from the different criteria organizations use to assess*

*external employees' "worth", and from the higher frequency of negotiations that introduce additional risk for gender disparities among hired employees.*

*Mitigation of risk through additional practices*

Although interviews and the literature suggest that procedural differences may result in greater gender disparities among externally hired employees, interviewees also repeatedly discussed how existing HR policies counteracted the potentially inequality-generating effect of filling a position via external hire. These examples included HR acting as third party that reviews candidate's CVs and recommends salaries centrally based on candidate's resumes without meeting the employee. Additionally, HR departments would monitor the entire process to ensure procedural fairness. For instance, Lauren emphasizes her HR department's role in reducing race and gender inequality in the hiring process.

So our HR partner verifies that the hiring process has been handled appropriately, no improprieties occurred during the hiring process, the compensation is appropriately based on where they have been, so [the employer] is not paying more than they should for a new teammate, and that there isn't any other factor that is causing the compensation to be less than it should be, such as discriminatory factors, race, gender, sexual orientation – just making sure that there isn't anything funky going on.

Similarly, Rebecca points to the importance of HR as third party that develops the salary offers:

So I basically say here's a person I want to hire, here's the job description associated with it and the grade. They [HR] look at it and they make sure they agree that the person has the experience level. And for them, it's all on paper. They don't meet the person. So it strictly is if an auditor came in and looked at this, this is what they would see. And so if something doesn't, you know, look right to them, we have to get letters to explain, here's why.

Rebecca's example demonstrates especially well that HR departments work as third party but most importantly, they increase accountability by requiring supervisors to justify their

decisions. Previous experimental research demonstrated that individuals are much less likely to make decisions based on ascriptive categories when they have to justify their decisions afterwards and when decisions are publicly associated with their name (Lerner and Tetlock 1999; Salancik and Pfeffer 1978; Tetlock and Mitchell 2009).

These transparency and accountability measures also applied to supervisors during the negotiation process, limiting supervisors' ability to respond to higher salary demands. For instance, Michael recounted "There wasn't really a lot of negotiation, I think, though there can be. I mean, but we're pretty much at the top of what we could offer at that point." In summary, the interviews suggested that organizations can minimize the effect of potentially inequality-increasing processes. Specifically, interviews suggest that HR departments limit room for bias in the hiring process by centrally developing salary recommendations, monitoring the hiring process, by enforcing existing pay structures (i.e. pay ceilings) and by asking supervisors to justify themselves if they exceed recommended offering salaries.

#### **Subsequent pay increases (Step 4)**

Below I examine how procedures for subsequent pay raises may affect men and women's earnings increases. Interviews suggest that organizations rely on three criteria to determine subsequent salary increases: budget availability, employees' performance ratings and their position in the range. Generally, supervisors seemed to apply these criteria somewhat inconsistently. These inconsistencies however, seemed primarily related to differences in units or occupations and job entry mode.

### *Budget*

Supervisors within the same organization varied in how binding their merit-pool was, as some departments appeared to have access to additional budget resources. For instance, Cole describes how his budget allows him to exceed the recommended merit pool.

I have never hit that number [ merit pool]. I'm not blowing it away at five percent. I want to say – I think one year it was – it was recommended two percent, I was two point seven five and nobody cared. [But] we have extra funds that come in for project funds and things like that [...] I can use some of that for spot bonuses or performance bonuses

If women and minorities are more concentrated in peripheral positions in the organizations with less access to resources (Collins 1996; Kanter 1977) then this would result in systematically greater pay increases for men.

### *Performance Evaluations*

With regard to performance ratings, great variation existed in how accountable supervisors were for their performance ratings and how ratings translated into merit-increases. Some units held supervisors accountable, by having “calibration meetings” in which supervisors had to show how they rated their employees. For instance, Donna needed to provide a justification for each employee that received the highest performance rating. “[I]f you’re going to give [employees] a 5 in particular, you better come with here’s my justification for my 5 rating because then the senior leadership of HR, VP and our associate VPs get together and they look at all the ratings across.” Thus, some organizations hold supervisors accountable for their ratings.

At the same time, several respondents discussed other supervisors or departments in their organization, which seemed to “game the system”. The following exchange with Donna illustrates this perceived inconsistency:

P: [Performance ratings of 5] are more usual than they should be, but I think this is why. They’re not as prevalent in HR than they are in some areas of the organization that will remain unnamed (laughs).

I: So it varies by department?

P: Yeah. Every business unit does its own thing basically, so some units will have calibration ratings and do that. Other ones, you know, we heard where some people don’t get performance reviews. Well, they – they had to have a number in the system or they can’t get a raise, so somebody put a number in there. [W]hat happens a lot of times is then people game the performance management system.

I: They game it?

P: Oh yeah, so they’ll – the manager might give, you know, all their people 5s so they can get the best raise they can get, because they know if they don’t, they’re not going to get much of a raise.

This exchange shows how supervisors might circumvent existing performance systems and alter the performance evaluations to change the rewards employees receive. It also illustrates that performance management systems may be enforced differently, even within the same organization, holding some supervisors more accountable for their ratings than others. Expectation state theory (e.g., Ridgeway 2011) and research on accountability (e.g., Salancik and Pfeffer 1978; Tetlock 1985) suggest that with accountability measures, employees’ ascriptive characteristics correlate less with performance evaluations.

Even if supervisors conduct performance evaluations consistently, organizations and supervisors varied in how performance evaluations translated into increases. Some but not all, supervisors indicated that their unit gave the same percentage increase for a specific performance. For instance, Mark describes how his units collected all performance ratings and then distributed pay increases so that the average raise would match the merit-pool:

Once we have given the person the performance rating, then every year within – within the entity where I work, we come up with an entity-wide pay plan that assess

a merit increase for whichever level of performance you achieve. So everybody that achieves a level five is going to get the same merit increase so that we have salary equity within the organization.

This illustrates that some departments assign salary increases centrally based on performance ratings. Especially front-line supervisors like Emily may have little discretion over pay increases. “Well, ultimately, the amount of a raise that anybody’s going to get usually comes from a corner office, okay, because the CEO, the – someone at the top level is going to decide what the increase amounts will be on any given year, okay?”

In contrast, other supervisors reported that it was up to them to divide the pool among their employees. When asked what administrative steps she has to go through to give raises, Samantha says:

You get the money from the Chief Financial Officer, this is what you have and our VP doesn’t have prior – doesn’t do prior approval of them [merit raises]. He lets you decide what you’re going to do [...] and I do the same. I don’t know, I don’t ask [the supervisors in my unit] who they’re giving what to. I trust that they’re going to do the right thing.

Thus, some organizations link performance ratings to pay increases centrally resulting in similar raises for employees with the same rating. In contrast, other supervisors can decide themselves how to distribute merit-increases. These inconsistencies may be a major source of gender disparities over time. For instance, using personnel records of a large organization, Castilla (2008) demonstrated that inconsistent application of performance ratings to merit increases resulted in substantial earnings disparities among employees with the same performance rating. Once the organization introduced transparency and accountability measures that held supervisors accountable for their rating and how supervisors applied them to merit-increases, race and gender earnings disparities disappeared (Castilla 2015). Hence, organizational changes can greatly reduce differences in outcomes.



*Accounting for employees' position within the range*

Some but not all supervisors also account for employees' relative position in their range. Similar to the performance evaluations, organizations can be inconsistent in whether they consider employees' position in the range when giving merit raises. The following exchange with Betty is an example of these inconsistencies.

I: Do most people take into account the – where employees are relative to the midpoint?

P: No.

I: No?

P: In fact, some people – some unit – we ask them to take it into – we – because we set the guidelines, right? [But] people just have different philosophies about this. You know, my philosophy is if you're above midpoint, you're already paid very competitively, so it should be fine. Other people, they cannot – they do not see it that way. They want everybody to get an increase, doesn't matter how much they make, if they worked really hard this year, they should get the increase and so on. So it's just kind of different philosophies.

This indicates that while pay increases may alter employees' relative position in the pay range, units apply policies inconsistently. Given that social-psychological research demonstrates that men are often perceived as more deserving of rewards (Berger et al. 1985), an inconsistent application of this policy might result in greater earnings increases for men compared to women, similarly low in the range.

In summary, it appears that while supervisors rely on the same criteria (budget, performance, position in range) for hired and promoted employees, they vary a lot in whether and how they use these criteria to determine pay raises overall. This may enable supervisors to (unconsciously) bias pay increases. Consequently, independent of job entry mode I would expect inequality to arise gradually as gender biases in pay increases accumulate over time.

## CONCLUSION

### Key Findings

To understand how job entry modes affect career outcome, this chapter focused on the pay-setting process. I use 19 interviews with supervisors from several bureaucratic organizations to examine how formalized organizations determine pay at entry and over time: Specifically I address two questions:

- a) How does the pay-setting process differ for externally hired and internally promoted employees?
- b) How might differences create or reduce disparities in outcomes?

Supervisors identified four steps in the pay-setting process: First, supervisors (re-)define vacancy's responsibilities and requirements. Based on these requirements, HR assigns jobs to pay grades. Pay grades determines a job's minimum and maximum pay. Second, supervisors fill the position and determine incumbents' appropriate position within the predefined pay grade. In the third step, promoted or hired employees may contest their location in the range and negotiate for higher pay. After job entry, employees' location in the pay range might change further when they receive merit-increases in the fourth step.

Table 4-4 summarizes a) how pay determination differs by job entry mode and 2) to what extent these differences create, reproduce or reduce disparities. Pay-setting processes between hired and promoted employees differ most when organizations locate employees within predefined pay ranges (i.e. step 2 and 3). Consistent with the literature, hiring managers have less information about candidates when hiring externally (Akerlof 1970; Bidwell 2011; Halaby 1988). To reduce uncertainty, different criteria determine pay for hired and promoted employees. Consistent with early literature on firm-internal labor markets (e.g., Doeringer and Piore 1971), pay for internally promoted employees is almost

exclusively determined by firm-internal policies and equity concerns.<sup>29</sup> In contrast, organizations consider employees' education and experience, firm-external market factors as well as firm-internal structures (e.g. equity, pay ceilings) when developing salary offers for external hires. My findings speak to research that emphasizes the importance of credentials (e.g., Arrow 1973; Becker 1993; Rider 2014; Spence 1973), shifts in labor supply and demand (e.g., Lazear and Oyer 2004) and firm-internal factors (Bewley 1999; Levine 1993; Sørensen and Kalleberg 1981). Hence, interviews suggest that these three factors equally affect pay of external employees, while internal employees are only affected by internal factors.

\*\*\* Table 4-4 here \*\*\*

Moreover, hired and promoted employees appear to differ in whether they negotiate salary offers. Interviews suggest that salary negotiations may be taken-for-granted in the hiring process, while they are less frequent among promoted employees. Several respondents suggested that certainty regarding internally promoted employees' previous pay inhibits further negotiation. *Thus, interviews suggest that uncertainty becomes embedded in organizational practices as organizations develop organizational routines that cope with greater uncertainty in the hiring process.*

These systematic differences in the pay-setting process might then lead to systematic differences in outcomes. For instance, the evaluation of employees' skill and experiences can be subject to interpretation and therefore disparate outcomes. Similarly, relying on market forces such as employees' previous earnings can potentially introduce or maintain existing gaps as women earn on average less (Blau and Kahn 2007). Similarly,

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<sup>29</sup> E.g., they receive a 3% increase for each grade they climbed

determining pay based on external salary surveys can lead to biased salary offers as job titles and job descriptions can be gendered (e.g., Acker 1989; Bielby and Baron 1986; Tomaskovic-Devey and Skaggs 1999). Finally, pay negotiations can lead to greater gender disparities due to gender differences in candidates' negotiation behavior and how it is perceived by hiring managers (e.g., Babcock and Laschever 2003; Barron 2003). *This suggests that differences in pay-setting practices create systematically more room for potential supervisory discretion and possible bias among hired employees than among internally promoted employees.* This is similar to what Petersen and Saporta (2004) find. They argue that opportunities for differential treatment are more prevalent in the hiring process than in the promotion process because discrimination is more difficult to demonstrate in the hiring process. Based on the interviews data, I extend this argument and demonstrate that the pay-setting process itself leaves more room for potential disparities regardless of whether rejected employees are more likely to sue. That is, differences in organizational routines to set pay under high uncertainty in the hiring process may introduce greater gender differences in starting salaries due to potential supervisor bias and existing gender gaps in market wages.

However, I also find that organizations had several practices in place to minimize supervisory discretion in the hiring process. Supervisors described measures that provided transparency and accountability, possibly mitigating greater disparities among hired employees at job entry. Therefore, it is unclear whether gender disparities in starting salaries are greater among hired employee or whether disparities are equally wide among hired and promoted employees.

Most importantly, the interviews suggest subsequent pay increases were less standardized than the initial pay-setting process. Hence, counter to Petersen and Saporta (2004) disparities may (re-)emerge post-entry as supervisors have relatively more discretion over pay increases. That is, while supervisors rely on the same criteria (budget, performance, position in range) for hired and promoted employees, supervisors varied in whether and how they use these criteria. These inconsistencies may create gender disparities in pay raises and subsequent earnings growth. Consequently, gender disparities among hired and promoted employees may (re-)emerge gradually after job entry, when supervisors have more discretion.

In summary, this chapter extends the literature primarily by revisiting, combining, and extending different bodies of literature in the setting of large, bureaucratic organizations. To my knowledge, this is the first study that explicitly compares pay-setting processes for hired and promoted employees, since the earlier work on firm-internal labor markets (e.g., Doeringer and Piore 1971; Lazear and Oyer 2004). Most importantly, in-depth interviews enabled me to assess how supervisors navigate organizational policies and how much room for discretion supervisors had. I use this information as well as the literature on gendered organizations (e.g., Acker 2006; Burriss 1996; Ferguson 1984; Kanter 1977) and literature on discretion and inequality (e.g., Baron and Pfeffer 1994; Bielby 2000; Castilla 2015; Kalev et al. 2006; Tetlock 1985) to assess how differences in pay-setting processes may affect gender pay differences among hired and promoted employees. By combining these bodies of literature, I begin to develop an organizational theory of gendered mobility outcomes that highlights the role of organizations in shaping men and women's mobility outcomes.

This argues that above and beyond individual differences between men and women, gender differences in mobility outcomes might be wider or narrower depending on how organizations set pay and how much these procedures exaggerate or counter existing gender differences in other domains.

### **Testable Implications, Limitations and Future Research**

In the following chapter (chapter 5), I test the implications of these findings. That is, given that men tend to benefit more from employer changes than equivalent women, I will test to what extent greater gender earnings disparities among externally hired employees exist at job entry and to what extent they emerge over time after job entry. To do so, I will utilize the longitudinal personnel data from a large U.S. employer. In addition, to this test, several additional hypothesis arise that can be tested either with the existing data or that can be explored with additional data in future research. Hypotheses testable with the current data:

1. Respondents suggest that promoted employees' pay is primarily a function of their current earnings and the number of paygrades that they climb. As supervisors discussed having some room in how much to give, the room should become greater the more grades an employee jumps. For example, if employees get a 3-6% increase for moving up a single grade, then moving up two grades would imply a 6-12% increase, which would double the room for discretion. If greater room for discretion results in earnings disparities then earnings disparities would be greater among employees who climbed multiple grades with one promotion.
2. Interviewees regularly discussed the effect of budget constraints in determining salary offers and subsequent pay increases. In that regard budget constrains might

work in concert with other equalizing policies and compress salary differences. This would imply that ascriptive differences at entry and over time are greater when more resources are available for salary and benefits.

Three additional research questions arise from the interviews that I cannot address with the current data: First, if gender gaps at job entry are wider among externally hired employees than among promoted employees, then it remains unclear what is contributing to that gap. How much of these differences are due to variation in salary offers made by the organization (i.e. step 2) and how much difference arises due to gendered behavior in the negotiation process (i.e. step 3)? Hiring data that include information on the initial offer made (e.g. via a copy of the first offer letter) and the final salary after negotiation, might help to distinguish between the importance of these steps.<sup>30</sup> Such data might reveal that initial salary offers do not vary by gender (e.g. because of formulaic pay-setting approach), but that disparities are introduced during the negotiation process or vice versa.

Second, the interviews emphasized the role of organizational “interventions” which appeared to mitigate the potentially greater biases introduced in the hiring process. As these practices appear to be stable across the organization and over time, it is impossible to judge their true effectiveness. This means it remains unclear whether implementation of these practices in all organizations would reduce biases in the hiring process everywhere. To understand how biases in the hiring process can be limited, I would need to draw on one of the three possible designs detailed below.

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<sup>30</sup> Although several supervisors mentioned doing the salary negotiation *before* they send the official offer letter.

Finally, while interviews showed very clearly how processes differ between hired and promoted employees, they provided limited information on how these differences affect employees. Put differently, given the current structure of my interview guides, interviews did not provide direct evidence on whether reliance on specific criteria (i.e. human capital, market-factors, firm-internal factors) would affect the potential for bias. Overall, several theoretical and empirical studies discuss differences in pay-setting criteria for internal vs. external job mobility (e.g., Doeringer and Piore 1971; Galuscak et al. 2012; Lazear and Oyer 2004; Levine 1993), and how they may explain higher starting salaries for external hires vs. internal promotion (Bidwell 2011; Bidwell and Mollick 2014). However, to my knowledge, less work exists that examines how these criteria (or their application) systematically create or reduce earnings disparities among different demographic groups. As this research would not only need detailed information on employees but also on organizational practices, the dearth of research is likely due to the lack of data (or access to it). In many cases, biases emerge unconsciously and despite better intentions of organizations and the actors within. However, organizations are a key in understanding how changing career patterns affect employment outcomes and future research needs to investigate these questions.

Future research could take several approaches to establish more clearly how the usage of different criteria enables or limits systematic biases in the pay-setting process. First, additional **qualitative research** with supervisors and compensation professionals in different organizations would provide broader insights into pay-setting processes and their



potential outcomes (for a qualitative study that linked practices in the workplace to inequality see: Williams et al. 2012). Interviews would focus on a) what criteria different organizations use and b) how exactly these criteria are applied (e.g. do they count years of experience based on resumes and how do they go about evaluating qualitative differences in work experience), and c) how much room for interpretation these criteria leave. Criteria would leave room for bias if supervisors and/or compensation specialists would discuss vague, inconsistently applied guidelines and/ or the need to make case-by-case decisions.

Second, two types of **quantitative organizational data** would further help to examine how different organizational practices create or limit income disparities. A *quasi-experimental case-study*, in which I would follow an organization over time as it changes some of its practices. I would use quantitative data to assess before-and-after differences (for an example of an organizational study in which employment practices changed see: Castilla 2015). Such a quasi-experiment might be improved even further if changes are applied (randomly) in some departments or units but not in others. If these departments are similar on important characteristics, then they can provide a meaningful comparison category and rule out the possibility that changes in employment outcomes are due to other, third factors such as economic developments.

Additionally, *comparisons across organizations* might also give insights into how certain practices create or limit bias, although causal inferences would be limited in a cross-sectional design. While gaining access to employment data from multiple organizations would be extremely challenging, it might be possible to take advantage of linked employer-employee data (LEED), that is becoming available in North America and several European

countries. These data provide information on employees and basic information on their employers. If these employers can be identified, it may be possible to supplement linked employer-employee data with surveys of a subset of organizations. These surveys would primarily assess more detailed information on organizations' pay-setting process (for an example of combining public data with individual surveys see: Kalev et al. 2006).

Finally, as access to field sites and compensation professionals is difficult, the effect of organizational policies can also be simulated in **experimental studies** (e.g. Castilla and Benard 2010; Dovidio and Gaertner 2000; Lerner and Tetlock 1999). Experiments would simulate and manipulate pay-setting situations that resemble those found in organizations. While their external validity may be limited, especially compared to quasi-experimental organizational research, they would be well suited to establish causal relationships

TABLES AND FIGURES

Figure 4-1. Setting hired and promoted employees' pay.

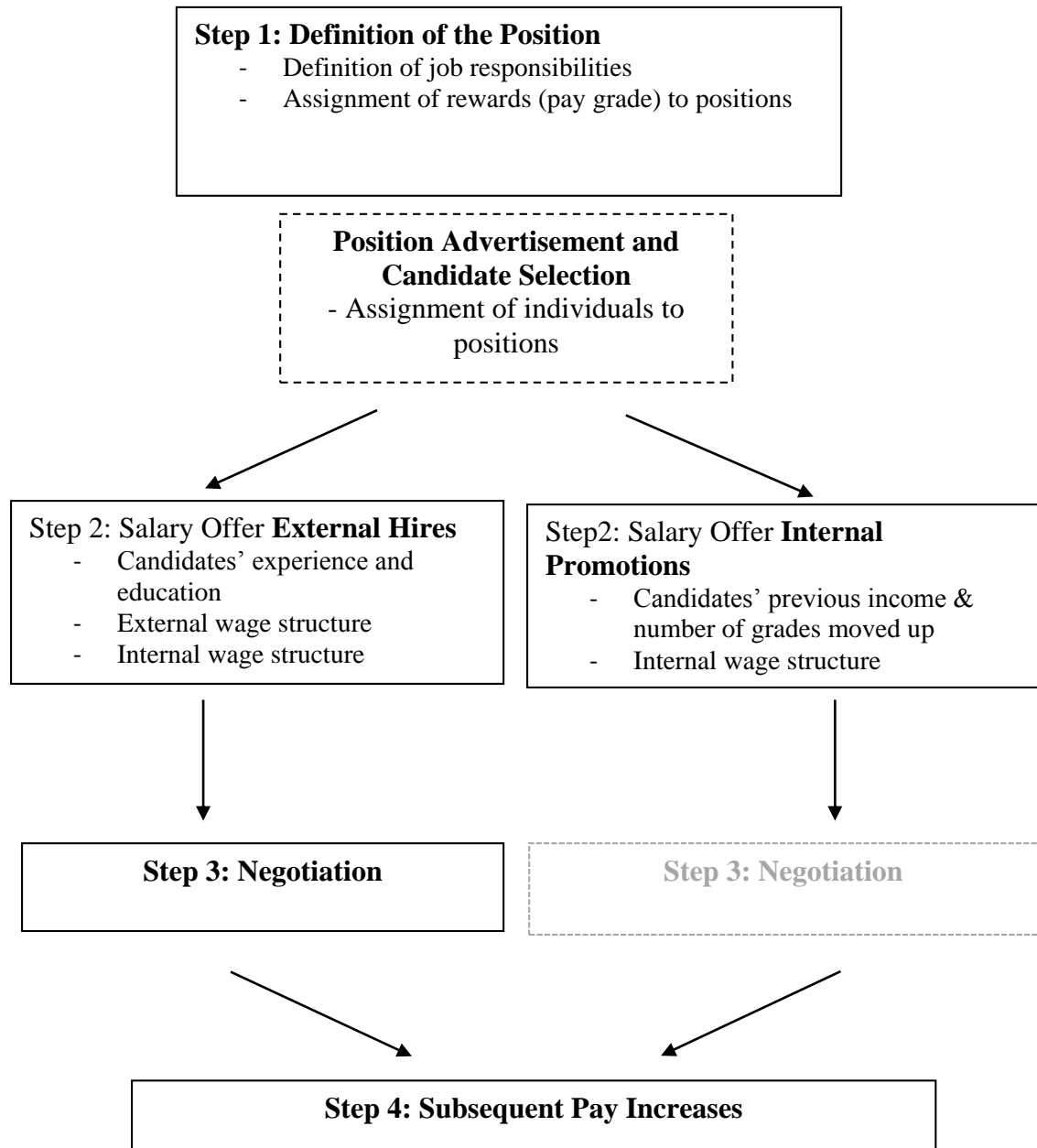


Table 4-1. Criteria for salary offers: External hires

<b>Theme</b>	<b># of supervisors who mentioned</b>
Employees' education and experience	5
Internal wage structure (equity, policies)	4
External wage structure (previous salary or salary survey)	4
Total # of supervisors who provided examples of hired employees	<b>11</b>

Note: Of the 19 supervisors, only 11 provided an example of a recent hired. Of the other respondents, 4 only promoted employees in the previous year. I gave the other 4 respondents the abbreviated version of the interview (due to time constraints) which did not address the hiring and promotion process.

Table 4-2. Criteria for salary offers: Hired vs promoted employees

<b>Theme</b>	<b># of supervisors who mentioned</b>	
	<b>hired</b>	<b>promoted</b>
Employees' education and experience	5	2
Internal Wage Structure & Practices	4	10
External Wage Structure	4	1
Total # of supervisors who provided examples of promoted employees	<b>11</b>	<b>11</b>

Note: For promoted employees, I included mention of previous salary and number of jumps in the internal category, as pay increases were determined by bureaucratic rules. For hired employees I included salary expectations in the external category, because the wage has been set by a different employer.

Of the 19 supervisors, only 11 provided an example of a recent promotion. Of the other respondents, 4 only hired employees in the previous year and the other 4 did the short interview.

Table 4-3. Salary offer: Opportunities for disparities and HR interventions

<b>Internal Promotions</b>		<b>External Hires</b>	
Potential Bias	HR intervention	Potential Bias	HR Intervention
<p><b>Bureaucratic Rules</b></p> <p>- <i>inconsistency</i>: range of accepted raise percentages</p> <p>- <i>inconsistency</i>: taking into account employees' position in range</p>	<p><i>Transparency</i>: Publication of pay ranges for each grade and rule for increases</p> <p><i>Accountability</i>: Justification if raise is above or below regular increase</p>	<p><b>Human Capital</b></p> <p>- <i>Inconsistency</i>: Whether/ how to account for qualitative differences between employees</p> <p><b>Market Factors</b></p> <p>- <i>systematic gender differences</i>: in salary histories</p> <p>- <i>systematic gender differences</i>: in market wages</p> <p><b>Negotiations</b></p> <p>- Systematic gender differences in negotiation behavior of candidates and hiring managers</p>	<p><i>Transparency</i> impersonal evaluation of qualifications</p> <p>formula for how education and years of work experience counts towards earnings</p> <p><i>Accountability</i> Request justification when supervisors deviate from recommended salary &amp; salaries outside of the range need approval</p>

Table 4-4. Pay setting. Procedural differences and opportunity for disparities

	Criteria and Process		Room for Gender Disparities?	
	Externally Hired	Internally promoted	Externally Hired	Internally promoted
<b>Step 1:</b> Assigning <u>Pay Grade</u> to Position	<b>Grade depends on:</b> Job prerequisites and responsibilities		<b>Low</b> HR assigns pay grades centrally  Potential For Disparities: - Gendered job description - Systematic differences of who contests grading & succeeds	
<b>Step 2:</b> Developing <u>Salary Offers</u> ⇒ Location in pay range	<b>Position in Range depends on:</b> Firm-internal criteria + Human capital + firm-external criteria	<b>Position in Range depends on:</b> Firm-internal criteria	<b>Medium</b>	<b>Low</b>
			<b>Human Capital</b> - <i>Inconsistency</i> : Whether/ how to account for qualitative differences in HC?  <b>Market Factors</b> - comparability of jobs - systematic gender differences in salary histories & market wages  <b>HR Intervention</b> <i>Transparency</i> - impersonal evaluation of qualifications - formula for how education and experience affects earnings <i>Accountability</i> Request justification when supervisors deviate from recommended salary & salaries outside of the range need approval	<b>Firm-Internal Criteria</b> - <i>inconsistency</i> : range of accepted raise percentages - <i>inconsistency</i> : taking into account employees' position in range  - room for bias increases with magnitude of jump  <b>HR intervention</b> <i>Transparency</i> : Publication of pay ranges for each grade <i>Accountability</i> : Request justification if raise is above/ below regular increase

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	Criteria and Process		Room for Bias?	
	Externally Hired	Internally Promoted	Externally Hired	Internally Promoted
<b>Step 3:</b> <u>Salary Negotiation</u> ⇒ Location in pay range	Frequent negotiations	Few negotiation	<b>Medium</b> Bias: Systematic gender differences in candidates' negotiation behavior and how behavior is received by manager  <b>HR intervention:</b> Need approval to go above recommended starting salary	<b>Low</b> Fewer opportunity for additional gender bias
<b>Step 4:</b> <u>Subsequent Pay Increases</u> ⇒ Location in pay range	<b>Magnitude of Pay Increase depends on</b> Budget + Performance Evaluations + Position in Range		<b>High</b> Inconsistencies in how criteria are applied:  <b>Budget:</b> - Variability in budget availability - Merit-pool, guideline or absolute limit  <b>Performance</b> - Implementation of performance reviews => variable accountability - Usage of performance reviews: supervisory discretion vs. central determination of raises based on distribution of performance reviews  <b>Position in range:</b> - Variability in whether supervisors account for employees' position in range	

## **Chapter 5**

### **Modes of Job Entry and Gender Earnings Disparities.**

How entering a job via hire or promotion affects gender earnings differences.

In the previous chapter, I used in-depth interviews to examine how bureaucratic organizations determine pay of hired and promoted employees. I found that organizational procedures especially diverged between hired and promoted employees when organizations set the initial starting salary. At the same time, organizations also went to great length to prevent disparities and had several policies in place to reduce supervisory discretion over starting salaries. In contrast, supervisors had more discretion when setting subsequent pay increases. As pay-setting and room for supervisory discretion varies between hired and promoted employees at entry and over time, it is unclear if such differences would affect employees' earnings.

Hence, the objective of this chapter is to examine the association between job entry mode and earnings among men and women. I use B2G's longitudinal personnel records between 2005 and 2013 to examine gender disparities in starting salaries and subsequent pay increases *given a particularly job entry mode* (i.e., job entry via hire or promotion). For this purpose, I build and extend previous research that suggests that inter-organizational mobility is associated with greater earnings among men but not women (Brett and Stroh 1997; Dreher and Cox 2000; Dreher et al. 2011; Kronberg 2013; Lam and Dreher 2004). This research left two questions unanswered, which I address here. First, what role do organizational settings play in our understanding of gendered mobility outcomes? Second, what happens to hired and promoted employees *after* job entry?



Depending on when gaps emerge and how they develop after job entry, organizations may play fundamentally different roles in our understanding of gendered mobility outcomes. For instance, Petersen and Saporta (2004) suggest that the “opportunity for discrimination” is greatest at the point of hire because there is more uncertainty and it is more difficult to detect discrimination. Using longitudinal personnel records from a large employer, they found that gender disparities were widest among newly hired employees.

Most importantly, Petersen and Saporta (2004) demonstrate that earnings differences between men and women gradually declined after job entry, suggesting that organizational practices may reduce inequality that may have been imported or generated at the point of hire. In contrast, literature on gendered organizational practices (e.g., Acker 2006; Burris 1996; Ferguson 1984; Kanter 1977; Williams et al. 2012), and literature that emphasizes the inequality-producing effect of supervisory discretion (e.g., Baron and Pfeffer 1994; Bielby 2000; Castilla 2015; Kalev et al. 2006; Salancik and Pfeffer 1978; Tetlock 1985) have highlighted different ways in which inequality among men and women is maintained or exaggerated in organizations. Hence, gender disparities may widen further among externally hired employees.

In this regard, the qualitative interview data discussed in the previous chapter revealed that supervisors have more discretion over employees’ merit-increases than over their initial earnings differences. Research on implicit biases and discretion suggest that supervisory discretion can result in gender earnings disparities (e.g., Dovidio and Gaertner 2000; Kalev et al. 2006; Salancik and Pfeffer 1978; Tetlock 1985) as women are perceived to be less competent and deserving of rewards than men are (e.g., Berger et al. 1985; Ridgeway 1997; Ridgeway 2011). Castilla (2008) for instance, found that supervisory

discretion over merit-increases resulted in smaller earnings increases for women than for equally well-performing men. It is possible that gender disparities are even more pronounced among hired employees, as employees are still building a record of accomplishment. In the absence of other information, gender beliefs may move to the forefront in daily interactions and evaluation processes (e.g., Berger et al. 1992; Ridgeway 1997; Ridgeway 2011) and result in a gradual widening of gender disparities among externally hired employees.

Hence, counter to Petersen and Saporta (2004) other research suggests that greater disparities among externally hired employees are likely a combination of disparities at job entry and gradually changing disparities post-entry. *By determining a) whether gender disparities are already greater among hired than promoted employees at job entry and b) whether these differences increase or decrease post-entry, we can begin to identify mechanisms that translate job entry mode into disparities at different points in time.*

Unfortunately, existing studies are less suited to disaggregate disparities into entry and post-entry differences. That is, previous studies relied on retrospective surveys which assessed employees' earnings and how many times respondents changed employers in the past three years (Brett and Stroh 1997), past ten years (Dreher and Cox 2000; Lam and Dreher 2004), since their first job (Dreher et al. 2011) or since age 30 (Valcour and Tolbert 2003). Hence, there may be several years between the mobility event and current earnings.<sup>31</sup> Even when using panel data (e.g., Fuller 2008; Kronberg 2013), biannual data collection and missing data (especially among mobile respondents) make it difficult to assess earnings at entry and over time. Given the substantial lag between mobility events

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<sup>31</sup> In some cases, mobility events might be up to 10 years ago and it is possible that employees already obtained subsequent promotions before their income was measured.

and later earnings measurement, our understanding of when exactly this gap emerges and what mechanisms contribute to the overall gap are incomplete.

To my knowledge, this is the first study that addresses this gap in the literature. Given the focus on organizations, this study shifts away from asking whether intra- or inter-organizational mobility result in greater earnings growth between the current and previous job. Instead, I focus on gender disparities in starting salaries and subsequent pay increases *given a particular mode of job entry*. I therefore built on similar studies that examined how organizations shape employment outcomes of hired and promoted employees in general (e.g., Acosta 2010; Bidwell 2011; Chan 2006) and discuss how modes of job entry have different implications for men and women in the workplace.

Similar to previous studies of organizational processes and mobility outcomes (e.g., Acosta 2010; Bidwell 2011; Chan 2006) I use personnel records from a large U.S. employer (“BetterTogether” or “B2G”)<sup>32</sup> 2005-2013 with thousands of employees. I find that despite the extraordinary measures B2G takes to standardize pay, men’s starting salaries are higher than women’s starting salaries. Counter to Petersen and Saporta (2004) however, gender differences in starting salary are equally wide among externally hired and internally promoted employees. Over time, gender differences widen among externally hired employees, while they remain constant among internally promoted employees.

Additional analyses show that neither selective attrition nor less frequent pay increases among hired women account for slower earnings growth among hired women compared to hired men. Instead, gender differences emerge because externally hired women receive smaller pay increases than externally hired men in similar jobs, while pay

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<sup>32</sup> Pseudonym to protect confidentiality.

raises among promoted employees do not vary by gender. Thus, controlling for employee characteristics, turnover odds, and job characteristics, gender disparities arise among hired but not promoted employees after job entry. As the personnel data include little pre-hire data, emerging disparities may result from pre-hire differences in men and women's characteristics that no longer exist among promoted employees. Similarly, differences may result from noisy experience measures and lacking controls for parental and marital status, all of which are important factors contributing to gender earnings differences (e.g., Becker 1993; Budig and England 2001; Hodges and Budig 2010).

Employee characteristics however, arguably affect earnings growth via enabling employees to perform better (e.g. more experience increases earnings because employees perform better). As performance controls only explain a portion of hired women's slower earnings growth, organizational (e.g., Acker 2006; Kanter 1977) and socio-psychological research (e.g., Lerner and Tetlock 1999; Ridgeway 2011; Salancik and Pfeffer 1978) suggests that different organizational practices might expose hired women to more supervisor discretion than hired men.

This study contributes to the literature in several ways: By bringing an organizational perspective to the research on job mobility and gendered career outcomes, I not only extend current career research but also our understanding of how gender disparities come about in an era of more frequent inter-organizational mobility. Moreover, by examining what happens to employees *after* they enter a job, I take a long(er)-term perspective and extend the existing mobility research, which mostly focuses on how employees get into firm-internal or –external jobs and how much their earnings change because of these transitions.

My findings suggest that mode of job entry or pre-hire differences continue to effect employees' earnings after job entry, which is an important difference that gets lost when only focusing on starting salaries, or when looking at salary several years after entry.

Finally, I also extend existing mobility research by focusing on the comparison between externally hired and internally promoted employees. Most of the previous studies on gender differences in job mobility compare individuals who changed employers with individuals who stayed (Brett and Stroh 1997; Dreher and Cox 2000; Dreher et al. 2011; Kronberg 2013; Lam and Dreher 2004; except see Bidwell 2011 and Valcour and Tolbert 2003). Employees who stay with their company however, might differ dramatically, meaning that some employees stay in the same job while others experience substantial firm-internal mobility. Thus, it is unclear how the effect of entering a job via hire will compare to entering a job via promotion. As employees can build careers by moving between or within organizations, this study significantly refines previous mobility research and explicitly compares the effect of entering a job via hire or promotion.<sup>33</sup>

I structure the current chapter as follows. In the next section, I review existing research regarding gender disparities among hired and promoted employees at entry and how these disparities may develop post-entry. Then I briefly discuss how I use longitudinal personnel data to assess the predictions made by the literature. In the results section, I first present descriptive statistics on who enters a job via hire and promotion. Then I examine how mode of job entry affects gender differences in starting salaries before I examine how

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<sup>33</sup> I focus on internal promotions as internal move because transfers imply no change in income and demotions occur too seldom to allow a separate analysis. Bidwell (2011) however demonstrates that these intra-organizational moves affect career outcomes differently. I merely control for whether a promotion co-occurred with a transfer and whether a promotion co-occurred with a reorganization of the sending or receiving department. Future research should examine how these modes (e.g. transfers) translate into career outcomes among men and women, which is beyond the scope of this study.

entering a job via hire or promotion affects subsequent earnings growth. In the discussion, I summarize my findings, and discuss important limitations and potential for future research.

### **BACKGROUND: MODE OF JOB ENTRY AND GENDER EARNINGS INEQUALITY**

Several studies suggest that men and women do not benefit equally when switching employers. For instance, Brett and Stroh (1997) surveyed 1,000 managers from 20 Fortune 500 companies to examine how past mobility affected managers' pay. They found that men who changed firms between 1989 and 1991 at least once earned significantly more than men who stayed with the same firm. Their study also demonstrated that earnings of female managers were unaffected by previous mobility, even when controlling for whether turnover was voluntary or involuntary.

Using repeated surveys with over 3,000 professionals in large US and Hong Kong corporations, Lam and Dreher (2004) came to the same conclusion. Men who frequently changed employers between 1991 and 1999 also reported higher cash compensation in 1999 than men who were less mobile during that time.<sup>34</sup> Again, no significant earnings differences existed between female stayers and leavers.

Dreher and Cox (2000) and Dreher et al. (2011) expanded this research and examined the intersection between race and gender with 1,000 MBA graduates from nine business schools and with 600 managers recruited from a high-end executive search firm. Results showed that changing employers at least once since graduation was associated with

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<sup>34</sup> The authors asked how many times employees have switched employers between 1991 and 1999. Next, they categorized respondents above the median count as leaver and respondents below the median as stayers.

higher earnings only among white men, whereas differences between stayers and leavers did not reach statistical significance among women and black managers.

This research suggests that inter-organizational job mobility is associated with higher earnings among (white) men, but not women. Contrary to these findings, Valcour and Tolbert (2003) found negative effects of inter-organizational mobility based on a survey of 2000 professionals who lived in dual-career partnerships. Contrary to previous studies, professionals with more frequent inter-organizational mobility earned less than those who changed employers less frequently, regardless of gender. Later, Fuller's (2008) analyses of panel data from the National Longitudinal Study of Youth demonstrated that too frequent employer changes, especially in later stages of an employee's career, were associated with decreasing earnings. This may explain the negative effect found by Valcour and Tolbert (2003), as they counted all employer changes since age 30.

While most of the previous studies were cross-sectional, I found support for their key finding using longitudinal data from the Panel Study of Income Dynamics. These data showed that men gained more when switching employers than women did, particularly among professional and managerial employees (i.e. "good jobs"). Gender differences in returns to inter-organizational mobility have increased among male and female involuntary leavers since the 1990s. In contrast, gender differences among voluntary leavers narrowed since the 1970s (Kronberg 2013).

Although several already explored the association between gender and job entry mode, they have left two questions unanswered. First, what are the mechanisms by which different modes of job entry translate into gendered mobility outcomes? Second, what happens to

hired and promoted employees after they enter their job? With regard to the first question, research on gender barriers in the hiring process suggests that female leavers earn less because of gender differences in social networks (e.g., Ibarra 1992; McDonald et al. 2009), gender differences in human capital (e.g., Becker 1993; Mincer and Polachek 1974; Troske and Voicu 2013), or gender differences in negotiation behavior (Babcock and Laschever 2003; Barron 2003). Scholars however, have paid less attention to the role of organizational practices in creating the gendered effect of entering a job via hire or promotion. As organizations assign rewards to employees in positions (Sørensen and Kalleberg 1981), much social and economic inequality is arguably created or reduced in the workplace (Acker 2006). Hence, organizational practices may be key in understanding how modes of job entry translate into gender disparities.

In this regard, Petersen and Saporta (2004) argue that there is more discrimination in the external hiring process because hiring decisions are less transparent and thus managers have more discretion when hiring than when promoting an employee. Hence, pay differences in starting salaries may be greater among hired employees than among promoted employees. Most importantly, their study suggests that initial gender differences decrease post-hire, causing the initial gender gap to disappear after several years in the organization. This is consistent with economic models of learning (e.g., Jovanovic 1979) and socio-psychological research on perceptions and integration of new information (e.g., Berger et al. 1992). Both of these theories argue that as organizations, supervisors and coworkers learn more about employees' true performance; other more diffuse characteristics (e.g., gender) will become less important. Thus, organizations may adjust



pay to employees' actual performance, closing the gap between equally well performing men and women.

In contrast, other research suggests that gendered organizational practices (Acker 2006; Kanter 1977) and/or supervisory discretion and implicit biases (Kalev et al. 2006; Ridgeway 1997; Williams et al. 2012) may contribute to gender earnings differences post-entry, particularly among externally hired employees who just entered the organization. Hence, greater gender earnings differences may actually emerge or widen post-entry. This debate, which I will discuss in more detail in the section below, suggests that organizational context and practices matter, especially post-entry. In this regard, it is unclear to what extent greater gender disparities among hired employees already exist at job entry and to what extent they widen or narrow afterwards. As these different possibilities imply very different organizational roles in the production and reduction of gendered career outcomes, it is important that we understand when gaps emerge and how they develop post-entry.

Unfortunately, existing studies are less suited to determine how organizations affect gender disparities among hired and promoted employees at job entry and thereafter. That is, previous studies relied on retrospective surveys which assessed employees' current earnings and how many times respondents changed employers in the past three years (Brett and Stroh 1997), past ten years (Dreher and Cox 2000; Lam and Dreher 2004), since their first job (Dreher et al. 2011) or since age 30 (Valcour and Tolbert 2003). Hence, there may be several years between the mobility event and current earnings. Even when using panel data (e.g., Fuller 2008; Kronberg 2013), biannual data collection and missing data (especially among mobile respondents) are less suited to assess earnings at the point of job entry and thereafter. Given the substantial lag between mobility events and current

earnings, our understanding of when this gap emerges and what mechanisms contribute to the overall gap are incomplete.

The present study addresses this gap in the literature. Using longitudinal personnel records of a large U.S. employer, I test for four possible scenarios describing how job entry modes may affect gender disparities at entry and over time. Figure 5-1 below illustrates the different scenarios. Based on Petersen and Saporta (2004), the “Reducing Inequality” scenario (A) shows a situation in which gender disparities are greater among hired than among promoted employees at entry, e.g., because the opportunity for discrimination is greater at the point of hire. Post-entry however, different organizational practices, such as giving greater pay increases to those lower in the earnings distribution, may reduce initial inequality post-entry.

In contrast, the “Maintaining Inequality” scenario (B) shows a situation in which the gender gap is also greater among hired employees than promoted employees at job entry are. After entry, however disparities may remain the same. Such a scenario would indicate that inequality primarily arises during the initial pay-setting process and that organizational practices maintain that gap afterwards without amplifying them (e.g., by giving across-the-board pay increases).

\*\*\* Figure 5-1 here \*\*\*

The “Emerging Inequality” scenario (C) illustrates the other extreme, in which the gender gap is equally wide among hired and promoted employee at entry, but then gender disparities emerge gradually after job entry among hired employees, resulting in the larger overall gap among hired employees. In this scenario, EEO regulation and formalization of the hiring processes might limit the introduction of biases in the hiring process, but then

other post-entry mechanisms cause inequality to emerge quickly among externally hired employees.

Finally, the “Exaggerating Inequality” scenario (D), is a mix of the “Emerging” and “Maintaining scenario, meaning that some earnings differences exist at job entry and then widen further over time. The more Scenario D resembles the “Maintaining Inequality” scenario however; the more influential are processes during the initial matching and pay-setting process. Likewise, if Scenario D moves closer to the “Emerging Inequality” scenario, the more influential are post-entry factors during the pay raise process.

Although all of these scenarios would result in greater aggregate gender disparities among hired employees, they imply fundamentally different roles for organizations in shaping gendered outcomes of job mobility. Thus, below I discuss mechanisms that may affect disparities in starting salaries and subsequent pay increases given a particular mode of job entry in more detail.

### **Gender Disparities in Starting Salaries At Job Entry**

Gender disparities in starting salaries might be greater among hired employees than among promoted employees because the hiring process is more ambiguous. Because firms know less about external employees, uncertainty tends to be greater when firms hire externally than when promoting internally (e.g., Akerlof 1970; Bidwell 2011; Halaby 1988). Once employees enter the organization however, they built a performance record and it will become more clear how well employees fit the organization (e.g, Jovanovic 1979). This implies that uncertainty regarding employees’ fit will be lower in the promotion process.

Greater uncertainty in hiring situations creates “opportunity for discrimination” (Petersen and Saporta 2004). As discussed in the previous chapter, several experimental studies found that decision-makers discriminated more when applicants’ information was insufficient and the relative quality of applicants was ambiguous (Dovidio and Gaertner 2000; Hodson et al. 2002; Pugh and Wahrman 1983). Similarly, the lack of accountability in managerial decision-making increases ascriptive inequality (e.g., Kalev et al. 2006; Tetlock 1985; Tetlock and Mitchell 2009). As the hiring process is more uncertain, ascriptive characteristics such as employees’ gender should matter more in the hiring process than the promotion process. Because status characteristics such as gender are associated with lower competency and reward expectations for women (Berger et al. 1985; Ridgeway 2011), women should be disadvantaged in the hiring process and receive lower starting salaries.

Gender biases may not only affect decision makers but also applicants’ behaviour. For instance, gender differences in negotiation behaviour are a potential source of gender pay differences (Babcock and Laschever 2003). Due to gendered norms of interpersonal behavior and sex-segregated social networks, women tend to ask for lower starting salaries and negotiate less assertively than men do, resulting in lower starting wages (Barron 2003; Belliveau 2005). Most importantly, gender differences in negotiation behavior vary greatly depending on situational uncertainty. Using a survey of MBA graduates and a lab experiment, Bowles et al. (2005) demonstrate that gender disparities in negotiation outcomes disappeared when the bargaining range and appropriate standards for agreement were clearer. This implies that gender differences in negotiation are smaller in the promotion process because internal incumbents may be aware of appropriate salary ranges

and negotiation standards. Additionally, the previous chapter suggested that negotiations might occur less frequently in the initial pay-setting process among promoted employees further reducing the room for bias among internal incumbents.

Firms and applicants might also try to reduce uncertainty by soliciting information about each other through social networks. Thus, employees with broader social networks might be advantaged when switching employers as they are able to bridge “structural holes” (Burt 1992), i.e. access information about positions they would have otherwise no access to (Brodt 1994). Information from social contacts often improve the odds of being hired and positively affect salary negotiations (e.g., Fernandez et al. 2000; Granovetter 1983). For example, Rider (2014) analyses mobility outcomes for 1426 lawyers affected by law firm dissolutions and found that laid-off lawyers were more likely to regain employment in organizations employing more former class mates.

The importance of social capital might disadvantage women, as women have different kinds of networks (McPherson et al. 2001). For instance, in a study of gender differences among 73 professionals in an advertising agency, Ibarra (1992) shows that men are more likely to connect to other men, whereas women build same-sex networks for friendship and social support, whereas they draw on opposite-sex networks for instrumental support. Moreover, using data from the General Social Survey, Moore (1990) found that women have more ties to kin, whereas men had more ties to coworkers, even when controlling for employment, family and age. Due to these gender differences, men appear to get greater returns from social networks (Ibarra 1992). Moreover, even when controlling for network differences, a nationally representative survey showed that women

were less likely to receive job leads from their networks than men were (McDonald et al. 2009).

To summarize, the literature suggests that greater uncertainty in the hiring process, gender differences in social networks and negotiation behavior particularly affect starting salaries of externally hired employees. Consequently, I expect greater gender disparities in starting salaries among externally hired employees than among promoted employees, as suggested by the “Maintaining”, “Exaggerating” and “Reducing” Inequality scenarios (A, B and D)

*H1: At job entry, the gender gap is greater among hired employees than among promoted employees in the same position.*

### **Gender Disparities in Pay Increases Over Time**

As aforementioned, research has paid less attention to organizational processes affecting career outcomes among men and women given a particular job entry mode. Ostensibly, the problem of uncertainty persists after the point of job entry. While career advancement within large organizations is often determined by organizational rules and bureaucratic criteria such as seniority (e.g., Doeringer and Piore 1971; Lazear and Oyer 2004), it takes time to learn how to navigate the complexities of official and unofficial rules (Kaplow 1995). One of the greatest advantages of promoted employees is arguably greater familiarity with organizational culture and decision makers. Although promoted employees still need to demonstrate their fit in the new position, they might already have a reputation and past performance records that colleagues and supervisors draw upon.

In the absence of institutional knowledge and social capital, the immediate supervisor may become critical for the career development of externally hired employees. Supervisors affect their subordinate's advancement in a number of ways: They take a central role in conducting performance evaluations, assign highly visible projects and provide important mentoring on how to navigate formal and informal workplace policies (e.g., Castilla 2008; Castilla 2011; Epstein 1981; Scandura 1992; Williams et al. 2012). As women tend to have weaker ties to (male) supervisors (Kanter 1977; McPherson et al. 2001), they might advance slower when entering a job as external hire. In this regard, Williams et al. (2012) found that the reliance on supervisors in designing employees' career paths resulted in slower firm-internal advancement of women in that organization.

Moreover, the previous chapter revealed that supervisors have substantial discretion over employees' merit-increases. Castilla (2008) found that supervisory discretion over merit-increases could result in smaller earnings increases for women than for equally well performing men. It is possible that gender biases are even more pronounced among hired employees. That is, in the absence of information about externally hired employees, salient status characteristics such as gender might affect interactions with team members, resulting in male hires being perceived as more competent and deserving of rewards than female hires (Berger et al. 1985; Ridgeway 1997). Arguably the salience of employees' gender would decrease over time as other task-specific information (i.e. employee performance) reduces the impact of gender as a general status category (Berger et al. 1992). Put differently, gender biases should have a stronger effect on salary increases of externally hired employees than internally promoted employees should.

In summary, previous work on inequality in organizations suggests that greater uncertainty about externally hired employees should persist after entry, as hired employees are new to the organization. As illustrated in the “Emerging” and “Exaggerating” inequality scenario, gender differences may therefore widen quicker among externally hired employees after job entry.

*H2a: Over time, gender wage differences widen more among externally hired employees relative to internally promoted employees.*

Other literature suggests that organizations sometimes act to prevent greater earnings differences among employees, especially within the same occupation (e.g., Levine 1993). In support of this research, the interviews in the previous chapter indicated that supervisors might account for employees’ relative position in the pay distribution. By giving employees lower in the range greater pay increases, organizations may gradually reduce initial differences.

*H2b: Over time, gender wage differences narrow more among externally hired employees relative to internally promoted employees.*

## **PERSONNEL DATA AND GENDERED EFFECT OF JOB ENTRY MODE**

To examine gender disparities in starting salaries and subsequent pay increases given a particular job entry mode, I use B2G’s longitudinal personnel records 2005-2013. For further detail on data, measures and analytic strategy please see Chapter 3. In an ideal research design, I would randomly assign men and women (coming from the same jobs) to



enter the same new job either via external hire or via internal promotion, and follow them over time to examine the effect of entering a job via hire and promotion. While such randomization is neither ethical nor feasible, detailed longitudinal observations are the next best option. This detailed longitudinal data enables me to assess gender disparities at entry and over time. By focusing on how gender disparities in starting salaries and subsequent pay increases depend on job entry mode, I identify one of the different inequality scenarios outlined above.

My key outcome is the annual, full-time equivalent income from wages and salaries (excluding bonuses) in 2013 dollars. Full-time equivalent earnings are the income an employee would earn after one year of full-time employment in that position. These earnings rates are independent of actual weeks and hours worked in that position. To make earnings comparable across years, I use 2013 dollars. This implies that earnings will only grow when pay increases exceed annual inflation. Real earnings remain stable when pay increases match inflation rates and real earnings will decrease when inflation exceeds pay increases.

## **FINDINGS**

Below I review the results from the longitudinal personnel. For a better overview, I first present descriptive statistics and discuss differences between hired and promoted employees. Then I examine gender differences in starting salaries and whether they vary between hired and promoted employees (Hypothesis 1). Next, I focus on what happens after job entry and whether men and women's average earnings growth depends on job entry mode (Hypothesis 2a and 2b). Finally, differences in earnings growth can emerge because of differential selection of employees over time, disparities in how frequently

employees receive pay increases and/ or because some employees receive greater raises than others do. To arbitrate between these possibilities, I examine how gender and mode of job entry affect selective turnover, timing of raises and magnitude of raises.

### **Descriptive Analyses: Who enters a job via hire or promotion?**

My first set of analyses look at who enters jobs via hire and promotion, and how men and women differ given a particular entry mode. This provides a look into whether men and women select differently into being hired or promoted. For instance, if hired women have less education than hired men, while promoted men and women do not differ, then we would expect a greater wage gap among hired employees. If the gender wage gap was solely determined by human capital, then controlling for education and other human capital characteristics would account for all gender differences.

Table 5-1 examines job entry mode by gender. Men and women are equally likely to enter a job via external hire, as 31% of all men and 29% women entered their jobs via external hire, which is a non-significant difference. Similarly, men and women are equally likely to enter as rehired employee.<sup>35</sup> In contrast, women are more likely to enter a job via promotion than men, as 33% of all women enter their job via internal promotion (with or without transferring between departments) compared to 28% of men. Instead, men are more likely to transfer between jobs than women are. Men are in part more likely to transfer because they are overrepresented in the IT department, which underwent reorganization between 2005 and 2013, resulting in many transfers from old to new departments. In all analyses, I control for whether sending or receiving departments underwent a

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<sup>35</sup> Some of B2G's services are seasonal. Thus, some employees are hired and rehired as regular employees during peak season. Similarly, when employees transition from temporary to regular status they are often rehired. As B2G employs these employees only for short periods, I do not include them in the group of external hires in the analyses below and the next chapter.

reorganization that year.<sup>36</sup> Moreover, as promotions with transfers occur less frequently, I combine simple promotions and promotions with transfers into one group in the analyses. As it is beyond the scope of this dissertation to discuss how transfers and demotions affect employees, I focus on differences between hired and promoted employees in the presentation and discussion of the findings below.<sup>37</sup>

\*\*\*Table 5-1 here \*\*\*

Table 5-2 examines differences among employees who enter a job via hire or promotion. As in Table 5-1, I restrict the sample to the year in which employees entered their job and ran a logistic regression, which assessed whether individuals entered a job via external hire (0) or internal promotion (1). The results suggest that fewer employees enter via internal promotion during recessions and that employees who entered via internal promotion are more likely to have a graduate degree, more years of experience, higher performance and are younger. Interestingly, the non-significant gender coefficient in Model 1 indicates that after controlling for job and employee characteristics, women are no longer more likely to enter a job via promotion than men are.

\*\*\* Table 5-2 \*\*\*

Additionally, Table 5-2 shows the analyses separately by gender. Comparing Model 2 and 3 reveals that the recession affects men more negatively than women. Moreover, promoted and hired men do not differ with regard to their education and labor market experience, whereas promoted women are significantly more likely to have a PhD and have more years of labor market experience than externally hired women. Given the significant effect of

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<sup>36</sup> See Chapter 3 for details.

<sup>37</sup> All models include entry via transfer and rehire (vs. hire) – the effects are just not presented in the tables below to focus the discussion on hired vs. promoted employees.

education among women but not among men indicates that differences in experience and education are greater among female hires and promotions than among hired and promoted men. Table 5-3 confirms that hired and promoted men are similar with regard to their background. In contrast, externally hired women have significantly fewer years of work experience at job entry than promoted women. Moreover, Table 5-2 and 5-3 show that despite differences in employees' backgrounds, men and women receive similar performance ratings, regardless of job entry mode.

\*\*\* Table 5-3 \*\*\*

### **Earnings Differences at Job Entry**

This section focuses on gender earnings differences at entry and whether disparities depend on job entry mode (Hypothesis 1). Figure 5-2 shows the unadjusted gender income gap<sup>38</sup> among all employees by mode of job entry. The unadjusted gender gap among all employees is 11.5%. As men earn on average \$68,585/year, a gap of 11.6% means that women earn on average \$8,723/year less than their male counterparts do. When looking at the unadjusted gender gap by job entry, Figure 5-2 suggests that the gap is slightly greater among hired employees than among promoted employees. These differences fail to reach statistical significance, however ( $p=0.48$ ). Arguably, occupational earnings differences mask most of the gender differences between hired and promoted employees. As men are more likely to work in higher-paid, technical and managerial jobs, the unadjusted gaps primarily reflect gender differences in job characteristics. A more informative comparison would be gender differences among similar employees in similar jobs. Although the de-

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<sup>38</sup> Average gap in men and women's earnings, not accounting for gender differences in individual, job or labor market characteristics.

identified personnel records did not include job titles, they do include employees' job function, unit and most importantly their detailed pay grade. This allows me to compare employees in similar positions.

\*\*\* Figure 5-2 here \*\*\*

To compare men and women in similar jobs, Table 5-4 shows the estimates from the multiple regressions in which I hold constant employee, job and market characteristics. I restrict the sample to when employees enter their new job internally or externally, to compare starting salaries. As the same employees can have multiple jobs over time, I use a HLM with two levels to account for the nested nature of the data (see Chapter 3 for a detailed explanation). The outcome variable is the natural log of full-time equivalent earnings from salary and wages in 2013 dollars (excluding bonuses). Model 1 shows the raw gender gap with only the labor market controls. In Model 2 and Model 3, I add employee and job characteristics respectively, before controlling for the mode of job entry in Model 4. In Model 5, I include an interaction effect between mode of job entry and gender to assess whether the gender gap is greater among externally hired than internally promoted employees.

\*\*\* Table 5-4 here \*\*\*

For ease of interpretation, Figure 5-3 demonstrates how controlling for employee characteristics, job characteristics and job entry mode reduces the relative gender gap.<sup>39</sup>

The first column shows the gender gap only adjusted for market characteristics at 10.8%,

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<sup>39</sup> I predict the gap based on estimates in Models 1-4 in Table 5. I calculated average gender gap using the following formula:  $(\text{Earn}_{(M)} - \text{Earn}_{(F)}) / \text{Earn}_{(M)}$ . I predict adjusted earnings for white employees, with a bachelor, 17 years of labor market experience, 4 years of firm tenure, 35-40 years old, a performance rating of 4, with an average of 2,500 employees in the business unit, unemployment rate of 7.7 percent. I also hold the business unit, pay grade and job function constant. All values reflect sample averages.

meaning that women earn on average 10.8% less than men do. After holding constant employee characteristics such as human capital, performance and turnover odds in Model 2, the gender gap narrows to 9.4%. Thus, adding employee characteristics reduces the gender gap by 13%. Consistent with literature showing that gender disparities mostly result from occupational segregation and between-job differences (e.g., Leuze and Strauss 2009; Reskin 1993), Model 3 reveals that controlling for job function, pay grade, and business unit narrows unexplained disparities more drastically (by 85%). Taking into account job characteristics reduces the gender gap to about 1.4%.<sup>40</sup> This difference may be due differential treatment, noisy human capital measures<sup>41</sup> or omitted variables (e.g. parental status, marital status, unobserved human capital differences, exact job title) that would affect earnings.

\*\*\* Figure 5-3 here \*\*\*

Adding the effect of job entry mode in Model 4 shows that promoted employees start at a lower salary than comparable hired employees do in similar jobs (Model 4,  $b = -0.034$ ). That is, at job entry, internally promoted employees earn approximately 1.7% (or \$1,166/year) less than external hires in the same job. Moreover, Model 4 (and the right-most column in Figure 5-3) shows that controlling for mode of job entry does *not* reduce the gender gap further. This means that the way by which men and women enter their job does not account for the unexplained gender gap. This is mostly due to men and women entering jobs at similar rates at B2G.

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<sup>40</sup> Meaning that women earn on average \$987 less per year than their male counterparts in similar jobs

<sup>41</sup> As I do not have employees' actual years of labor market experience prior to their employment at B2G, I calculate their years of experience by subtracting their years of education (based on highest degree) from their approximate age (provided in 5-year brackets). This measure is very noisy in general and arguably systematically overestimates women's work experience if they are more likely to have interrupted careers.

Finally, Model 5 in Table 5-4 examines whether gender earnings disparities in starting salaries are greater among externally hired or internally promoted employees. Hypothesis 1 predicted that gender-specific factors in the pay-setting process, particularly among hired employees, gender disparities at job entry are greater among externally hired employees than among internally promoted employees. The results in Model 5 *fail to support Hypothesis 1*, as the interaction effect between gender and job entry mode does not reach conventional levels of significance. *This means that at job entry, the gender gap is equally wide among hired and promoted employees and that mode of job entry does not moderate gender earnings differences at entry.* This contradicts the findings of Petersen and Saporta (2004) and eliminates the “Reducing,” “Maintaining” and “Exaggerating” scenarios (A,B,D) discussed above. As interviewees in the previous chapter repeatedly discussed the importance of organizational practices that limit supervisory discretion in the initial pay-setting process, these practices may prevent greater disparities among hired employees found in a previous study (Petersen and Saporta 2004).

### **Earnings Differences Post-Entry**

Below I shift from earnings differences at job entry to what happens *after* employees enter their job via hire or promotion. It is unclear how earnings disparities develop post-entry. While Petersen and Saporta (2004) found narrowing gender disparities, other literature on gendered structures and supervisory discretion suggests that disparities may widen post-entry. To distinguish between these predictions, Table 5-5 shows the results from a HLM model that includes employees’ earnings at entry and over time. Similar to Table 5-4, Table 5-5 shows the effect of gender and job entry mode on salary at job entry (e.g. female,

promoted, female\*promoted). However, to gauge how earnings differences develop after job entry, I interact gender and mode of job entry with job tenure. The interaction term “tenure\*female” in Models 1-4 indicates how women’s average earnings grow compared to men’s earning. Likewise, the interaction term “tenure\*promoted” in Model 4 assesses how earnings of promoted employees develop relative to externally hired employees over time. To gauge whether gender disparities widen faster among externally hired employees than among internally promoted employees, I add a three-way interaction term “tenure\*female\*promoted” in Model 5. Moreover, as both pay grade and performance rating were criteria frequently discussed in the interviews, Model 6 is the full model without the fixed-effects for pay grades. Similarly, Model 7 is the full model without the performance controls. Again, the dependent variable is the inflation-adjusted, full-time equivalent, annual income from salary and wages. As I use constant 2013 dollars, all earnings increases reflect increases in real earnings beyond annual cost-of-living adjustments.

\*\*\* Table 5-5 here\*\*\*

Table 5-5 replicates the findings from Table 5-4 and shows that the unexplained gender gap at job entry is initially quite wide, but that individual and job characteristics explain most gender disparities in starting salaries. With regard to post-entry earnings growth, the non-significant interaction between gender and tenure (tenure\*female) in Models 1-4 suggest that men’s and women’s pay grows at similar rates. Gender differences in earnings trajectories only emerge after separating hired and promoted employees in Model 5, which I will discuss after addressing the effect of entering a job via hire or promotion below. Additionally, a comparison of Model 5 and Model 6 shows that gender differences are



significantly wider when not controlling for pay increases (M5  $b=-0.027$  vs. M6  $b= -0.77$ ), that suggests that much of overall gender disparities is related to women working in jobs associated with lower pay grades. In contrast, not controlling for performance evaluations in Model 7 has no noticeable effects on gender at entry or over time (when compared to Model 5).

When considering job entry mode, Model 4 in Table 5-5, shows again that starting salaries are significantly lower among promoted employees than among employees who have been hired into similar jobs (M4,  $b= -0.026$ ). Over time however, the positive interaction between tenure and being promoted indicates that internally promoted employees' are able to catch up (M4,  $b=0.006$ ) to equivalent hired employees and close the gap after about 4 years in the job. This is consistent with previous studies (Bidwell 2011). Model 4 also shows that adding a control for job entry mode does not change the gender effect, meaning that job entry mode does *not* account for unexplained gender differences in earnings growth. Additionally, a comparison between Model 5 and Model 6, in which I left out the controls of employees' pay grades shows that differences between hired and promoted employees only become visible when comparing employees in the same grade. Or put differently, earnings differences are offset because hired employees enter in lower grades, but earn more than promoted employees (in the same jobs). In contrast, not controlling for performance evaluations in Model 7, has little effect on earnings differences between hired and promoted employees.

Although mode of job entry does not mediate the effect of gender, the positive and significant three-way interaction term between tenure, gender and job entry mode in Model 5 indicates that mode of job entry moderates the effect of gender. This means that gender differences in earnings growth are greater among hired than internally promoted employees. Figure 5-4 illustrates the predicted earnings trajectories for hired and promoted men and women. Based on the estimates in Model 5, I calculate predicted earnings for men and women at entry and over time, given a particular job entry mode. As I use earnings in 2013 dollars, positive slopes indicate increases in real earnings. In contrast, flat trajectories indicate that earnings increases match changes in cost-of-living. Negative slopes would suggest that employees' earnings grow slower than annual inflation, resulting in a decline in real earnings.

\*\*\* Figure 5-4 here \*\*\*

As discussed above, Figure 5-4 shows that average starting salaries are significantly greater for hired employees when compared to promoted employees in similar jobs. Likewise, men's starting salaries are significantly higher than women's starting salaries in similar jobs. This gender gap in starting salaries is equally wide among hired and promoted employees.<sup>42</sup>

Over time however, externally hired women's earnings grow significantly slower than externally hired men's earnings in similar jobs, as indicated by the flatter gray dashed line (hired women) and the steeper black dashed line (hired men) in Figure 5-4.<sup>43</sup> Given that externally hired women experience slower earnings growth than externally hired men, gender disparities widen after job entry among externally hired employees. In contrast,

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<sup>42</sup> As indicated by the non-significant "promoted\*female" interaction term in Model 5

<sup>43</sup> And the significant negative "tenure\*female" coefficient in Model 5.

income grows at about similar rates among promoted men and women, as indicated by the solid black and gray line. *This implies that gender disparities remain constant among internally promoted employees, while they increase among hired men and women. This supports Hypothesis 2a and is consistent with the “Emerging Inequality” scenario (C) discussed above.*

This implies that post-entry gender gaps are partially due to the compounded effect of differences in starting salary and partially due to subsequent differences in earnings growth. I illustrate this in Figure 5-5 below. Panel A shows men and women’s predicted earnings at entry and over time. It also shows how much of the gap total gap over time is attributable to the compounded effect at job entry (area with gray diagonal lines) and what part of the gap is attributable to post-entry processes above beyond initial starting differences (dotted area).<sup>44</sup> After four years, the average predicted gender gap among hired employees is 3.5% or \$2,177/ year. Of this initial gap, 77% (area with diagonal lines) is due to the initial starting differences and 23% (dotted area) are due to disparities in pay increases post-entry.

\*\*\* Figure 5-5 here \*\*\*

Panel B shows the results for promoted employees. The solid grey line indicates promoted women’s predicted earnings, while the solid black line indicates men’s predicted earnings. The diagonally shaded area indicates that after four years, all differences between promoted men and women can be attributed to initial gender gaps in starting salaries. Put differently,

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<sup>44</sup> To determine how much of the gap is attributable to initial earnings differences, I predicted women’s earnings with men’s starting salaries, i.e. by forcing initial gender differences in intercepts (i.e. coefficient for “female” and “female\* promoted”) to be 0. The area below women’s earnings with men’s starting salary is the gap attributable to initial differences (diagonal dashed), whereas the area above is the gap due to post-entry processes (dotted area).

as promoted men and women's earnings grow at similar rates after entry, no additional earnings differences arise among promoted employees (but differences also do not decrease). In contrast, post-entry gender disparities widen among externally hired employees beyond the compounded effect of initial disparities at job entry. Figure 5-5 also suggests that most of the gender gap arises at job entry and that these gaps are very persistent over. Hence, investments into preventing earnings differences at entry may be the most efficient way to reduce inequality. If the organization would reduce initial gaps by giving women (or employees lower in the range) greater pay increases, then women's pay increases would have to be 36% greater than men's pay increases to close the gap over the course of four years. That is, on average earnings increased by 0.69% per year for promoted employees (which includes several years during the recession in which B2G gave no pay increases). To catch up over the course of four years, women's earnings would have to increase by 0.96% each year. These differences are relatively small in years in which earnings increases are very low. However, in non-recession years, B2G often used a merit-pool of 3%. In this scenario, women would have to receive on average 4% increases in order to catch up after 4 years (even more if they exceed expectations). Given social comparison dynamics in teams such dramatic and sustained differences in pay increases might be difficult to implement and to defend "politically."

Thus in terms of relative earnings differences (gap as percentage of men's earnings)<sup>45</sup> the result suggest that gender differences remain the same among promoted employees, but

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<sup>45</sup> For instance, Model 5 predicts a starting salary of \$62,018 (in 2013 dollar) for externally hired men, whereas it predicts a starting salary of \$60,354 (in 2013 dollars) for externally hired women. Therefore, the absolute gender gap is \$1,664/year, which represents a relative gap of 2.7% ( $\$1,664 / \$62,018$ ).

increase among externally hired employees. Hence, Figure 5-6 shows that promoted women earn on average 2.9% less than men do at entry (solid line), while hired women earn 2.9% less than hired men do at job entry (dotted line). The small difference between hired and promoted employees does not reach statistical significance.<sup>46</sup> This means that the gender gap is equally wide among hired and promoted employees, which is contrary to the prediction in Hypothesis 1.

In support of Hypothesis 2a, hired women's pay increases slower than hired men's earnings, resulting in increasing gender disparities among externally hired employees, while relative gender disparities remain unchanged among promoted employees. Specifically, estimates from Table 5-5 suggest that the relative gender gap increases from 2.7% at entry to about 3.5% four years after job entry among hired employees (thus a 0.8 percentage point increase beyond differences at job entry). *Given the similar gender gaps among hired and promoted employees at entry and the subsequently widening of gender gap among externally hired employees, results resemble the "Emerging Inequality" scenario (C).*

### **Selective Attrition, Timing and Size of Pay Raises after Entry**

To understand why externally hired women's earnings grow slower than hired men's pay, I examine how gender and mode of job entry affect 1) post-entry turnover, 2) the frequency of pay increases and 3) magnitude of pay increases. With regard to the first question, if hired women with higher earnings transitioned quicker out of their job (e.g. via promotion,

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<sup>46</sup> As indicated by the non-significant "promote\*female" coefficient.

transfer or quit) than their male counterparts, then more lower-earning employees would be left in the female sample of externally hired employees than in the male sample. Hence, slower earnings growth among hired women compared to hired men may be due to selective attrition. To examine this relationship, Table 5-6 shows the estimates from piecewise exponential event history analyses in which the outcome is how quickly employees exit via voluntary quit, involuntarily discharge, promotion or transfer, respectively.

\*\*\*Table 5-6 here \*\*\*

Results show that employees with higher earnings are less likely to be terminated and more likely to be promoted and transferred. Moreover, women are more likely to quit and exit via discharge than men are. This however does not depend on job entry mode, meaning that compared to their male counterparts, hired and promoted women are equally likely to quit or be terminated, indicated by the non-significant interaction between female and being promoted (promoted\*female). Similarly, gender differences in turnover do not depend on pay, except when looking at transfers, where higher-paid women are less likely to transfer, regardless of job entry mode.

The non-significant three-way interaction term between being female, being promoted and having a higher income (promoted\*female\*earnings) indicates that externally hired women do *not* transition into their next job faster than their male counterparts do. *Therefore, selective attrition does not explain growing earnings disparities among externally hired employees relative to promoted employees.*

Addressing the timing of subsequent pay increases, Table 5-7 shows the estimates from a piecewise exponential event history analysis in which the outcome is how quickly employees receive a pay raise. A positive interaction between entering via promotion and being female would imply that hired women advance slower than hired men did because they receive pay increases less frequently than hired men do.

\*\*\* Table 5-7 \*\*\*

The results indicate that promoted employees receive raises more frequently than externally hired employees do ( $hr = 1.116$ ). Moreover, women receive raises more frequently than men do ( $hr = 1.089$ ), which is consistent with Barnett et al. (2000). The marginally significant interaction between female and entering a job via promotion indicates that the positive effect of being female is slightly smaller among promoted employees. These results suggest that the frequency with which employees receive pay raises cannot explain why hired women's pay grows slower than hired men's pay and why no such gender differences exist among promoted employees. *If anything, given the results in Table 5-7 gender differences in earnings growth should be smaller among externally hired employees.*

With regard to the magnitude of pay increases, Table 5-8 examines how gender and job entry affect the relative size of earnings increases, controlling for mode of job entry, employee and job characteristics. The dependent variable is the natural log of relative increase in earnings (increase relative to previous earnings).<sup>47</sup> The sample is restricted to months in which employees' pay changed. Because observations are nested (multiple raises

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<sup>47</sup> I take the natural log of earnings increases, as the distribution of pay raises was right-skewed.

in same job, multiple jobs per person over time), I use a HLM with three levels. To take into account the possibility that employees might receive greater raises when they have been waiting longer, I control for the time since the last raise.<sup>48,49</sup> I also control for employees' earnings at the point of job entry,<sup>50</sup> as employees with higher starting salary might receive smaller subsequent raises, and a control for type of raise (i.e. merit-only, adjustment-only or a combination). In additional analyses not shown here, I also included year dummies, as pay increases are calculated based on actual earnings (not inflation-adjusted earnings as in the models above). Including, year fixed-effects did not change the substantive findings.

\*\*\* Table 5-8 here \*\*\*

The results in Table 5-8 suggest that externally hired women fall behind relative to hired men because women's pay increases are lower than hired men's increases. In contrast, no such gender differences exist among promoted men and women. For ease of interpretation, Figure 5-6 shows the predicted pay increases by gender and mode of job entry (predicted based on Model 4 Table 5-8). It shows that gender disparities are significantly wider among hired employees, than among promoted employees.<sup>51</sup> Specifically, among externally hired employees, women's raises are 0.3 percentage points smaller than men's raises ( $p=0.016$ ), whereas promoted men and women receive similar raises ( $p=0.46$ ). Thus, gender disparities in pay increases only exist among hired but not promoted employees. While these differences are relatively small, they describe the difference between employees with

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<sup>48</sup> Adding controls for time since raise or job entry did not affect findings.

<sup>49</sup> E.g., because employees entered their job shortly before annual performance ratings and therefore did not get an increase right away.

<sup>50</sup> I also ran these models using income immediately before the earnings increase as opposed to earnings at job entry. The choice of measure did not affect the substantive findings.

<sup>51</sup> As indicated by the significant and positive interaction term "female\*promotion"



similar characteristics in similar jobs. These differences accumulate over time as indicated in Figure 5-4. Moreover, my observation period includes the 2008 recession, during which B2G instituted pay freezes, resulting in low average pay increases in my sample.

With regard to job entry mode, the results also show that job entry mode only affects women's earnings, and not men's earnings. That is, hired women receive significantly smaller pay increases than promoted women ( $p < 0.001$ ), whereas differences between hired and promoted men fail to reach significant levels ( $p = 0.13$ ).

*Overall, the analyses indicate that earnings for externally hired women increase slower than for hired men because externally hired women's pay increases are significantly smaller than hired men's increases. Put differently, disparities among externally hired employees' widen because entering a job via external hire is associated with slower earnings growth among women but among men. Hence, the gender gap remains constant among promoted employees as men and women receive the same relative pay raises.*

## **CONCLUSION**

### **Mode of Job Entry: How does it affect men and women at entry and over time?**

As U.S. employees switch employers more frequently throughout their career (e.g., Bidwell et al. 2013; Cappelli 1999; Farber 2008; Hollister 2011), research shows that inter-organizational mobility is associated with higher earnings among men than among women (Brett and Stroh 1997; Dreher and Cox 2000; Dreher et al. 2011; Fuller 2008; Kronberg 2013; Lam and Dreher 2004). Consequently, the shift to more frequent employer changes may be one of the factors preventing the gender gap to close in the U.S. and other industrialized countries.

As people in organizations distribute rewards among employees, this study takes an organizational perspective to examine how earnings disparities evolve over the course of employees' jobs. Do greater gender earnings disparities already exist at job entry and do they increase or decrease subsequently? By addressing these questions, I extend previous studies, which were less able to distinguish between earnings differences at entry and the effect of job entry mode on subsequent earnings differences (e.g., Brett and Stroh 1997; Dreher and Cox 2000; Dreher et al. 2011; Kronberg 2013; Lam and Dreher 2004). Whether earnings differences already exist at job entry and whether they increase or decrease post-entry however, has key implications for our understanding of the underlying mechanisms. Greater earnings differences at job entry may be due to per-hire differences in men or women's characteristics or due to processes during pay determination. Similarly, widening gaps post-entry may be due to employee selection or organizational practices such as performance increases.

Using longitudinal personnel records from a large U.S. employer (2005-2013) that employs several thousand professional and managerial employees, this chapter builds on previous career research and examines how gender disparities arise within organizations given a particular mode of job entry. The results reveal that at job entry, women earn less than equivalent men in similar jobs do. This initial gender gap is equally wide among externally hired and internally promoted employees, meaning that job entry mode does not affect gender disparities in starting salary. Over time however, gender differences widen quickly among externally hired employees as externally hired women receive smaller

raises than hired men do. In contrast, promoted men and women receive similar pay increases after job entry, thereby maintaining initial differences in starting salaries.

With regard to similar gender earnings gaps among hired and promoted employees at job entry, my findings contradict Petersen and Saporta (2004). They also used longitudinal personnel records and found that gender earnings disparities were greatest when employees' entered the organization via external hire. In their study gender earnings' disparities decreased over time with employees' seniority. Divergence in findings may potentially be due to B2G's explicit efforts to minimize ascriptive inequality at entry.<sup>52</sup> For instance, interview data from the previous chapter showed that B2G and other large employers relied heavily on standardized job descriptions and pay grades to determine pay. Moreover, the HR department has a significant say in the determination of hired and promoted employees' starting salary. This high degree of formalization might cause gender differences to be equally wide among hired and promoted employees. Along these lines, Petersen and Saporta's collected their personnel data between 1978 and 1986. It is possible that organizations have become more aware of possible disparities that may emerge among hired employees and have put more policies in place to prevent disparities. In this regard, the remaining gender differences at entry may reflect differential treatment in the pay-setting process, noisy measures,<sup>53</sup> unmeasured human capital differences and other omitted variables such as childcare responsibilities.<sup>54</sup>

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<sup>52</sup> While Peterson and Saporta's organization also appears to be a larger employer, I can't speak to their policies in place.

<sup>53</sup> E.g., labor market experience is based on age and type of education and does not reflect actual years of experience. As women's careers are more intermittent, the measure is less accurate for female employees.

<sup>54</sup> B2G does not record employees' marital or parental status, or why employees left their previous employer.

Although gender disparities among hired and promoted employees are equally wide at job entry, gender disparities increase post-entry among externally hired employees, but remain constant among promoted employees. This may be due to a number of factors. First, differences might be due to pre-hire differences among employees that affect their subsequent earnings growth. For instance, Table 5-3 shows that externally hired women are younger and have less previous labor market experience than externally hired men do. In contrast, promoted women had more labor market experience and were older than promoted men do. Although my models control for differences in age and experience, they cannot account for other pre-hire differences. For instance, due to the left-censored nature of the personnel records I cannot account for qualitative differences in work experience (e.g., 5 years as accountant for small family business versus large accounting firm), or the reasons for entering B2G (e.g., career-related, family-related, or previous lay-off).

Moreover, personnel data did not include information on employees' marital and parental status. In this regard, particularly motherhood is associated with lower earnings (e.g., Budig and England 2001) and may therefore contribute to slower earnings increases among externally hired women compared to hired men. I will examine this explanation further in the next chapter. Finally, to protect employees' identity the de-identified personnel data did not include employees' job title. I therefore rely on broader job functions, business unit information and employees' pay grade to define similar jobs. This means that I compare employees in similar but not identical jobs. Pay floors and ceiling however, set the same limits for employees with different job titles in the same grade. Hence, pay grades might be a more meaningful control than job titles, especially when there are many single-incumbent job titles.

More generally, many of the discussed individual differences (e.g. unobserved human capital, parental status, reason for leaving) should primarily affect raises via lower performance ratings (as pay increases at B2G are merit-based). E.g., if hired men have qualitatively more work experience than hired women in similar jobs do, then this experience may enable men to outperform women with less experience, which would result in greater earnings increases among hired men. Disparities should therefore disappear (or at least decrease substantially) after I control for employees' performance ratings. However, as demonstrated in Table 5-5 and 5-8, disadvantages for hired women persist after controlling for performance evaluations. That is, although differences in gender disparities among hired vs. promoted employees ("female\*promoted") decline significantly ( $p=0.024$ ) from  $b=0.8$  to  $b=0.6$  in Model 2 and 3 respectively, substantively 75% of the effect remains after controlling for performance.

As performance ratings are unable to account for most of the greater disparities among hired employees, organizational literature and the interview data from the previous chapter suggest that the growing gap among hired employees may be a partial result of organizational processes that affect employees' pay raises over time. Literature on gendered organizational practices (e.g., Acker 2006; Burriss 1996; Ferguson 1984; Kanter 1977; Williams et al. 2012) and literature that emphasizes the inequality-producing effect of supervisory discretion (e.g., Baron and Pfeffer 1994; Bielby 2000; Castilla 2015; Kalev et al. 2006; Salancik and Pfeffer 1978; Tetlock 1985) have highlighted how well-intentioned organizational practices can result in gradually increases income inequality. In this regard, the interview data discussed in the previous chapter suggested that supervisors

have more discretion over employees' performance evaluation than they have over initial pay.

Given that different departments may use criteria for pay increases (e.g., budget, performance rating, position in the range) inconsistently, some supervisory discretion exists. Here, experimental research demonstrates that individuals often have lower performance expectations for female employees than for male employees and that higher rewards are perceived as more justified for men than for women (Berger et al. 1985; Ridgeway 1997; Ridgeway 2011). These expectation states may affect how supervisors determine pay increases causing men to receive greater pay increases than equally performing women. In support of this, Castilla (2008) used personnel records of a large organization and found that even when men and women had the same performance rating, men were given greater pay increases as supervisors had greater discretion in how much of a raise to assign. When the organization changed its process by making the merit-pay process more transparent, disparities in pay increases disappeared (Castilla 2015). Finally, differences in perceptions of competence and deservingness may particularly affect newly hired employees, as they are still building a record. As other task-specific characteristics are still being evaluated, employees' gender has possibly greater effects on how employees are evaluated (Berger et al. 1985).

In summary, this study suggests that while gender disparities at job entry are equally wide among hired and promoted employees, gender disparities widen over time among externally hired employees. Widening gaps may be due to pre-hire differences between employees or due to organizational processes that increase inequality over time. Either way, the results emphasize the importance of studying earnings outcomes in an

organizational setting and the importance of considering what happens to employees *after* they enter jobs via hire or promotion.

### **Mode of Job Entry: How Much does it Explain?**

This chapter also explored whether accounting for mode of job entry reduces unexplained gender gaps. There was no evidence that mode of job entry mediates the effect of gender on earnings. The effect of gender did not weaken when controlling for how men and women entered their job. Instead, job characteristics explained most of the gap in starting salaries and subsequent earnings growth. Although job entry mode does not mediate gender differences, the results suggest that job entry mode moderates the effect of gender – especially over time – as the effect of gender on earnings increases varied greatly among hired and promoted employees.

### **Limitations, Generalizability and Potential for Future Research**

Although this study focuses on careers in a single organization, I believe that the findings are generalizable to other large organizations. In fact, given the substantial effort of B2G to minimize disparate outcomes, this study presents a very conservative case. In less formalized organizations, gender differences might be even greater and I would expect initial disparities to be significantly greater among hired employees. Similarly, I expect that gender differences among externally hired employees emerge even faster over time in less formalized organization as there are fewer mechanisms in place to reduce biases.

Future research should explore what mechanisms cause earnings differences to increase over time. This study suggests that pre-hire differences in characteristics (that no longer exist among promoted employees) may result in different earnings increases over

time. Alternatively, different organizational and socio-cognitive processes result in growing disparities among hired employees. To discern between these options, I would need data that a) includes pre-hire information on employees (e.g., actual years of experience, qualitative differences in career histories, reasons for leaving), full characteristics of employees (e.g. parental and marital status) and b) information on organizational practices. In an ideal scenario I would have longitudinal pay information on employees as they built their careers (to compare the effect of employee differences in the same environment) *and* detailed information on their employers and their practices (to compare how differences in practices affect similar employees). To my knowledge, no such data exists, yet.

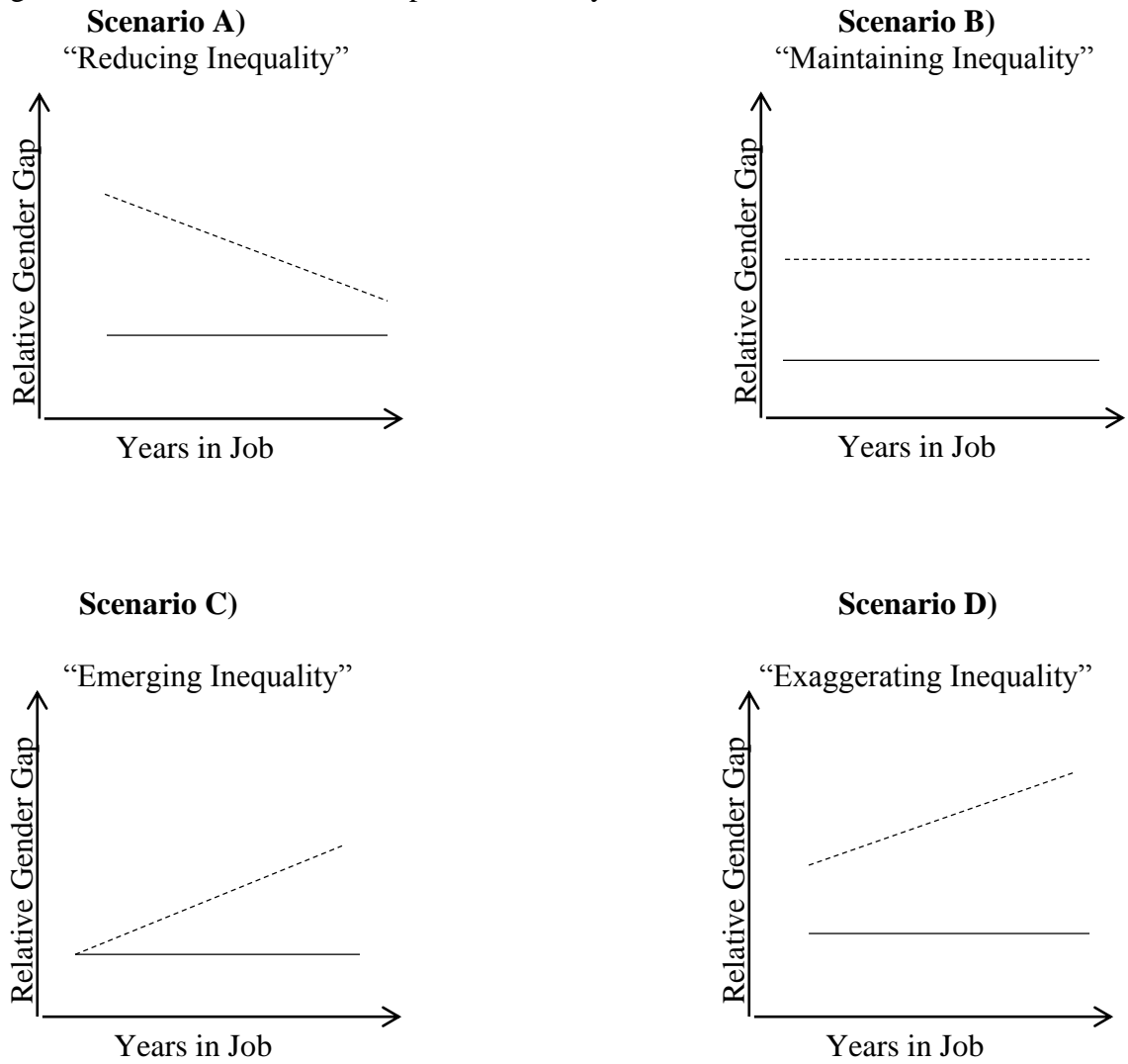
Publicly available, employer-employee linked administrative data might be a close approximation. These data however, only include little information on employee and employer characteristics. Another option would be data collected for specific occupational labor markets in which hierarchical ranks are fairly comparable across firms and in which compensation information is publicly available or available via large consulting firms. For instance, Kampkötter and Sliwka (2014) draw on longitudinal compensation data for over 120,000 bankers across 50 banks located in Germany. The advantage of such data would be that employers would be comparable in the sense that job types and ranks are comparable and that these banks represent a relatively closed occupational labor market, such that most bankers will work for one of these 50 banks. The longitudinal nature of the data would allow a direct comparison of positions across companies (although I am not sure whether the data includes complete career histories and to what extent records are linked over time) and how much employees earned previously. Moreover, given that the



number of banks is limited, it might be possible to supplement the data with interviews of compensation specialists in these organizations.

**TABLES AND FIGURES**

Figure 5-1. Scenarios. Gender disparities at entry and over time



-----	gender gap: <i>externally hired</i> employees
_____	gender gap: <i>internally promoted</i> employees

Table 5-1. Modes of job entry, by gender

	Men	Women	Diff.
External Hire	31% ( 701 )	29% ( 1,412 )	2%
Rehire	7% ( 169 )	9% ( 451 )	-2%
Promotion	25% ( 576 )	29% ( 1,427 )	-4% ***
Promotion w/ Transfer	3% ( 79 )	4% ( 200 )	-1%
Transfer	32% ( 728 )	28% ( 1,361 )	4% ***
Demotion	2% ( 45 )	2% ( 90 )	0%
<b>TOTAL</b>	<b>100% ( 2,298 )</b>	<b>100% ( 4,941 )</b>	

Note: \* $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$  based on two-tailed t-tests. Sample only includes person years at job entry

Table 5-2. Logistic regression. Entering via promotion, by gender

	M1: All	M2: Men	M3: Women
<b>Context</b>			
reorganization	0.000 ( 1.000 )	0.000 ( 1.000 )	0.000 ( 1.000 )
state unemployment	-0.014 ( 0.986 )	0.007 ( 1.007 )	-0.019 ( 0.981 )
recession (2008-2009)	-0.272 ( 0.762 ) **	-0.533 ( 0.587 ) ***	-0.169 ( 0.845 )
unit size	0.000 ( 1.000 )	0.000 ( 1.000 )	0.000 ( 1.000 )
<b>Demographics</b>			
female	0.117 ( 1.124 )	-	-
non-hisp black	-0.108 ( 0.898 )	-0.131 ( 0.877 )	-0.070 ( 0.932 )
non-hisp asian	0.177 ( 1.194 )	0.025 ( 1.026 )	0.204 ( 1.226 )
other	-0.552 ( 0.576 ) *	-0.837 ( 0.433 ) *	-0.444 ( 0.641 )
<b>Human Capital</b>			
no bachelor (ref cat)			
bachelor	0.087 ( 1.091 )	0.017 ( 1.017 )	0.059 ( 1.061 )
master	-0.060 ( 0.942 )	-0.144 ( 0.866 )	-0.005 ( 0.995 )
phd	1.031 ( 2.803 ) ***	0.582 ( 1.790 )	1.285 ( 3.616 ) ***
lm experience	0.159 ( 1.172 ) ***	0.088 ( 1.092 )	0.192 ( 1.211 ) ***
performance: 4 of 5	0.506 ( 1.659 ) ***	0.350 ( 1.420 ) *	0.578 ( 1.783 ) ***
performance: 5 of 5	0.999 ( 2.717 ) ***	0.824 ( 2.279 ) ***	1.121 ( 3.067 ) ***
performance: missing	-2.401 ( 0.091 ) ***	-2.910 ( 0.054 ) ***	-2.220 ( 0.109 ) ***
<b>Age</b>			
18-25 (ref cat)			
26-30	-0.499 ( 0.607 )	-0.683 ( 0.505 )	-0.607 ( 0.545 ) *
31-35	-1.257 ( 0.284 )	-1.200 ( 0.301 ) *	-1.525 ( 0.218 ) ***
36-40	-1.876 ( 0.153 ) ***	-1.985 ( 0.137 ) **	-1.992 ( 0.136 ) ***
41-45	-2.732 ( 0.065 ) ***	-2.514 ( 0.081 ) **	-3.051 ( 0.047 ) ***
46-50	-3.552 ( 0.029 ) ***	-3.142 ( 0.043 ) **	-3.917 ( 0.020 ) ***
51-55	-4.394 ( 0.012 ) ***	-3.709 ( 0.025 ) **	-4.930 ( 0.007 ) ***
56+	-5.484 ( 0.004 ) ***	-4.321 ( 0.013 ) **	-6.234 ( 0.002 ) ***
<b>Generation</b>			
WWII (ref cat)			
Baby Boomer	0.507 ( 1.660 )	-0.196 ( 0.822 )	0.957 ( 2.604 )
Gen X early	0.228 ( 1.256 )	-0.527 ( 0.591 )	0.691 ( 1.995 )
Gen X late	0.247 ( 1.280 )	-0.665 ( 0.514 )	0.772 ( 2.163 )
Gen Y	-0.059 ( 0.943 )	-1.119 ( 0.327 )	0.476 ( 1.610 )
<b>Occupation Fixed Effects</b>	yes	yes	yes
<b>Division Fixed Effects</b>	yes	yes	yes
<b>Intercept</b>	5.512	0.838	10.739
N (jobspells)	4257	1293	2920
LL	-2181	-673	-1444
Pseudo-R	0.260	0.25	0.29

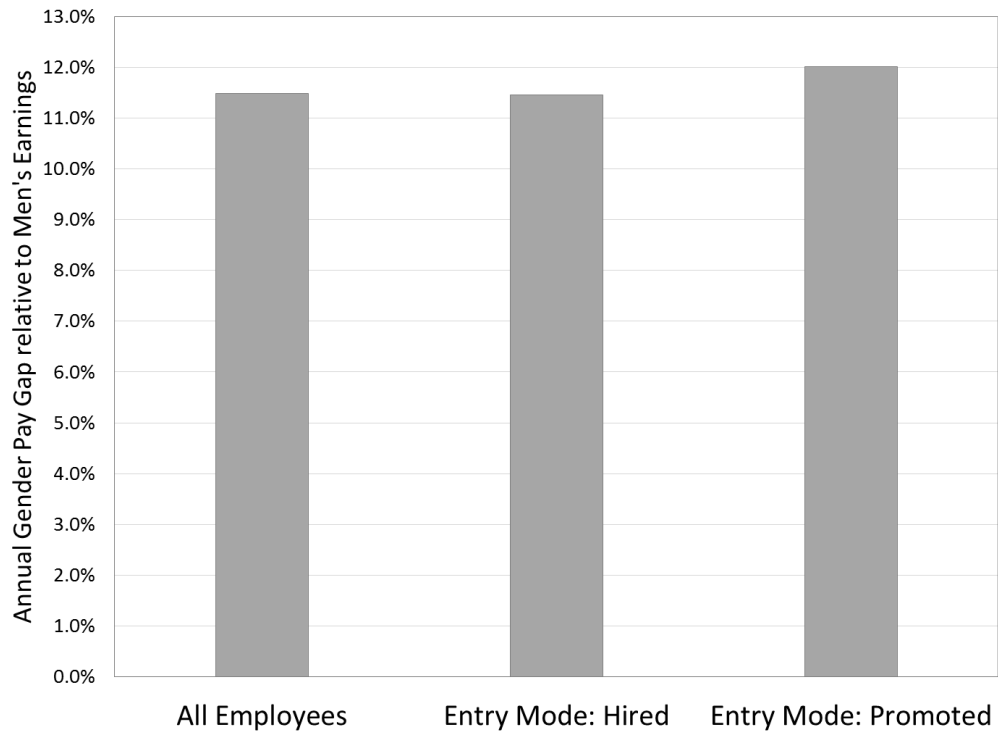
Note: \*p<0.05, \*\* p<0.01, \*\*\* p<0.001, DV= job entry via promotion (1) vs hire (0). Sample only includes hired and promoted employees at the point of job entry. Errors clustered by employee ID

Table 5-3. Sample characteristics, by gender and job entry mode

	External Hire				Internal Promotion				Dif in Dif
	Men	Women	Dif		Men	Women	Dif		
adjusted pay	68,748	59,739	9,009	***	68,411	59,969	8,442	***	567
pay grade	20	18	1.5	***	21	19	1.4	***	0.09
black	0.20	0.28	-0.08	***	0.19	0.30	-0.11	***	0.03
asian	0.10	0.06	0.04	**	0.10	0.07	0.03	*	0.01
other race	0.07	0.05	0.01		0.04	0.04	0.00		0.02
less than bachelor	0.13	0.07	0.06	***	0.16	0.12	0.04	**	0.01
bachelor	0.45	0.43	0.02		0.45	0.47	-0.02		0.04
master	0.37	0.46	-0.09	***	0.33	0.36	-0.03		-0.06
phd	0.05	0.04	0.02		0.06	0.05	0.01		0.01
lm experience	15.23	14.22	1.02	*	10.37	12.26	-1.89	***	2.91 ***
firm tenure	-	-	-		1.51	1.61	-0.10		-
performance: 4 of 5	0.26	0.26	0.00		0.42	0.45	-0.03		0.03
performance: 5 of 5	0.09	0.09	-0.01		0.22	0.24	-0.02		0.01
performance: missing	0.37	0.35	0.02		0.04	0.04	0.00		0.02
age									
18-25	0.08	0.10	-0.03	*	0.05	0.05	0.01		-0.03
26-30	0.22	0.24	-0.02		0.23	0.19	0.04	*	-0.06 *
31-35	0.20	0.19	0.01		0.24	0.18	0.06	**	-0.05
36-40	0.18	0.14	0.04	*	0.18	0.18	-0.01		0.05 *
41-45	0.12	0.12	0.00		0.12	0.14	-0.02		0.01
46-50	0.10	0.10	0.00		0.09	0.13	-0.04	*	0.04
51-55	0.06	0.06	0.00		0.04	0.08	-0.04	**	0.03 *
56+	0.05	0.04	0.00		0.04	0.05	-0.01		0.01
recession	0.21	0.19	0.02		0.15	0.18	-0.03		0.05
state unemployment	7.62	7.37	0.25	*	7.89	7.63	0.26	*	-0.01
N (jobspells)	701	1412			655	1627			

Note: \*p<0.05, \*\* p<0.01, \*\*\* p<0.001, based on two-tailed t-tests, Sample only includes hired and promoted employees at the point of job entry.

Figure 5-2. Unadjusted gender gap, by job entry mode



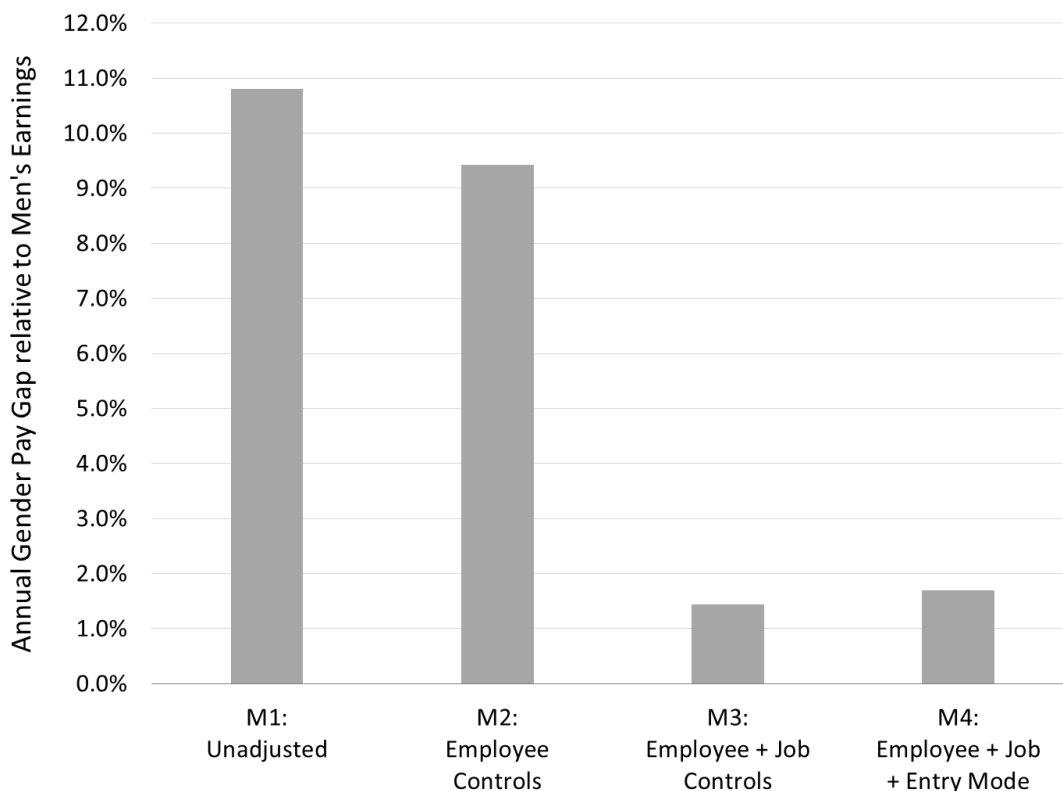
Note: Gap is significant in each sample with  $p < 0.001$ , Difference in unadjusted gap between hired and promoted employees fails to reach statistical significance ( $p = 0.48$ )

Table 5-4. HLM: Earnings at job entry

	M1: Unadjusted Gap	M2: Employee Controls	M3: Empl & Job Controls	M4: Empl & Job, Entry Mode	M5: Full Model
Intercept	10.891 ***	10.550 ***	9.661 ***	10.040 ***	10.020 ***
<b>Gender and Job Entry Mode</b>					
female	-0.114 ***	-0.099 ***	-0.015 ***	-0.017 ***	-0.017 ***
promoted	-	-	-	-0.034 ***	-0.031 ***
promoted*female	-	-	-	-	-0.001
<b>Employee Controls</b>					
black	-	-0.096 ***	-0.018 ***	-0.017 ***	-0.018 ***
asian	-	-0.048 **	-0.020 **	-0.022 **	-0.022 **
other	-	-0.101 ***	-0.017 *	-0.019 *	-0.019 *
bachelor	-	0.182 ***	0.003	0.021 **	0.021 **
master	-	0.314 ***	0.015	0.041 ***	0.041 ***
phd	-	0.467 ***	0.006	0.054 **	0.053 **
ln experience	-	0.038 ***	-0.006 ***	0.001	0.001
ln experience2	-	0.000 ***	0.000	0.000	0.000
firm tenure	-	-0.011 ***	-0.002 ***	-0.003	-0.003
firm tenure2	-	0.000	0.000 *	0.000 *	0.000 *
performance: 4 of 5	-	0.008 *	0.008 **	0.009 ***	0.009 ***
performance: 5 of 5	-	0.029 ***	0.015 ***	0.018 ***	0.018 ***
performance: missing	-	0.001	0.013 ***	0.013 ***	0.013 ***
age category	-	yes	yes	yes	yes
generation	-	yes	yes	yes	yes
turnover hazard	-	yes	yes	yes	yes
<b>Job Characteristics</b>	-	-	yes	yes	yes
<b>Recession and Unemployment</b>	yes	yes	yes	yes	yes
N (Jobspells)	7,239	7,239	7,239	7,239	7,239
N (Employees)	4,280	4,280	4,280	4,280	4,820
LL	657	2,722	6,749	6,807	6,808
BIC	-1,261	-5,151	-12,466	-12,548	-12,523

Note: \*\*\* p<0.001, \*\* p<0.01, \* p<0.05, errors clustered by employee, dependent variable= ln full-time equivalent earnings in 2013 dollars, job controls include: number of employees in business unit, and fixed-effects for pay grade, job function, business-unit

Figure 5-3. Relative gender earnings gap in entry salary



Note: Gender gap in all models is significant ( $p < 0.001$ ). The drop between model 1 and model 2 is significant at  $p = 0.0495$ , whereas the drop between model 2 and 3 is significant at  $p < 0.001$ . Differences between model 3 and 4 are not significant.

Gender gap =  $(\text{Earn}_{(M)} - \text{Earn}_{(F)}) / \text{Earn}_{(M)}$ . Earnings predicted based on models 1-4 in Table 5-4. Adjusted gaps predicted for white male or female with a bachelor, 16 years of labor market experience at entry, 35-40 years old, 0.5 years of firm tenure, performance rating of 4, unemployment rate 7.7%, in a business unit of 2445 employees. Holding constant the pay grade, business unit and job function.

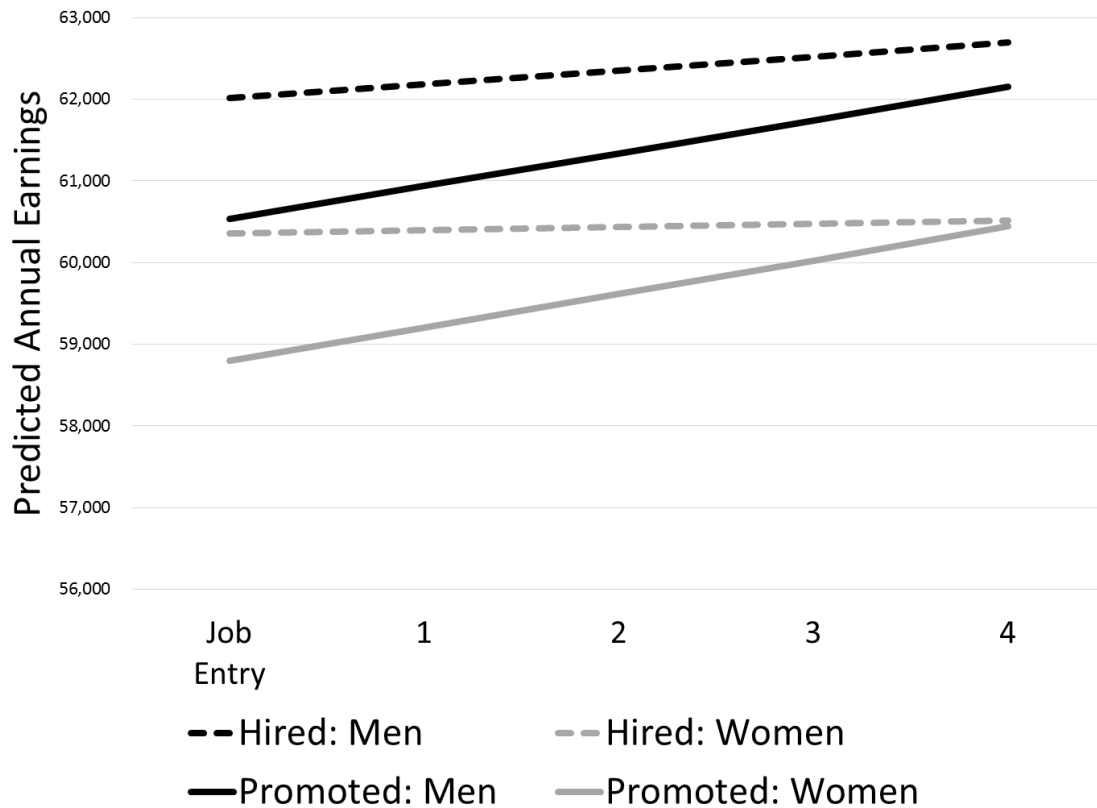


Table 5-5. HLM. Gender earnings gaps at entry and over time

	M1: Unadjusted Gap	M2: Employee Controls	M3: Empl. & Job Controls	M4: Empl. & Job, Entry Mode	M5: Full Model	M6: Full Model no Pay Grade	M7: Full Model no perform.
intercept	11.020 ***	10.390 ***	9.891 ***	10.000 ***	9.996 ***	10.510 ***	9.971 ***
job tenure	0.006 ***	0.001 ***	0.004 ***	0.002 ***	0.003 ***	0.003 ***	0.004 ***
<b>Gender</b>							
female	-0.118 ***	-0.104 ***	-0.027 ***	-0.027 ***	-0.027 ***	-0.077 ***	-0.026 ***
tenure*female	0.000	-0.001 +	0.000	-0.001 +	-0.002 ***	-0.003 ***	-0.002 *
<b>Mode of Job Entry</b>							
promoted	-	-	-	-0.026 ***	-0.024 ***	0.003	-0.020 ***
tenure*promoted	-	-	-	0.006 ***	0.004 ***	0.005 ***	0.004 ***
<b>Gender * Mode of Job Entry</b>							
female*promoted	-	-	-	-	-0.002	-0.008	-0.002
tenure*female*promoted	-	-	-	-	0.002 ***	0.003 ***	0.002 **
<b>Employee Characteristics</b>	<b>no</b>	yes	yes	yes	yes	yes	yes
<b>Performance Evaluation</b>	<b>no</b>	yes	yes	yes	yes	yes	<b>no</b>
<b>Job Characteristics</b>	<b>no</b>	<b>no</b>	yes	yes	yes	yes	yes
<b>Pay Grade</b>	<b>no</b>	<b>no</b>	yes	yes	yes	<b>no</b>	yes
<b>Recession and Unemployment</b>	yes	yes	yes	yes	yes	yes	yes
N (job spell-years)	22730	22730	22730	22730	22730	22730	22730
N (job spells)	7239	7239	7239	7239	7239	7239	7239
N (employees)	4280	4280	4280	4280	4280	4280	4280
LL	30141	32249	36051	36175	36182	33109	36074
BIC	-60192	-64137	-70908	-71086	-71040	-65103	-70853

Note: \*\*\* p<0.001, \*\* p<0.01, \* p<0.05, errors clustered by employee and job spell, employee controls include: race, highest degree, years of labor market experience, firm tenure, age category, generation, turnover hazards; job controls include: number of employees in business unit, and fixed-effects for job function, business unit

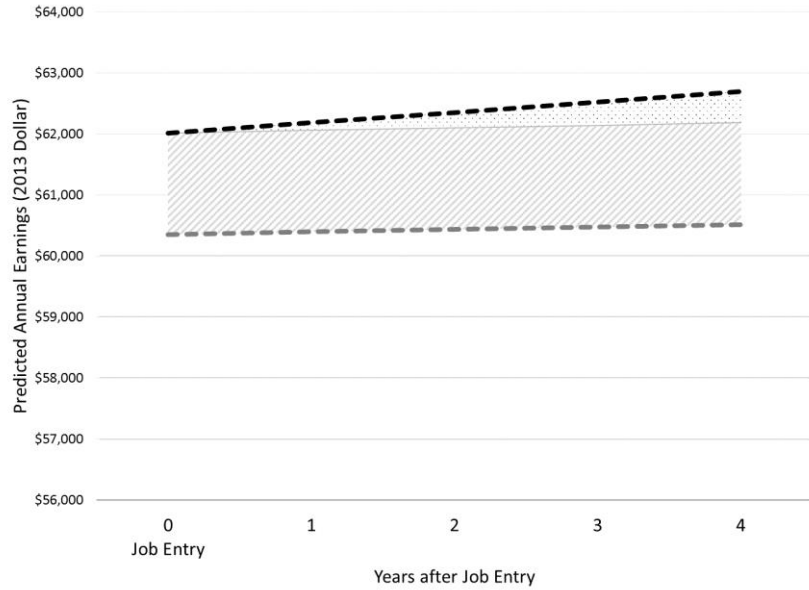
Figure 5-4. Earnings trajectories, by gender and mode of job entry



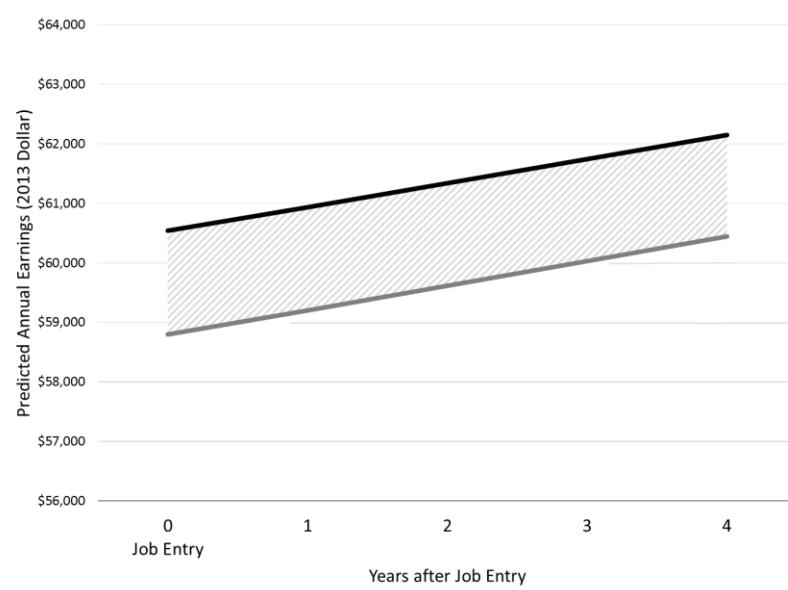
I predicted earnings based on estimates in Table 5-5. Values calculated for white employees, with a bachelor, 17 years of labor market experience, 4 years of firm tenure, 35-40 years old, a performance rating of 4, with an average of 2,491 employees in the business unit, unemployment rate of 8.1 percent. I also hold the business unit, pay grade and job function constant. All values reflect sample averages.

Figure 5-5: Disaggregating the gap: Initial and subsequent gender differences

Panel A: Predicted earnings hired employees



Panel B: Predicted earnings promoted employees

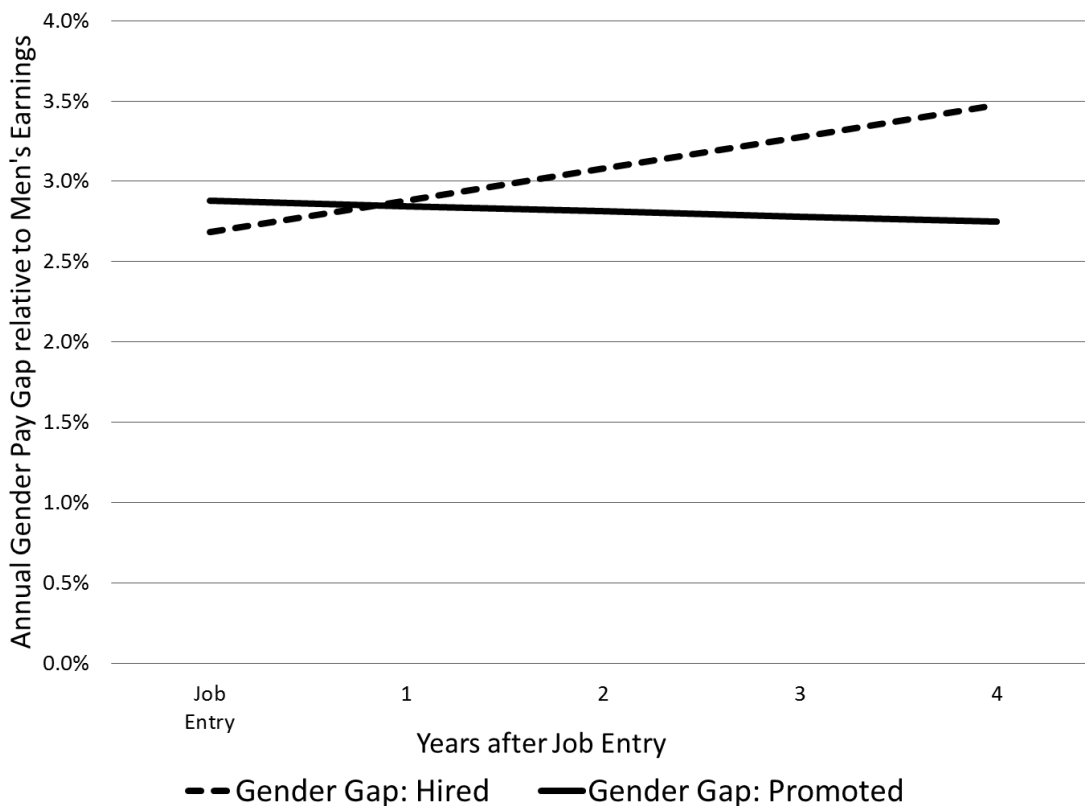


Hired Men  
 Hired Women

Hired Men  
 Hired Women

Compounded Effect of Differences in Starting Salaries  
 Post-Entry Effect

Figure 5-6. Relative gender gap, by tenure and mode of job entry



I calculated the gender gap using the following formula:  $(\text{Earn}_{(M)} - \text{Earn}_{(F)}) / \text{Earn}_{(M)}$ . I predicted earnings based on estimates in Table 5-5. Values calculated for white employees, with a bachelor, 17 years of labor market experience, 4 years of firm tenure, 35-40 years old, a performance rating of 4, with an average of 2,491 employees in the business unit, unemployment rate of 8.1 percent. I also hold the business unit, pay grade and job function constant. All values reflect sample averages.

Table 5-6. EHA. Turnover by gender, job entry mode and earnings

	Quit	Terminated	Promoted	Transferred
<b>Time Pieces</b>				
0 -7 months	0.013 ***	0.001 ***	0.023 **	0.017 ***
8 -12 months	0.029 ***	0.001 ***	0.045 *	0.026 ***
13 - 24 months	0.032 ***	0.002 ***	0.056 *	0.025 ***
25+ months	0.038 ***	0.002 ***	0.066 *	0.021 ***
<b>Earnings</b>	0.886	0.231 **	5.424 ***	2.809 ***
<b>Gender * Earnings</b>				
female	1.0003 ***	1.0003 **	1.000	0.9999 *
female * earnings	1.000	1.000	1.000	0.9999 *
<b>Job Entry Mode* Earnings</b>				
promoted	0.633 ***	0.655	1.009	1.277 *
promoted * earnings	0.615	0.565	1.107	0.624
<b>Gender * Entry * Earnings</b>				
promoted * female	1.000	1.000	1.000	1.000
promoted * female * earnings	1.000	1.000	1.000	1.000
<b>Turnover Hazard</b>				
Hazard: organizational exit	-	-	0.389	1.184
Hazard: promotion	0.627	0.862	-	0.260 ***
Hazard: transfer	1.279	1.380	0.805	-
<b>Employee Controls</b>	yes	yes	yes	yes
<b>Job Characteristics</b>	yes	yes	yes	yes
<b>Recession and Unemployment</b>	yes	yes	yes	yes
N (Job spell - months)	156007	156007	156007	156007
N (Job spells)	7224	7224	7224	7224
N (Employees)	4270	4270	4270	4270
N (Failure)	1330	314	1387	1667
LL	-3537	-1187	-3553	-4591

Note: \*\*\* p<0.001, \*\* p<0.01, \* p<0.05, errors clustered by employee, coefficients represent hazard ratios from piecewise exponential regression, dependent variable: M1= voluntary quit, M2 = involuntary termination, M3= promotion, M4= transfer. Job controls include dummies for pay grade, business unit, job function and size of business unit

Table 5-7. EHA. Timing of subsequent pay increases

<b>Time Pieces</b>	<b>Hazard Ratio</b>	<b>P-Value</b>	
0 -7 months	0.083	0.000	***
8 -12 months	0.490	0.105	
13 - 24 months	0.497	0.113	
25+ months	0.668	0.363	
<b>Gender and Mode of Job Entry</b>			
promoted	1.116	0.016	*
female	1.089	0.029	*
promoted*female	0.911	0.066	
<b>Individual Controls</b>			
black	1.133	0.000	***
asian	1.070	0.074	
other race	1.172	0.001	***
bachelor	0.985	0.709	
master	1.001	0.985	
phd	0.921	0.300	
LM exp. at entry	1.036	0.001	***
LM exp. at entry 2	1.000	0.060	
firm tenure at entry	1.030	0.081	
firm tenure at entry 2	1.010	0.384	
job tenure	1.016	0.000	***
job tenure 2	1.000	0.473	
performance: 4 of 5	1.194	0.000	***
performance: 5 of 5	1.494	0.000	***
performance: missing	0.334	0.000	***
turnover hazards		yes	
age		yes	
generation		yes	
starting month		yes	
no of raise in spell		yes	
<b>Job Characteristics</b>		yes	
<b>Recession and Unemployment</b>		yes	
N (raisespell-months)	155,992		
N (employees)	4,280		
N (failure = raise)	10,286		
LL	-9,499		

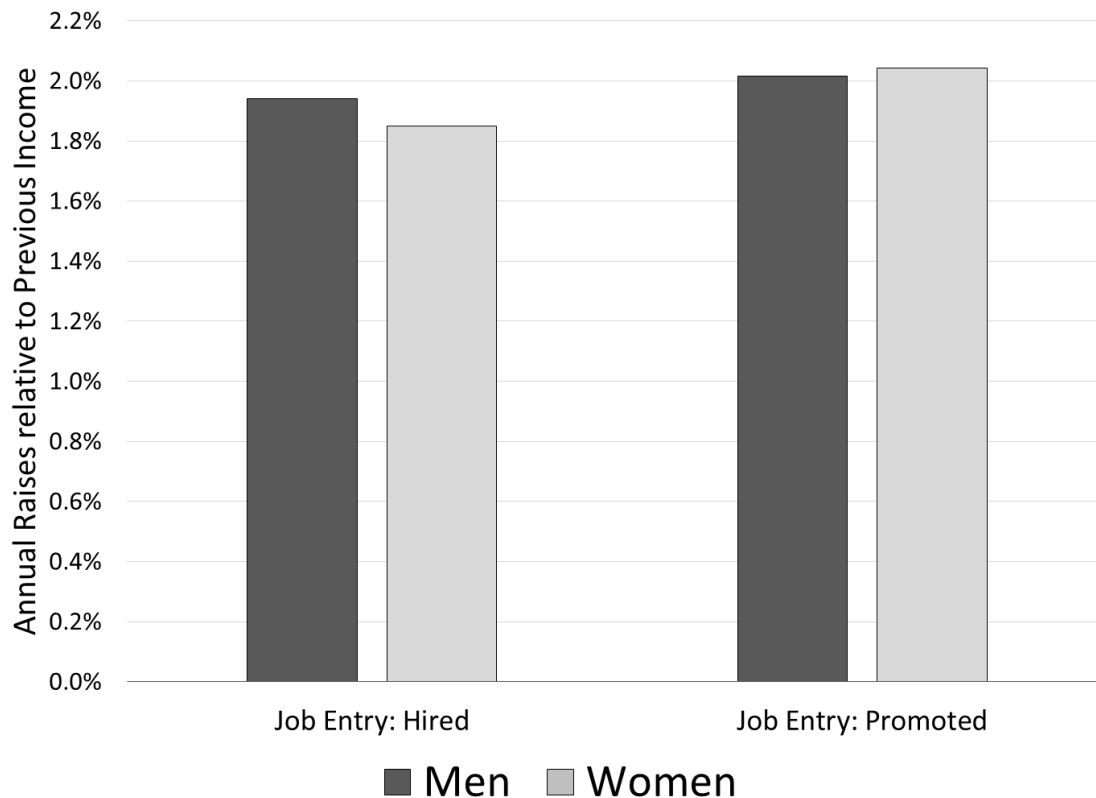
Note: \*\*\* p<0.001, \*\* p<0.01, \* p<0.05, errors clustered by employee, coefficients represent hazard ratios from piecewise exponential regression, dependent variable = employee receives an earnings increase. Job controls include dummies for pay grade, business unit, job function and size of business unit

Table 5-8. HLM. Size of subsequent pay increases

	M1: Unadjusted Gap	M2: Employee Control	M3: Performance Rating	M4: Full Model (Empl.+Job)
intercept	1.332 ***	2.356 ***	2.421 ***	1.368 ***
starting salary (centered)	0.029	0.122 ***	0.073 ***	-0.102 **
<b>Gender and Mode of Job Entry</b>				
female	-0.032	-0.019	-0.027	-0.049 *
promoted	0.017	0.025	-0.005	0.026
promoted*female	0.080 **	0.083 **	0.060 **	0.060 *
<b>Employee Characteristics</b>				
black	-	-0.055 ***	-0.015	-0.016
asian	-	0.003	0.010	-0.005
other race	-	-0.051	-0.026	-0.042
bachelor	-	-0.071 **	-0.073 ***	-0.068 **
master	-	-0.090 ***	-0.098 ***	-0.086 **
phd	-	-0.192 ***	-0.200 ***	-0.162 ***
LM exp. at entry	-	-0.033 ***	-0.033 ***	-0.015 **
LM exp. at entry 2	-	0.000	0.000 *	0.000
firm tenure at entry	-	-0.027 *	-0.028 *	-0.021 *
firm tenure at entry 2	-	-0.009	-0.009	-0.006
job tenure	-	-0.001	-0.002 *	-0.002
job tenure 2	-	0.000 **	0.000	0.000
performance: 4 of 5	-	-	0.249 ***	0.265 ***
performance: 5 of 5	-	-	0.424 ***	0.463 ***
performance: missing	-	-	0.103 **	0.055 *
age	-	yes	yes	yes
generation	-	yes	yes	yes
turnover hazard	-	yes	yes	yes
time since raise/entry	yes	yes	yes	yes
type of raise	yes	yes	yes	yes
<b>Job Characteristics</b>	-	-	-	yes
<b>Recession and Unemployment</b>	yes	yes	yes	yes
N (raises)	10,286	10,286	10,286	10,286
N (job spells)	4,952	4,952	4,952	4,952
N (employees)	3,356	3,356	3,356	3,356
LL	-8,278	-8,064	-7,680	-7,386
BIC	16,742	16,553	15,812	15,973

Note: \*\*\* p<0.001, \*\* p<0.01, \* p<0.05, errors clustered by employee and job spell, dependent variable = ln percentage pay increase, job controls include dummies for pay grade, business unit, job function and size of business unit

Figure 5-7. Predicted pay increases, by gender and job entry mode



Note: Gender difference among hired employees is significant ( $p=0.016$ ), gender difference among promoted employees is not significant ( $p=0.46$ ). Effect of promotion is significant among women ( $p<0.001$ ), but not men ( $p=0.13$ ).

I calculated % raise as follows:  $((\text{Current Income} - \text{Previous Income}) / \text{Current Income})$ . All predicted values based on estimates in Table 5-8. Average merit increase calculated for white employees, with a bachelor, 17 years of labor market experience, 4 years of firm tenure, 35-40 years old, a performance rating of 4, with an average of 2,500 employees in the business unit, unemployment rate of 8 percent. I also hold the business unit, pay grade and job function constant. All values reflect sample averages.



## CHAPTER 6

### **Why do gender disparities widen among hired employees?**

The previous Chapter 4 examined how job entry mode affects organizational processes while Chapter 5 focused on how job entry mode is associated with gender earnings disparities at entry and over time. I find that despite B2G's explicit efforts to minimize disparities, women earn less than equivalent men do at job entry. This initial gender gap is equally wide among externally hired and internally promoted employees, indicating that gender disparities are unaffected by job entry mode at entry. Over time however, gender earnings differences widen among externally hired employees as pay grows slower for hired women than for hired men in similar jobs and the same pay grade. In contrast, gender earnings differences remain constant among internally promoted employees post-hire. Most importantly, the personnel data revealed that selective turnover or infrequent pay increases cannot explain emerging pay differences among hired employees. Instead, hired women receive significantly smaller raises than externally hired men do, which results in an accumulation of gender disparities over time. No such gender differences in pay increases exist among internally promoted employees.

In this chapter, I draw on the quantitative personnel records and 19 in-depth interviews with supervisors from different organizations to examine potential mechanisms that might explain why externally hired women receive smaller raises than equivalent men do. Based on the literature and qualitative interviews, I focus on four distinct explanations that draw on the work-life literature, gendered perceptions of fairness, occupational segregation, and organizational mechanisms that might affect pay increases over time. Although none of these explanations was able to explain greater disparities in pay increases

among externally hired employees, they suggest that the formalized nature of the pay-setting process may be minimizing the effect of other inequality increasing factors. Future research should continue to examine why pay increases are smaller among externally hired women when compared to their male counterparts by considering both pre-hire and post-hire mechanisms.

## **BACKGROUND AND HYPOTHESES**

In this chapter, I focus on four mechanisms that might account for flatter earnings trajectories among externally hired women compared to hired men. Drawing on the work-life literature, I first examine to what extent externally hired women face greater earnings penalties when encountering potential work –life conflict. Second, I focus on distributive justice and gendered perceptions of deservingness to examine whether hired women are “taxed” heavier than men are for receiving a hiring premium.

The other two mechanisms focus on occupational segregation and specific features of the organizational pay-setting process. Thus, I consider sex segregation and the role of different occupational labor markets and cultural norms. Fourth, I examine whether seemingly neutral organizational policies, such as supervisor discretion and pay ceiling have gendered effects on earnings increases among hired employees.

### **Work-Life Balance**

Previous research demonstrates that gender earnings differences are partially attributable to the gendered effect of marriage and parenthood on earnings. Marriage typically affects men’s earnings positively, while women’s earnings are unaffected by changes in marital status (Chun and Lee 2001). In contrast, having young children affects women’s earnings

negatively, but has little effect on men's earnings (e.g., Budig and England 2001; Gangl and Ziefle 2009; Hodges and Budig 2010). These differences may be due to couples' shift in the division of household labor or employers' perception of deservingness (e.g., Budig and England 2001; Chun and Lee 2001; Ridgeway and Correll 2004a). Hence, marital and parental status are associated with particularly wide gender earnings disparities among married fathers and mothers.

While B2G does not record employees' marital and parental status, they do keep a record of paid and unpaid leaves taken. This includes all time taken off under the Family and Medical Leave Act (FMLA). Thus this measure is more general than marital or parental status as it assess all time taken off, including time to care for young children, elderly parents or own medical condition. While men have increased the amount of time spent on household labor in the past decades, women often still carry the majority of care responsibilities in the household and often provide urgent childcare when children are sick (Maume 2008; Sayer 2005). Thus, I expect that women are more likely than men are to take paid and unpaid leave.

*H1a: Women take more paid and unpaid leave than men do.*

As employees miss more work, supervisors might perceive these employees as less productive and less deserving of pay increases. Following a cohort of 200 mothers during their first seven years after childbirth, Glass (2004) showed that even when controlling for other productivity-related measures, mothers who utilized employer-sponsored work-life programs (e.g. telecommuting) earned less than mothers who did not do so. Along these lines Gestel and McGonagle (1999) found that the negative effect of using work-life

programs disappeared after mother's switched employers. The penalty might affect externally hired women more than promoted women as externally hired employees are still building a reputation in the organization.

*H1b: Taking more leave is associated with smaller earnings increases.*

*H1b: Penalties for taking leave are greater among employees with little organizational tenure (i.e. externally hired employees) than employees with more tenure (i.e. internally promoted employees).*

Thus, gender-specific usage of paid and unpaid leave might affect pay as follows: If women are on leave for longer periods than equivalent men are and if being on leave is more penalized among externally hired employees, then externally hired women should be most negatively affected after taking leave. This might explain why earnings of externally hired women is flatter than earnings of equivalent men.

*H2: Flatter earnings trajectories among externally hired women can be explained by controlling for women's time on leave and the negative effect of taking time off as a hired employee.*

### **Hiring Premium<sup>55</sup> and Gendered Perception of Fairness**

Social psychologists have long focused on the role of individuals' stereotypes and perceptions as important driver of inequality within organizations (e.g., Bielby 2000; Reskin 2000; Ridgeway 1997). The previous chapter showed that externally hired

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<sup>55</sup> This hiring premium is relative to equivalent employees who entered the same position (and paygrade) via promotion.

employees report a higher starting salary than equivalent employees who were promoted into similar job. This hiring premium exists among both men and women.

Qualitative interviews with 19 supervisors demonstrated that most supervisors are aware of this hiring premium. In fact, when I showed them different income scenarios (see Appendix F), 14 of 16 interviewed supervisors immediately eliminated the scenarios in which hired and promoted employees have the same starting salary at job entry (Scenario 1). Supervisors pointed to market competition and the pay-setting process (i.e. no external benchmarking for internally promoted employees) as the main causes for this gap. Most importantly, supervisors felt that these earnings advantages for hired employees were unfair (towards the promoted employees), but that market and organizational processes made it necessary to offer higher earnings to externally hired employees. For instance, Bob expresses his frustration with the smaller earnings among promoted employees. “Yeah, if you’ve been there for a long time, it’s almost like you pay for the fact that you’ve been there.” Similarly, Jeremy explains where earnings differences arise and that he perceives them as unfair:

I have a problem with the way [the employer] values its employees internally because it’s almost always based on your prior position, your prior pay. Whereas an external person, [the employer] doesn’t know exactly what they’re paid to begin with but they’re valuing the position and putting a compensation amount to the position. Well, if the person’s going to do the same job that you’re hiring somebody in for, then they should be compensated at that rate, not where they are currently

These quotes illustrate how market and organizational mechanisms result in greater earnings for externally hired employees and that they perceive higher starting salaries for externally hired employees are as unfair.

Although not discussed explicitly in the interviews, perceptions of fairness might affect subsequent pay increases such that employees with a higher entry salary receive

smaller subsequent earnings increases, i.e. they are taxed for their hiring premium. Distributive justice research shows that perception of unfairness are particularly strong when it affects individuals themselves (Lind et al. 1998; Skitka 2003). To remedy the situation, many supervisors mentioned giving greater earnings increases to employees lower in the earnings distribution compared to equally well-performing employees higher in the pay distribution.

*H3a: Employees entering jobs with above-average starting salary receive lower subsequent pay increases.*

Additionally, expectation state theory demonstrated that (unconscious) stereotypes cause supervisors to perceive men as more competent and deserving of rewards than women (Berger et al. 1985; Ridgeway 2011; Ridgeway and Correll 2004b). Put differently, men might be perceived as more legitimated as high earners and thus hiring premiums are perceived as more fair (Hegtvedt and Johnson 2000). These gendered perceptions of deservingness might cause externally hired women to be taxed more than men for receiving a hiring premium.

*H3b: Women are more taxed more for receiving a hiring premium than hired men are.*

To summarize, all externally hired employees receive an initial hiring premium, which supervisors and co-workers may perceive as unfair. These perceptions might affect subsequent decisions on pay increases. Given existing gender biases, externally hired women might be particularly penalized for receiving hiring premium compared to externally hired men. If this is the case, then accounting for the gendered effect of greater

entry salaries, should explain slower earnings trajectories of externally hired women compared to hired men.

*H4: Accounting for above average starting salaries and the gendered effects of starting high, will explain gender disparities in pay raises among externally hired men and women.*

### **Occupational Segregation and Occupational Labor Markets**

While the first two explanations focus on what people bring into the workplace and how others perceive these differences, the following explanations will focus more on structural causes of inequality. In this regard, occupational differences greatly affect gender earnings disparities. At B2G, as in most other workplaces (Stainback and Tomaskovic-Devey 2012; Stainback et al. 2005), men and women are concentrated in different types of jobs. Although the overall organization is predominately female with about 70% of all professional and managerial employees being female, men are more concentrated in technical and managerial jobs. These fields may be characterized by more competitive labor markets and more frequent turnover, which may affect whether pay is compressed between hired and promoted employees. In this regard, previous research showed that firms that employ individuals for longer periods are more reluctant to differentiate pay than firms with more turnover (Bewley 1999; Galuscak et al. 2012). If the same applies to occupations, then occupations with shorter tenure such as technical jobs might be less likely to compress salary differences between hired and promoted employees. I.e. they may not tax employees with higher starting salary. If that is the case, then men's concentration in these occupations might explain why earnings trajectories of externally hired men are steeper than among externally hired women, who are more concentrated in non-technical and non-managerial jobs.

To explore the importance of occupational affiliation, I presented human resource (HR), finance and accounting (F&A), and information technology (IT) supervisors with the following three scenarios in the in-depth interviews (see Appendix F):<sup>56</sup> Scenario 1 describes a scenario in which hired and promoted employees earn the same at entry and over time. Scenario 2, illustrated a situation in which hired employees earn more than promoted employees at entry did, but over time promoted employees are able narrow the gap. The final Scenario 3 also describes a situation in which hired employees start out at a higher salary than promoted employees do, but this gap remains constant over time instead of closing as indicated in Scenario 2. When presenting the scenarios, I emphasized that hired and promoted employees had the same training, performed at equal levels and worked in identical jobs.

After showing respondents the different scenarios, I asked them which scenario is more common in their department. Previous research (Bidwell 2011) and the personnel data discussed in the previous chapter suggests that Scenario 2 is more common. Interviewees' responses were split in three groups: The most frequent response was Scenario 2 (8 of 16 respondents<sup>57</sup>) in which hired employees earn more at entry, but over time promoted employees are able to narrow the gap. The second group identified the third scenario as more common (5 of 16 respondents) in which hired employees earn more at entry and then the gap remains constant as hired and promoted employees progress at the same rate. The third group was undecided between the second and third scenario (3 of 16 employees).

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<sup>56</sup> All scenarios focus solely on the differences between hired and promoted employees. I did not bring up race or gender differences when discussing the scenario.

<sup>57</sup> Since I only added the scenarios in the 4th interview, I only have information for 16 interviewees.



With regard to occupations, HR and F&A supervisors were more likely to identify with the second scenario; whereas IT supervisors either were more likely to identify with the third scenario or were undecided (only 2 of 7 identified the second scenario). This might indicate that the more male-dominated IT occupation is less likely to compress salary differences between hired and promoted employees as indicated by the third scenario.

\*\*\* Table 6-1 here \*\*\*

Other non-IT employees corroborated this trend. When asked under what circumstances Scenario 3 is more likely, several HR and F&A supervisors indicated that they would expect to see the third scenario in more competitive industries such as the IT or law. For instance, when asked in what settings scenarios 3 is more likely to occur, Emmanuel points to the technology and IT industry:

It's probably going to be in environments that are just highly competitive. I can think of the tech industry probably being a good one where, where they're trying to steal talent from one to the other to develop or innovate, that aspect. So you'll probably see that in environments where you have to poach and you have to pull talent from other places.

This suggests that occupational labor markets vary in their competitiveness, which may affect how much members of that occupation focus on pay compression. Put differently, in occupations characterized by a more competitive labor market, such as the IT sector, hired employees might receive the same pay increases as promoted employees and are not penalized for receiving a hiring premium.<sup>58</sup>

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<sup>58</sup> As IT supervisors worked disproportionately as front-line managers, hierarchical position (and not occupation) might determine perceptions of the pay-setting process. Specifically, 6 of 7 IT supervisors were front-line managers, whereas 5 of 6 HR and all F&A supervisors were in mid- or upper level management. Front-line managers were more likely to identify Scenario 3 as the typical scenario or were undecided. Specifically, 5 of 7 front-line managers were undecided or thought Scenario 3 was most prevalent, whereas only 1 of 5 and 1 of 3 mid- and upper-level employees identified Scenario 3, respectively. Upper-level managers may be more aware of pay compression for two reasons: First, upper-level managers (e.g. directors, assistant vice presidents) have insight into earnings of their entire department, whereas front-line supervisors only see earnings information of their direct reports. It is possible that salary compression

In summary, research on occupational labor markets and the qualitative interviews suggest that there might be occupational differences in the degree to which supervisors compress earnings between hired and promoted. This might affect externally hired men and women via their segregation into predominately male and female jobs.

*H5: There is less pay compression between hired and promoted employees in male-dominated occupations (i.e. technical jobs), than female-dominated jobs (i.e. non-technical and non-managerial jobs).*

*H6: Within male and female-dominated occupations, men and women receive comparable raises (i.e. there is no significant interaction between gender and mode of job entry within male- and female-dominated occupations).*

### **Organizational Processes**

Similar to the occupational perspective, organizational literature highlights two ways in which organizational processes can affect inequality: First, organizational policies and practices can create or limit opportunities for individual-level discrimination (e.g. Kalev et al. 2006; Lerner and Tetlock 1999; Reskin 2000; Salancik and Pfeffer 1978). Second, organizational structures and practices can be gendered themselves, meaning they have a disparate effect on different groups of employees (e.g., Acker 1990; 2006; Burris 1996; Ferguson 1984; Kanter 1977; Williams et al. 2012). Drawing on this organizational perspective, I examine how two seemingly neutral organizational aspects in the pay-raise process might cause disparate outcomes among men and women. I argue that they cause disparate outcomes because women and hired employees work in jobs that are located lower in the hierarchy. This affects their work context because lower level positions are

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(Scenario 2) only becomes apparent when seeing all employees in the department. Second, upper-level supervisors are more involved in determining the final amount of merit-increases. In several instances, front-line supervisors reported not having much influence on pay increases, but that upper-management set increases after seeing the distribution of performance ratings in their entire unit. Thus, upper-level managers might be more aware of the fact that lower-earning employees (i.e. promoted employees) get greater pay raises.

arguably characterized bigger teams and by narrower pay ranges (distance between predefined pay floor and pay ceiling). Team size and narrowness of pay ranges arguably affect the pay-setting processes and size of pay increases.

### **Team size – More Room for Differentiation?**

As described in Chapter 4, each department receives a monetary pool that they can use for pay increases. Supervisors then distribute that pool among employees according to their performance. To reward good performance, supervisors can give higher raises to higher-performing employees and smaller raises to lower-performing employees, as long as the average increase matches the overall pool for raises. In the qualitative interviews, several supervisors discussed situations in which they only had one or two direct reports. In these instances, supervisors tended to just give the average pay increase because they would have to get funding for an above-average pay increase from another supervisor. Samantha describes how having only one direct report might lead supervisors to give just the average raise, regardless of employee's performance.

So like if like one manager has one employee, so he [manager] only had 2% [merit pool], so even if she [employee] got a higher evaluation, he still only had 2% to give her. Now, he could ask within the department, do we have some more money within our whole unit that maybe she can get a 2.5 [percent increase] because she had an – you know, outstanding year. And so then they worked with our Chief Financial Officer on that.

As the number of direct reports underneath a supervisor increases, supervisors ostensibly have more opportunity to distinguish between employees. In contrast, with just one employee, greater pay-increases would require negotiation for additional funding.

When examining the organization as a whole, the average number of direct reports per supervisors might be greater for jobs lower in the hierarchy. Put differently, as one goes

up the hierarchical levels, fewer positions are available (i.e. there are only so many VPs) and thus fewer people report to the same supervisor. Additionally, similar to most other workplaces (Kanter 1977; Stainback and Tomaskovic-Devey 2012; Stainback et al. 2005), women tend to hold lower-level positions at B2G than equivalent men do. Similarly, externally hired employees enter the organization at a lower level, whereas promoted employees tend to work in jobs higher in the hierarchy. Therefore, it is possible that women work in groups that are larger, meaning they share the same supervisor with more employees than men do.

This might affect earnings as follows. If women – especially externally hired women – work in positions lower in the organizational hierarchy, they are more likely to work in larger teams. If larger teams allow more differentiation, then this might create more room for biases based on gender or tenure, causing externally hired women to be disadvantaged compared to externally hired men who enter into higher paygrades and work in smaller teams.<sup>59</sup>

*H7: Larger teams allow more supervisory discretion, which will have negative effects on women's earnings.*

*H8: Accounting for team size will explain flatter earnings trajectories among externally hired women compared to hired men.*

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<sup>59</sup> In addition to team size, I also examined the gendered effect of being in a resource rich environment. Depending on their revenue sources and relative negotiating power in the organization, some departments have a greater budget for pay increases than other departments. If supervisors hold gender biases then these biases should affect raises more strongly when more funds are available. I.e. when there are only funds for a 1% increase then differences should be more compressed than when departments can afford average pay increases of 6%. Thus, in models not shown here I examined the effect of being in a department with greater average pay increases on men's and women's pay increases. While women get relatively smaller raises in resource rich departments, the interaction did not explain why externally hired women earn less than hired men.

### **Pay grades – who “bumps” into the pay ceiling?**

At B2G, each job is associated with a specific paygrade, which dictates the minimum and maximum annual pay for each job in that paygrade. As demonstrated in Table 6-2 below, pay ranges are wider among higher-level grades than lower level grades, meaning that the difference between pay floor and ceiling is wider (absolute as well as relative to the grade mid-point) in higher grades. Specifically, between-grade differences in mid-points and pay ranges around the mid-point vary drastically and become wider in higher grades.

\*\*\* Table 6-2 here \*\*\*

Employees' relative position in the grade (i.e. how close they are to the ceiling) may affect their subsequent earnings growth. Merit-increases not only take into account previous performance ratings but also what B2G calls “range penetration.” This means that supervisors consider employees' relative position within their pay grade. For instance, if employees who performed exceptionally well get on average an 8% increase, then an exceptional performer with below-mid-point income would receive a 10% increase, whereas an exceptional performer with an above-average income would only get a 6 % increase.

Thus, organizations in which jobs are tied to predefined minimum and maximum pay may slow down hired employees' earnings progression, when they earn more than other equally well-performing employees do. This is especially the case when employees approach the pay ceiling in their grade. Many supervisors described this situation as stressful because high-performing employees are more likely to hit the ceiling and are especially frustrated when they get no further pay increases. To avoid situations in which

employees get no raises, supervisors slow earnings growth down well before employees hit the ceiling. Eric describes the frustration associated with being close to the ceiling:

If you have someone that's a high earner and they're about to hit their max, they won't get anything else. So the sky is not the limit. If you don't slow [employees] down after a certain percentage before the ceiling, they're going to get frustrated once they hit the ceiling, right, and they're going to get upset saying this isn't fair!

This illustrates that supervisors are alert to how close employees are to the ceiling and the need to slow employees down well before they reach the maximum pay. Pay grades and closeness to the pay ceiling might explain growing gender inequality among externally hired employees as follows. If both men and women get a hiring premium, and if women enter jobs in lower pay grades, and if lower grades have narrower ranges, then externally hired women might start out relatively closer to the pay ceiling than hired men do. If externally hired women enter their job closer to the ceiling, then their income should grow slower as the organization is preventing them from hitting the pay-ceiling.

*H9a: Externally hired women's starting salary is relatively closer to the pay-ceiling than men's or promoted employees' starting salary.*

*H9b: Employees closer to the ceiling receive smaller raises than employees further away from the ceiling do.*

*H10: Accounting for closeness to the pay ceiling will explain flatter earnings trajectories among hired women (i.e. the interaction between mode of job entry and gender becomes non-significant).*

## **DATA AND METHODS**

To test these explanations, I use the same data and models as in the previous chapter, which looked at all raises over the course of employees' job spell. For more detail on the personnel and interview data, and analytic method, please see Chapter 3. Also, please see discussion of Table 5-8 in the previous chapter on the findings regarding the pay increases. I use these

data and add variables that gauge the effect of work-life balance, gendered perceptions of justice, occupational demography, team size and closeness to the pay ceiling.

Although most of my explanations focus on gender differences among externally hired employees, I focus on replicating previous models that included both hired and promoted employees (instead of solely focusing on hired employees). This enables me to assess whether mechanisms can explain the original patterns found in the previous chapter. I consider mechanism to be a viable explanation when gender disparities in earnings increases are no longer greater among externally hired employees compared to internally promoted employees (i.e., the interaction effect weakens or becomes non-significant).

All models include the same controls for employee, job and labor market characteristics as the models in Chapter 5. Employee characteristics include race and ethnic group, highest degree (less than BA, BA, MA or PhD), years of labor market experience, years of firm and job tenure, most recent performance rating, individuals' turnover, promotion and transfer hazards, time since last raise or job entry, and fixed-effects for age categories, birth cohort, starting month, and type of raise. Job characteristics include the size of business unit and fixed-effects for pay grade, business unit, and job function. Labor market controls include annual state-level unemployment rate, and fixed effects for economic recession periods. The dependent variable is the natural logarithm of relative pay increase (pay increase relative to previous earnings). To test the explanations discussed above, I add control variables measuring work-life balance, gendered perceptions of fairness, occupational segregation and organizational practice to the model (M4. Tab 5-8). I describe new variables below.

*Work Life Balance – Cumulative time on paid and unpaid leave.*

I derive employees' time on paid and unpaid leave from the personnel records. B2G records when employees take a paid or unpaid leave and when they return. I aggregate the *number of days spent on leave* within each job spell. This means that time on leave resets when employees enter a new job via promotion or transfer.

I do not distinguish between different reasons for leaving. Although B2G technically records different reasons (e.g. FMLA – childcare, personal medical reasons), supervisors are responsible for entering that information into the HR system and the vast majority of leaves are categorized as “other leave.” This may indicate either that very few employees use FMLA or that supervisors prefer not to categorize leaves as such. Consequently, days on leave indicate absence for any reason, including but not exclusive to family related reasons.

*Hiring premium and gendered perceptions of justice*

To gauge average hiring premium, I first calculate the average starting salaries<sup>60</sup> in each pay grade/ job function cell. As some pay grade/ job function cells are relatively small (less than 50 employees), I do not disaggregate starting salaries by year. While I do not account for temporal variation in average starting salaries, I do use inflation-adjusted income (annual, full-time equivalent income from salaries and wages) which takes into account some economic fluctuation. In the next step, I calculate dividing employees' starting salary by the average starting salary in their respective pay grade/occupation cell to assess

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<sup>60</sup> Starting salaries include salaries for externally hired as well as internally promoted and transferred employees.



*employees' relative starting position*. A ratio below 1 indicates that employees receive less than the average starting salary whereas a ratio above 1 indicates an above-average starting salary.

Arguably, greater deviation from the average salary have less of an impact in jobs where salaries vary more in general. Hence, in addition to the average starting salary, I also control for the *standard deviation of earnings around the mean*. Greater variation means that starting salaries are more heterogeneous within a job function/ paygrade cell.

### *Occupational Segregation*

The *percentage female* captures the number of female employees relative to total employment in a given job function in a given year. I also calculated % female for each department/ job function cell to take into account that sex segregation varies between departments. Both measures provide the same substantive results in the analyses.

### *Women's position and organizational practices*

In most (but not all) personnel records, B2G indicates a supervisory identification number for each employee. To calculate the *number of direct reports with the same supervisor*, I counted the number of employees with the same supervisor ID within a single year. For these analyses, I exclude employees with missing supervisor information from the sample.

To gauge *employees' relative position in the pay range*, I subtract employees' current annual, full-time equivalent earnings (in current dollars) from the predefined pay floor in employees' pay grade. Next, I divide employees' distance to the pay floor by the width of the pay range to assess how close employees are to the pay ceiling. For instance,

if the pay range in a given grade ranges from \$80,000 (pay floor) to \$120,000 (pay ceiling) an employee earning \$90,000 would be in the 25<sup>th</sup> percentile within the range and therefore the “distance to ceiling” measure takes on a value of 25. The higher the value the closer the employee is to the ceiling. Employees with a value of 0 make the minimum pay (i.e. earn at the pay floor), whereas a value of 100 indicates that an employee has hit the pay ceiling. As the ratio has heavy right tails, I take the square root of ratio in the multiple regression.

## **FINDINGS**

### **Descriptive Analyses**

Table 6-3 shows how the new control variables are distributed across hired and promoted men and women. Similarly, Table 6-4 shows the bivariate correlations.

\*\*\*Table 6-3 and 6-4 here\*\*\*

#### *Work-Life Conflict*

The descriptive analyses show that employees spend relatively few days on leave. Promoted employees stay on leave for longer than externally hired employees do. Consistent with the literature on the gender division of household labor (Maume 2008; Sayer 2005), women spend more days on leave than men do. Confirming Hypothesis 1a, women are on leave for about five to six days per year whereas men are on leave for two to three days. Gender differences are constant across hired and promoted employees, meaning that women take more time off, regardless of job mode entry.

#### *Hiring premium*

As shown in the previous chapter, promoted employees’ starting salaries are lower than hired employees’ starting salaries in similar jobs, regardless of gender. At the same time,

hired employees and women work in environments with less variation in starting salaries than men and promoted employees. Thus, externally hired women receive the same hiring premium as externally hired men do, but work in an environment in which there is significantly less variation around starting salaries.

### *Occupational Segregation*

With regard to occupational sex segregation, the descriptive analyses confirm that B2G's employees are predominantly female. Within the organization, men tend to be concentrated in jobs that are more gender integrated, whereas women are more likely to work in highly female-dominated occupations. This pattern is consistent with the broader literature on establishment-level occupational sex segregation (e.g., Stainback and Tomaskovic-Devey 2012; Stainback et al. 2005).

### *Women's Position and Organizational Practices*

Women and externally hired employees enter into jobs that are located in lower pay grades. As expected, externally hired women enter the organization at the lowest levels, whereas promoted men enter at the highest grade - almost 3 grade-levels above externally hired women.

With regard to team size, gender differences in team size depend greatly on job entry mode. Among externally hired employees, women work in bigger teams than men do, sharing their supervisor with approximately five other employees. In contrast, externally hired men only share their supervisor with four other employees. When looking at promoted employees, the gender difference flips, meaning that promoted women work

in significantly smaller teams than men do. Overall, men's team size is independent of job entry mode, but women's team size is noticeable greater among hired employees – causing hired women to work in the biggest and promoted women to work in the smallest teams. When looking at the extreme case of being the only direct report, gender differences however, no longer depend on mode of job entry. Among hired and promoted employees, women are actually more likely to be the only direct report.

Regarding closeness to the pay ceiling, all employees tend to be in the lower range (i.e. in the 30<sup>th</sup> percentile) of their pay grade. Moreover, as hired employees not only receive a hiring premium but also enter in lower, narrower grades, hired employees tend to be slightly closer to the pay ceiling than promoted employees are. However, as women's salaries are on average lower than men's salaries, women are lower in the pay range than men are, regardless of mode of job entry. This contradicts the expectation that externally hired women enter closer to the pay-ceiling (Hypothesis 9a). Instead, externally hired men enter closest to the ceiling.

### **Multivariate Analyses**

Next, I replicate the analyses from Model 4 in Table 5-8 in Chapter 5. I focus on the magnitude of pay increases conditional on employees receiving a raise, as Chapter 5 demonstrated that earnings disparities result from the amount employees receive and not from infrequent pay increases or selective attrition. In the following analyses, I replicate these models and test whether greater gender disparities among hired than promoted employees are due to potential work-life conflict, gendered perception of fairness, occupational segregation, or organizational practices. As the models use the same control

variables, I only present key explanatory (gender and mode of job entry) and added control variables.

### **Work-Life Conflict**

Table 6-5 examines how number of days on leave affect annual pay increases. Model 0 is the baseline model (same as in Table 5-8, Model 4, in Chapter 5) without the additional controls. To examine whether longer time on leave is associated with lower income (Hypothesis 1b), I add cumulative days on leave in Model 1. The results show that having been on leave for longer periods does not affect subsequent earnings increases. This rejects Hypothesis 1b, which predicted that being on leave for longer periods of time will result in lower earnings increases in that year. It is possible that employees put in extra effort before and after the leave to prevent negative performance ratings.

\*\*\* Table 6-5 here \*\*\*

To examine whether penalties might only affect externally hired employees, I add an interaction between time on leave and mode of job entry in Model 2.<sup>61</sup> Again, the effect fails to reach conventional levels of significance. This rejects Hypothesis 1c and indicates that hired employees are not taxed more than promoted employees for going on leave. Similarly, comparing the baseline model with Model 1 and 2 shows that controlling for days on leave does not change the coefficients for gender and mode of job entry. Contrary to Hypothesis 2, *this means that accounting for time on leave does not explain why externally hired women have smaller earnings increases.*<sup>62</sup> Although this analysis indicates

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<sup>61</sup> I also ran models with an interaction between time on leave and gender, to examine whether women are more taxed for taking time off. This interaction failed to reach conventional levels of significance. I also ran the models using: number of times employees request a leave, logged length, logged number of leaves, and a dummy indicating taking a leave at least once in the current job spell. All measures provide similar substantive results

<sup>62</sup> I also ran models with a dummy for childbearing age (age 18-40) and interacted it with being female to test for the effect of a motherhood penalty / fatherhood bonus. The results showed a negative effect for

that employees are not taxed for taking a leave, maternal and parental status might still affect earnings outcomes as being married and having a young child is associated with more inter-organizational mobility for women and more intra-organizational mobility for men (Valcour and Tolbert 2003). Moreover, women are more likely than men are to switch employers for family- and not career related reasons (Keith and McWilliams 1995), which might affect mobility outcomes. Unfortunately, the left-censored nature of the personnel data does not allow me to assess this possibility.

### **Hiring premium**

Table 6-6 examines how employees' deviation from the average starting salary in their occupation/paygrade cell affects subsequent earnings increases. For that purpose, Model 2 adds the ratio between employees' starting salary and the average starting salary in that occupation/paygrade cell.<sup>63</sup> As many supervisors mentioned taking into account whether employees enter low or high in their paygrade, I expect employees with greater starting salaries to receive smaller relative earnings increases. Looking at Model 2 the opposite is the case: Those starting at a higher starting salary also receive greater earnings increases, which rejects Hypothesis 3a. Although I control for performance and other human capital measures, it is possible that these results reflect unmeasured differences in human capital

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being in childbearing age for women and a positive effect for men. This relationship lost statistical significance after controlling for more detailed age categories in addition to the childbearing dummy. Adding a control for childbearing age did not change the effect of gender and mode of job entry.

<sup>63</sup> Arguably, greater deviation from the average is less "problematic" when all employees deviate more. Thus in additional analyses not shown here, I controlled for the average deviation around average starting salaries in an occupation/paygrade cell. Results showed that employees in jobs with greater variation also get more raises, but being in a job with more variation in starting salaries did not change the positive effect of entering with an above-average salary.

or competitive aspects (i.e. the reason why this person came in so high might motivate B2G to also give this employee greater increases).<sup>64,65</sup>

\*\*\* Table 6-6 about here \*\*\*

In Model 2, I add an interaction between being female and deviation from average salaries. Contrary to Hypothesis 3b, the effect of receiving a hiring premium is independent of employees' gender, meaning that supervisors do not tax women more than men for receiving a hiring premium. A comparison across models also rejects Hypothesis 4, *because accounting for higher starting salaries and a potentially gendered penalty for starting higher in the range does not account for the small earnings increases among externally hired women compared to hired men.*

### **Occupational Segregation**

Next, I examine whether flatter earnings growth among externally hired women is due to different norms regarding salary compression among female and male-dominated occupations. Specifically, men are most concentrated in managerial and technical job, where men make up between 60-55 percent of all employees. To examine whether there is less pay compression in male-dominated occupations, Table 6-7 models pay increases separately for technical employees (Model 1), managerial employees (Model 2) and the more female-dominated non-technical and non-managerial jobs (Model 3).

\*\*\* Table 6-7 here \*\*\*

The results are somewhat mixed. Although not significant, the negative effect for being promoted in Model 1 (b= -0.44), suggests that hired men in technical jobs actually receive

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<sup>64</sup> I also tried using a dummy indicating that employees started with above-average starting salaries. Findings did not differ.

<sup>65</sup> As hiring premium and salary at entry are very closely related, I took out the control for "salary at entry" in additional analyses. This did not affect the substantive results for receiving a hiring premium.

greater pay increases than internally promoted employees, thus *exaggerating* the initial hiring premium. In contrast, the coefficients among promoted employees in managerial (M2) and non-technical & non-managerial employees (M3) trend in a positive direction (they are not significant). In additional analyses not shown here, I added combined all three groups to examine whether the effect entering a job via promotion varies significantly by occupational group. These interactions failed to reach statistical significance, which indicates that differences in wage compression across occupations are not significant. Likewise, gender gaps among externally hired employees also did not vary significantly across occupational groups. This means that externally hired women still receive smaller pay increases than hired men across all groups.

In additional analyses, I also divided major job functions by the average job tenure within these groups (i.e. job functions with high, medium, and low tenure length). To prevent a negative effect of inequality on morale, job functions with longer job spells may compress earnings more by giving smaller pay increases to newly hired employees (Bewley 1999; Galuscak et al. 2012). As women are more concentrated in occupations with higher tenure, they may be more affected by active pay compression, resulting in a slower wage growth than comparable men. Results however, showed that gender earnings differences between hired and promoted employees did not vary between high and low tenure occupations. *In summary, Table 6-7 rejects Hypothesis 6, which predicted that gender differences in compensation are due to men and women working in different occupations. I reject the hypothesis because the data suggest that externally hired women in technical and non-technical occupation receive smaller raises compare to hired men.*



### **Organizational Practices**

#### *Team size – More Room for Differentiation?*

Next, I examine whether team size explains why externally hired women receive smaller pay increases. As about 10% of employees have no supervisor on record, I perform these analyses on the subsample of employees who have a supervisor on their file. The baseline model M0 shows the effect of gender and mode of job entry for employees with a supervisor on record, without the controls for team size. When looking at the smaller subsample, the interaction between gender and mode of job entry becomes weaker and non-significant, meaning that gender disparities among hired and promoted employees are similar. However, as the main effect for gender is negative and the main effect for promotion is positive, hired women still receive the smallest earnings increases.

\*\*\* Table 6-8 here\*\*\*

In Model 1, I add a dummy indicating whether a given employee is the only person reporting to their supervisor. The measure fails to reach conventional levels of significance and does not affect earnings. In Model 2, I test Hypothesis 7, which predicted that women should benefit from being in smaller teams and especially from being the only direct report (as large teams provide more opportunities for supervisors to distinguish between employees). In the interviews, supervisors indicated that they would give employees just the average pay increase when they were the only direct report. Results in Model 7 confirm this hypothesis. The positive and significant interaction between being the only direct report and being female indicates that women's pay increases are greater when they are the only direct report than when women work in teams with more than one direct report per supervisor.<sup>66</sup>

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<sup>66</sup> Additionally, I ran models with a count measure for number of direct reports (ranging from 1-30). These results were similar, meaning that women's raises were smaller the bigger the team. This trend however,

Comparing across models shows that controlling for team size and its gendered effects does not account for smaller pay increases among externally hired women. Instead, gender disparities in pay raises grow in magnitude after accounting for being the only direct report, meaning that the disadvantage becomes greater when controlling for team size. *This directly contradicts Hypothesis 8, which predicted that team size accounts for smaller pay increases among externally hired women compared to hired men.*

*Pay Grades – who “bumps” into the pay ceiling?*

In Table 6-9, I examine whether employees’ relative position in the pay grade and specifically their closeness to the pay ceiling accounts for lower pay increases among hired women compared to hired men. For that purpose, I add a measure that gauges closeness to the pay ceiling in Model 1 (higher values indicate that employees are closer to ceiling).<sup>67</sup> Similar to the analyses addressing the effect of hiring premium, the results in Model 1 indicate that employees closer to the ceiling receive greater and not smaller raises, holding constant performance. That is, many supervisors stated they were taking employees’ position in the pay range into account – meaning employees lower in the range get greater pay increases than equally well-performing employees who are already above the mid-point. As closeness to the ceiling results in greater (not smaller) raises, I reject Hypothesis 9b.

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was non-significant, which might indicate that women are less affected by very large teams but by being the only direct report.

In additional, analyses I also added a control for average raise given by a given supervisor to exclude the possibility that supervisors with single direct reports somehow have better access to resources. The control did not change the findings.

<sup>67</sup> In additional analyses, I also used a dummy indicating that employees are in the 60th percentile of the range and thus considerably close to the ceiling. These analyses provided the same substantive results as the continuous closeness measure.

\*\*\* Table 6-9 about here \*\*\*

In Model 2, I add an interaction term between closeness and being female, to test whether being close to the ceiling affects men and women differently, which it does not. Comparing across models demonstrates that accounting for closeness to the pay ceiling does not explain why externally hired women receive smaller earnings increases than externally hired men. *Instead, the effect of gender and mode of job entry remains remarkably stable. Therefore, I reject Hypothesis 10, which predicted that accounting for closeness to the ceiling explains why externally hired women fall behind.*

### **Additional Analyses**

#### *Intersectionality between race and gender*

Table 6-10 shows the analyses separately for Non-Hispanic White, Black, Asian employees and employees of other race or ethnicities. It demonstrates that gender patterns are very similar across the different race and ethnic groups. Generally, the effect of gender is significant only among White employees, which is likely due to their greater sample size. Given however, that the magnitude and directionality of the gender effects (female, female\* promoted) are similar across models, I infer that externally hired women receive smaller pay increases than hired men, while no or less gender disparities exist among internally promoted employees, regardless of race. However, when running the HLM models separately by race, gender disparities among externally hired employees primarily arise among black employees. While addressing this intersectionality is unfortunately beyond the scope of this paper, future research should examine how race, gender and mode of job entry intersect and whether black women see particularly slow earnings growth after entering a job via hire compared to hired black men.

\*\*\* Table 6-10 here \*\*\*

*Within-unit variability in pay increases*

The interviews suggested that supervisors might differ in how they use pay raise criteria such as performance evaluations, position in pay range and budget limits. Drawing on previous studies, that demonstrate that accountability and transparency reduces disparities (e.g., Castilla 2015), I expect gender disparities to be smaller in units where supervisors use criteria more consistently. I.e. if units determine pay increases centrally, then everyone in that unit with the same rating and position should get the same relative raise. In contrast, if units leave it up to the individual supervisors to set merit-increases, then there should be greater variability in pay raises for employees of the same rating and the same position.

Although I cannot tell whether or how much B2G's units vary in their pay-setting policy, I can examine variability in annual pay increases. For that purpose, I divided all employees within each unit into 5 performance groups (performance rating: 2 or less, 3, 4, 5, or missing) and 3 "position" groups (below 90% of mid-point, 90%-110% of mid-point, and above 110% of midpoint). For each of these 5x3 groups, I calculated the standard deviation in relative annual pay increases in each unit and fiscal year. Next, I added the amount of variation across these groups, creating a measure of variability that is higher the more variability existed around pay increases for employees of the same performance rating and position in the range.

Using this measure, I divided units into low, medium and high variation and ran the analyses separately for each of these groups. My expectation was that gender disparities among externally hired employees should be greater in units with high variability than in units with low variability. Results in Table 6-11 show that variability around pay increases does not have a consistent effect on gender disparities among externally hired employees.

As demonstrated in the different panels, minimal changes in the cut-off points between low, medium, and high variability resulted in very different patterns. Thus, there does not seem to be a consistent relationship between higher variability in pay increases and greater gender disparities among hired employees.<sup>68</sup>

\*\*\* Table 6-11 here \*\*\*

*Before and After Introduction of Merit-System*

This dissertation focuses on the data between 2005 and 2013 as no performance data is available prior to 2005. B2G started recording performance evaluations in 2005 because it switched to a performance based pay system, whereas it relied on an ‘across-the-board’ raise system before. In Table 6-12 below, I reexamine the effect of job entry mode before and after the change (i.e. before and after 2005). The table shows that gender and job entry mode have much stronger effects after 2005 (in terms of magnitude and significance), especially at job entry. With regard to the intersection between gender and job entry mode, the results show similar patterns that however, do not reach conventional levels of significance before 2005. Meaning that over time, gender earnings gaps widen among externally hired employees while differences stay steady among promoted employees. Hence, while this pattern exists before and after 2005, it does not reach significance before 2005. This might be a result of the much smaller sample size in the earlier years (i.e. 7000 job spell years before 2005 vs. 23,000 after 2005) or it may indicate that these patterns were actually non-existent before 2005 as pay increases were not tied to performance differences between employees.

\*\*\* Table 6-12 here \*\*\*

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<sup>68</sup> As variability is greater in units with more resources, i.e. greater merit-pool, I controlled for the size of the average annual increase in that unit in that year.

**Others**

I also examined the role of the recession, which resulted in substantial pay and hiring freezes at B2G. I ran the analyses separately for pre-recession years (2005-2007), recession years (2008-2010), and post-recession years (2011-2013), but patterns did not differ significantly.

Additionally, I considered the following other factors: gender-match between supervisor and direct report, demographic make-up of department and token status of employees, and average raises given in a department. None of these factors affected the overall pattern.

**CONCLUSION**

The objective of this chapter was to explore why externally hired women receive smaller pay increases after entry than hire men in similar jobs, and why there are no gender differences among internally employees. I examined four major explanations: First, the effect of potential work-life imbalance, which may result in more paid and unpaid leave taken among women than men. More time on leave might have a negative effect on subsequent raises, particularly among externally hired employees who are still building a record of accomplishments. Second, hired employees might receive smaller pay increases when their starting salary was higher than the average salary, in an effort to compress salaries between hired and promoted employees. Moreover, gender differences in the perception in deservingness, supervisors might tax hired women more than hired men for receiving a hiring premium. Third, earnings differences may be produced by differences between male and female-dominated occupations. If male-dominated occupations are less likely to compress earnings differences between hired and promoted employees, then hired men would have faster earnings growth than hired women in female dominated

occupations. Finally, I examine how team size and closeness to the pay ceiling affect gender disparities. In this regard, hired women might receive smaller pay increases than hired men, because hired women work in bigger teams or are located closer to the pay ceiling.

I summarize the results in Table 6-13 below. Overall, none of these explanations accounted for greater gender disparities among externally hired employees compared to internally promoted employees. As Table 6-13 suggests, in many instances the distribution of risk factors were as expected but they left earnings unaffected or even affected them in the opposite direction. This suggests that there may be HR measures that eliminate these factors as potential sources of inequality (e.g., employees are not penalized for taking a leave).

\*\*\* Table 6-13 here \*\*\*

Consequently, it remains unclear why greater gender disparities arise over time among hired employees. As discussed in Chapter 5, growing disparities among hired employees might be due to men's and women's pre-hire differences that affect later earnings progression or emerging disparities might be a result of how organizations distribute rewards. Due to the left- and right-censored nature of the personnel data, my ability to test for pre-hire factors (e.g., reason for leaving, previous experience) or other unobserved differences between employees (e.g., qualitative human capital differences, marital and parental status) are limited. However, most individual differences should affect pay increases via their effect on employees' performance. As greater disparities among hired men and women persist after controlling for performance other organizational

mechanisms might be at play. Future research should continue to examine by what mechanisms mode of job entry affects men and women's earnings after entry.



## TABLES AND FIGURES

Table 6-1. Supervisors: Common scenarios by occupation

	HR	IT	F&A
Scenario 2	4	2	2
Scenario 3	-	3	2
Undecided	1	2	-
<b>TOTAL</b>	<b>5</b>	<b>7</b>	<b>4</b>

Table 6-2. Pay ranges in lower and upper pay grades

	Mid-Point	Pay Floor	Pay Ceiling	Range (Ceil-Floor)	Range relative to Mid-point
Lowest grade (grade 7)	\$ 26,610	\$ 20,708	\$ 34,137	\$ 13,429	50%
Middle grade (grade 17)	\$ 57,910	\$ 44,546	\$ 74,837	\$ 30,291	52%
Highest grade (grade 27)	\$ 160,397	\$ 116,652	\$ 214,349	\$ 97,697	61%

Note: Managerial and professional jobs start at grade 7. Non-professional jobs start at grade 1.

Table 6-3. Descriptive statistics additional processes

	Externally Hired			Internally Promoted			$\Delta$ hired
	Men	Women	Difference	Men	Women	Difference	$-\Delta$ promoted
<b>Work-Life</b>							
# of times on leave	0.07	0.15	-0.08 ***	0.08	0.15	-0.07 ***	-0.01
# of days on leave	2.11	5.08	-2.97 ***	2.77	6.44	-3.68 ***	0.71
<b>Hiring Premium and Perceived Justice</b>							
starting salary							
(rel to average start salary)	1.01	1.00	0.00	0.96	0.96	0.00	0.00
variation in starting salary	13.4	13.0	0.39 ***	13.9	13.4	0.49 ***	-0.10
<b>Occupational Segregation</b>							
% female	0.57	0.70	-0.13 ***	0.57	0.72	-0.15 ***	0.02 ***
% technical jobs	0.36	0.09	0.27 ***	0.38	0.07	0.31 ***	-0.04 ***
% managerial jobs	0.06	0.02	0.04 ***	0.07	0.04	0.03 ***	0.01 *
% non-tech./ non-man jobs	0.59	0.89	-0.30 ***	0.57	0.90	-0.33 ***	0.03 *
<b>Organizational Practices</b>							
pay grade at job entry	19.5	18.2	1.37 ***	20.9	19.4	1.55 ***	-0.19
# of direct reports	5.92	6.26	-0.34 *	5.88	5.42	0.46 ***	-0.80 ***
only one direct report	0.10	0.12	-0.02 *	0.08	0.11	-0.03 ***	0.01
closeness to ceiling	36.9	34.7	2.20 *	30.4	27.8	2.60 *	-0.40
in 60th percentile or above	0.17	0.15	0.02	0.12	0.08	0.04 **	-0.02

Note: \*p <0.05, \*\* p<0.01, \*\*\* p<0.001, significance tests based on two-tailed t-test. The following statistics have been calculated based on the whole sample: work-life, % female, % in different occupations, number of direct reports, closeness to ceiling and 60<sup>th</sup> percentile. I calculated the following statistics using only the person year at entry: Starting salary, variation in starting salary, and pay grade at job entry

Table 6-4. Zero-order correlations additional processes

	mean	std	1)	2)	3)	4)	5)	6)	7)	8)	9)
1) salary increase in %	1.68	2.9	1								
2) promoted	0.50	0.5	0.08	1							
3) female	0.70	0.5	0.01	0.05	1						
4) pay grade	19.2	3.9	0.03	0.12	-0.15	1					
5) days on leave	0.12	0.5	0.05	0.01	0.07	0.01	1				
6) relative starting salary	0.99	0.1	-0.03	-0.19	-0.01	-0.05	-0.02	1			
7) var around start salary	13.23	2.4	0.04	0.07	-0.05	0.67	0.00	-0.03	1		
8) percent female	0.67	0.2	0.01	0.06	0.36	-0.25	0.04	0.04	-0.03	1	
9) one direct report	0.11	0.3	0.00	-0.01	0.04	-0.10	0.03	0.02	-0.07	0.05	1
10) closeness to ceiling	33.8	25.1	0.10	-0.13	-0.03	0.16	0.00	0.65	0.10	0.05	0.00

Table 6-5. HLM. Work-life conflict

	M0	M1	M2
	Baseline	Days on Leave	Leave * Entry Mode
intercept	1.368 ***	1.373 ***	1.376 ***
salary at entry	-0.102 *	-0.102 *	-0.102 *
<b>Gender * Job Entry</b>			
female	-0.049 *	-0.049 *	-0.050 *
promoted	0.026	0.026	0.027
female * promoted	0.060 *	0.060 *	0.059 *
<b>Leave</b>			
days on leave	-	0.000	0.001
days on leave * promoted	-	-	0.000
<b>Controls?</b>	yes	yes	yes
N (job spell months)	10,286	10,286	10,286
N (job spells)	4,952	4,952	4,952
N (employees)	3,356	3,356	3,356
LL	-7,386	-7,386	-7,384
BIC	15,973	15,982	16,007

Note: \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ , errors clustered by job spell and employee ID.

Table 6-6. HLM. Hiring premium and gendered perceptions of justice

	M0	M1	M2
	Baseline	Rel. Start Dif	Start Dif * Female
intercept	1.368 ***	-1.394 ***	-1.348 ***
salary at entry	-0.102 *	-1.646 ***	-1.645 ***
<b>Gender * Job Entry</b>			
female	-0.049 *	-0.053 **	-0.112
promoted	0.026	0.020	0.018
promoted * female	0.060 *	0.060 *	0.063 *
<b>Hiring Premium</b>			
relative start difference	-	1.727 ***	1.686 ***
start difference*female	-	-	0.059
<b>Controls?</b>			
	yes	yes	yes
N (job spell months)	10,286	10,286	10,286
N (job spells)	4,952	4,952	4,952
N (employees)	3,356	3,356	3,356
LL	-7,386	-7,238	-7,237
BIC	15,973	15,685	15,694

Note: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001, errors clustered by job spell and employee ID.

Table 6-7. HLM. Occupational differences

	M0	M1	M2	M3
	Baseline	Technical Employees	Mangerial Employees	Non-tech. & Non-man.
intercept	1.368 ***	1.977 ***	5.495 **	1.266 **
salary at entry	-0.102 *	-0.506 ***	-0.198	-0.062
<b>Gender * Job Entry</b>				
female	-0.049 *	-0.115 **	0.011	-0.036
promoted	0.026	-0.044	0.180	0.040
promoted * female	0.060 *	0.096	0.074	0.055
<b>Controls?</b>	yes	yes	yes	yes
N (job spell months)	10,286	1977	361	8007
N (job spells)	4,952	993	193	3844
N (employees)	3,356	638	164	2692
LL	-7,386	-1278	-226	-5748
BIC	15,973	3314	941	12575

Note: \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ , errors clustered by job spell and employee ID.

Table 6-8. HLM. Only one direct report

	M0	M1	M2
	Baseline	Team Size	Team Size * Gender
intercept	2.610 ***	2.610 ***	2.610 ***
salary at entry	-0.118 *	-0.118 *	-0.119 *
<b>Gender * Job Entry</b>			
female	-0.046 *	-0.046 *	-0.055 *
promoted	0.021	0.021	0.020
promoted * female	0.020	0.054	0.054
<b>Team Size</b>			
one direct report	-	0.009	-0.055
one report * female	-	-	0.082 *
<b>Controls?</b>	yes	yes	yes
N (job spell months)	9,458	9,458	9,458
N (job spells)	4,671	4,671	4,671
N (employees)	3,222	3,222	3,222
LL	-6,745	-6,745	-6,743
BIC	14,653	14,662	14,667

Note: \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ , errors clustered by job spell and employee ID.

Table 6-9. HLM. Closeness to ceiling

	M0	M1	M2
	Baseline	Close to Ceiling	Ceiling * Gender
intercept	1.368 ***	1.076 **	1.093 **
salary at entry	-0.102 *	-0.319 ***	-0.319 ***
<b>Gender * Job Entry</b>			
female	-0.049 *	-0.049 *	-0.071 *
promoted	0.026	0.028	0.026
promoted * female	0.060 *	0.061 *	0.064 *
<b>Closeness to Ceiling</b>			
closeness	-	0.017 ***	0.015 **
closeness*female	-	-	0.004
<b>Controls</b>	yes	yes	yes
N (job spell months)	10,286	10,286	10,286
N (job spells)	4,952	4,952	4,952
N (employees)	3,356	3,356	3,356
LL	-7,386	-7,375	-7,375
BIC	15,973	15,960	15,968

Note: \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ , errors clustered by job spell and employee ID.



Table 6-10. HLM. Effect of gender and job entry, by race

	M1: White	M2: Black	M3: Asian	M4: Other Race
intercept	1.227 **	2.174 ***	2.258 **	6.114 ***
salary at entry	-0.085	-0.232 *	-0.021	0.524
<b>Gender * Job Entry</b>				
female	-0.055 *	-0.049	-0.032	0.201
promoted	0.018	0.023	0.107	0.046
promoted * female	0.069 *	0.061	0.089	-0.226
<b>Controls?</b>	Yes	Yes	Yes	Yes
N (job spell months)	6,285	2,814	758	429
N (job spells)	3,025	1,335	373	219
N (employees)	2,045	900	255	156
LL	-4,466	-1,967	-497	-290
BIC	10,034	4,878	1,743	1,253

Note: \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ , errors clustered by job spell and employee ID.

Table 6-11. HLM. Within-unit variability in pay increases

Panel A. Variability cut-off based on value (i.e. one and two thirds of the max variability)

CUT-OFF 1	units w/ low variability	units w/ medium variability	units w/ high variability
intercept	0.510	1.787 **	1.895 ***
salary at entry	-0.159	-0.308 ***	0.011
<b>Gender * Job Entry</b>			
female	0.026	-0.078 +	-0.057 *
promoted	0.146 *	0.089 +	-0.033
promoted * female	0.017	0.042	0.077 *
<b>Controls?</b>			
	yes	yes	yes
N (job spell months)	1,680	2958	5648
N (job spells)	722	1464	2766
N (employees)	526	977	2019
LL	-944	-1959	-4186
BIC	2,638	4733	9356

Panel B. Variability cut-off based on percentile (i.e. bottom, middle and top third of units)

CUT-OFF 2	units w/ low variability	units w/ medium variability	units w/ high variability
Intercept	1.589 **	2.390 ***	1.817 ***
Salary at entry	-0.323 ***	-0.047	-0.006
<b>Gender * Job Entry</b>			
Female	-0.039	-0.083 *	-0.039
Promoted	0.072 +	0.070	-0.078 +
Female * promoted	0.071	0.030	0.090 +
<b>Controls?</b>			
	yes	yes	yes
N (jobspell months)	3464	2550	4272
N (jobspells)	1637	1246	2069
N (employees)	1129	883	1519
LL	-2118	-1838	-3097
BIC	5125	4452	7104

Note: \* p&lt;0.05, \*\* p&lt;0.01, \*\*\* p&lt;0.001, errors clustered by job spell and employee ID.

Table 6-12. HLM. Disparities before and after introduction of merit-system

	1998-2004			2005-2013		
	beta	std. error		beta	std. error	
intercept	9.726	0.070	***	9.980	0.078	***
job tenure	0.013	0.001	***	0.004	0.001	***
<b>Gender</b>						
female	-0.011	0.007		-0.027	0.005	***
tenure*female	-0.004	0.001	***	-0.002	0.001	***
<b>Mode of Job Entry</b>						
promoted	0.004	0.007		-0.022	0.005	***
tenure*promoted	-0.002	0.002		0.004	0.001	***
<b>Gender * Mode of Job Entry</b>						
female*promoted	-0.009	0.007		-0.002	0.005	
tenure*female*promoted	0.003	0.002		0.002	0.001	**
<b>Employee Characteristics</b>						
black	-0.019	0.006	**	-0.033	0.005	****
asian	-0.022	0.012		-0.025	0.008	**
other	-0.022	0.017		-0.033	0.010	***
bachelor	0.031	0.009	***	0.037	0.006	***
master	0.068	0.012	***	0.068	0.007	***
phd	0.092	0.018	***	0.082	0.010	***
ln experience	0.005	0.002	**	0.004	0.001	***
ln experience2	0.000	0.000		0.000	0.000	***
firm tenure	-0.005	0.008		-0.003	0.002	*
firm tenure2	0.001	0.002		0.000	0.000	**
performance: 4 of 5		-		0.007	0.001	***
performance: 5 of 5		-		0.015	0.001	***
performance: missing		-		-0.001	0.003	
age category		yes			yes	
generation		yes			yes	
turnover hazard		yes			yes	
<b>Job Characteristics</b>		yes			yes	
<b>Recession and Unemployment</b>		yes			yes	
N (job spell-years)		7,848			22,730	
N (job spells)		3,056			7,239	
N (employees)		2,039			4,280	
LL		11,446			36,182	
BIC		-21,870			-71,041	

Note: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001, errors clustered by job spell and employee ID.

Table 6-13. Summary of explanations

	<b>Distribution as expected?</b>	<b>Effect as Expected?</b>
Work-Life / time on leave	<b>YES</b> Women leave more often and longer than men do	<b>NO</b> Taking leaves does not affect earnings, regardless of gender
Hiring premium	<b>YES</b> Both men and women receive greater starting salaries than employees who enter the same position via promotion	<b>NO</b> Starting higher in the range does not result in smaller subsequent pay increases, regardless of gender.
Occupational Segregation	<b>YES</b> Women are more concentrated in non-technical and non-managerial employees	<b>NO</b> Being in a more male-dominated occupation or occupation with longer tenure does not affect pay compression between hired and promoted employees. It also does not affect gender disparities among hired employees
Team Size	<b>YES / NO</b> Hired women work in larger teams than hired men, but hired women are also more likely be the only direct report compared to hired men	<b>YES</b> Gender disparities are greater among larger teams than smaller teams. Gender differences are smaller between men and women working as single direct report than men and women in larger teams.
Closeness to ceiling	<b>NO</b> Men are closer to the ceiling than women, regardless of job entry mode	<b>NO</b> Employees closer to the ceiling are not penalized.

## Chapter 7

### Conclusion

As career patterns in the U.S. are shifting, more professional and managerial employees switch employers throughout their career (Bidwell et al. 2013; Bidwell and Mollick 2014; Cappelli 1999; Farber 2008; Hollister 2011; Osterman 1999). Although (voluntary) employer changes are associated with earnings increases (e.g., Topel and Ward 1992), men and women do not benefit equally from inter-organizational job mobility. Instead, switching employers is associated with greater earnings for men than for women (Brett and Stroh 1997; Dreher and Cox 2000; Dreher et al. 2011; Kronberg 2013; Lam and Dreher 2004). Less research addressed how disparities come about and what role organizational settings play in generating greater gender disparities among hired and promoted employees (except see: Petersen and Saporta 2004). As organizations distribute rewards among organizational members (e.g., Pfeffer 1981; Pfeffer and Ross 1990; Tomaskovic-Devey 2014), ignoring the role of organizational settings may result in an incomplete understanding of gendered mobility outcomes. Given employees continue to switch employers, and that inter-organizational mobility is associated with higher earnings for men, aggregate gender earnings gaps may continue to stall further or even reverse in the future.

This dissertation addresses how mode of job entry (i.e. entering a job via hire or promotion) affects men and women at job entry and over time, and employs a longitudinal, mixed-methods case study of careers in a large US organization (“BetterTogether”<sup>69</sup> or “B2G”). Similar to previous organizational studies (e.g., Acosta 2010; Barnett et al. 2000;

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<sup>69</sup> Pseudonym to protect the organization’s identity. Pseudonym describes the organization’s team-based culture.

Bidwell 2011; Castilla 2015; Chan 2006; Petersen and Saporta 2004), I rely on longitudinal personnel records 2005-2013. Additionally, 19 interviews with supervisors across different organizations give insight into organizational practices.

Below, I summarize the key findings of this dissertation and their theoretical implications. Then, I discuss the study's limitations and future direction of research. I conclude with an reexamination of individuals and organizations' the role in shaping career outcomes and discuss recommendations for work organizations.

## **SUMMARY OF FINDINGS AND THEORETICAL IMPLICATIONS**

### *Embedded Uncertainty and Organizational Interventions*

Greater gender disparities among hired than promoted employees may emerge because organizations use different procedures to set hired and promoted employees' pay. Because organizations have less information on hired than promoted employees, they may use different procedures to set externally hired employees' pay. Semi-structured interviews with 19 supervisors in different large organizations showed that greater uncertainty in the hiring process does indeed become embedded in organizational pay-setting routines.

Procedural differences between hired and promoted employees are particularly stark in the initial pay-setting process, where uncertainty is arguably the greatest. Here, organizations determine hired employees' starting salary by relying on firm-internal factors (e.g., equity), firm-external factors (e.g., pay for similar employees in other workplaces) and employees' education and training. Moreover, external candidates often initiate salary negotiations.<sup>70</sup> In contrast, pay for internally promoted employees primarily depends on employees' income in the previous position and how many pay grades employees climbed

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<sup>70</sup> Although these patterns might be driven by the greater representation of men among the examples of hired employees.

with the promotion. Several supervisors mentioned that these procedural differences are partially due to supervisors' certainty of employees' current earnings (and internal employees' awareness of that).

Literature suggests that these procedural differences may leave more room for supervisory discretion in the hiring process.<sup>71</sup> At the same time, supervisors repeatedly discussed how other organizational policies limited their discretion in the initial pay-setting process. For instance, HR compensation specialists provided salary recommendations based on candidate's resume and supervisors had to provide written justification if they wanted to deviate from these recommendations. Hence, although the hiring process might leave more room for supervisory discretion, organizations have other policies in place to minimize disparate outcomes. In contrast, subsequent distribution of pay increases is less standardized. This suggests that depending on the policies in place, organizations can widen or narrow gender disparities among hired employees.

#### *Long(er)-term, organizational perspective on career research*

The second major finding is that mode of job entry affects employees' earnings even after job entry. Results in Chapter 5 demonstrate that gender gaps were equally wide among hired and promoted employees at entry, but then gender disparities widened gradually among new hires, while disparities remained constant among internally promoted employees. Four years after job entry, 23% of the gender gap among hired employees is attributable to post-hire differences in pay increases that are beyond the compounded effect

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<sup>71</sup> E.g., because negotiations tend to be gendered and because other criteria such as qualitative human capital differences might leave room for interpretation.

of gender disparities at entry. Additional analyses show that neither selective attrition nor less frequent pay increases among hired women (compared to hired men) account for slower earnings growth. Instead, gender differences emerge because externally hired women receive smaller pay increases than externally hired men in similar jobs. In contrast, promoted men and women receive the same pay raises.

This emphasizes the importance of understanding at what point disparities emerge. In this regard, studies that only examine starting salaries or that do not distinguish between initial starting salary and subsequent earnings growth may mischaracterize the effect of entering a job via hire or promotion (as the gap changes further after entry). Most importantly, they may misidentify causal mechanisms that give rise to greater gender disparities among hired employees.

*Organizational perspective on gendered mobility outcomes*

Overall, I contribute to career research and our understanding of gender differences in mobility outcomes by laying the foundation for an organizational perspective on gendered mobility outcomes. I do so by combining several bodies of research. First, I draw on research that highlight procedural differences between inter- and intra-organizational mobility (e.g., Bidwell 2011; Bidwell and Mollick 2014; Doeringer and Piore 1971). Then, I expand Petersen and Saporta's (2004) idea of "opportunity structure for discrimination." Specifically, I draw on theories of gendered organizations (e.g., Acker 1990; Acker 2006; Burris 1996; Ferguson 1984; Kanter 1977) and literature that discusses the inequality-producing effect of supervisory discretion (e.g., Baron and Pfeffer 1994; Bielby 2000; Dovidio and Gaertner 2000; Lerner and Tetlock 1999; Salancik and Pfeffer 1978) to examine how procedural differences might affect earnings differences. Hence, this



dissertation draws attention to how organizational settings can narrow or widen gender differences among hired and promoted employees, regardless of employees' individual characteristics.

## **LIMITATIONS AND FUTURE DIRECTION**

The study has several limitations that provide room for future research. These include the types of entry modes, the population, the lack of pre-hire data, and generalizability of the findings. Given the complexity of organizational processes, this study examines a limited number of job entry modes and sample of employees. For instance, I focus on externally hired employees and internally promoted employees and do not discuss other internal moves such as transfers or demotions. Instead, I control for whether promotion co-occur with transfers or internal reorganizations. Therefore, future research should examine whether results would differ when considering other modes, such as transfers and demotions. Ideally, future research can draw a more direct comparison between the following three groups: a) external hires who experience an upward move vs internally promoted employee; b) lateral hires vs lateral transfers c) external hires who experience a downward move vs internally demoted employees.

Similar to previous studies (e.g., Dreher and Cox 2000; Petersen and Saporta 2004), I focus on professional and managerial employees, because increases in inter-organizational mobility particularly affected professional and managerial employees<sup>72</sup> (Kim 2013; Kronberg 2014) and because gender disparities among stayers and leavers are greater

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<sup>72</sup> Non-professional jobs were already precarious

among professionals (Kronberg 2013). It is unclear however, how employees in lower-wage jobs are affected by the externalization of job mobility. Although peripheral or “bad” jobs (Kalleberg 2011; Piore 1970) have always been precarious, it is possible that delayering of middle-management (Grimshaw et al. 2001) resulted in a less permeable boundary between good and bad jobs.

Furthermore, this study focuses on how modes of job entry affect gender earnings disparities.<sup>73</sup> Other ascribed characteristics such as race, age, nationality, parental status and sexual orientation however, also affect the outcome of job mobility (e.g., Alon and Tienda 2005; Dreher and Cox 2000; Dreher et al. 2011; Fuller 2008; Kronberg 2014; Looze 2014; McCall 2005; Rosenfeld 1992). Thus, future research can focus on how job entry modes affect disparities among other social groups. Most importantly future research should examine how these characteristics intersect. In this regard, Browne and Misra (2003) and Browne (2000) demonstrate that gender and other characteristics frequently intersect in the labor market, meaning that gender experiences differ for women of color, of lower class background or of different national origin.

Although detailed personnel records provide unique insight into how careers evolve in an organizational setting, they provide limited pre-entry information. This limits the comparability of hired and promoted employees. As I have no information on previous employment of externally hired employees, I am unable to determine whether externally hired employees made an upward, lateral, or downward move. In contrast, promotions are by definition an upward move for internal incumbents. Ideally, I would like to compare

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<sup>73</sup> Earlier analyses showed that mode of job entry does not affect race earnings differences.

inter- and intra-organizational mobility that is in the same direction (upward, lateral or downward).

As I cannot distinguish between externally hired employees who experience upward mobility and those who are not, hired employees may be more heterogeneous in their background than internally promoted employees are. Moreover, as women are more likely to move laterally and are less likely to move upwards than men are (Lyness and Schraeder 2006), heterogeneity is correlated with gender. Consequently, gender earnings differences among hired and promoted employees are potentially related to unobserved differences that vary systematically with gender and job entry mode.

I believe however, that the comparison between hired and promoted employees is theoretically and empirically valuable for several reasons: First, even if previous employment information was available for externally hired employees, it may not always be clear whether a new job equates to a promotion, lateral move or demotion. Especially when employees transition between different types of organizations (e.g., start-up vs. multi-national firms) responsibilities might increase even though pay or job title decreases and vice versa. In the job interview, external hires might conceal the nature of their move to portray themselves in a more favorable light. Thus, greater heterogeneity among externally hired employees is arguably part of the uncertainty that characterizes the hiring process. Put differently, uncertainty regarding employees' previous employment may not only be missing a measure in the personnel data but also unknown to the hiring organization. Examining the process by which organizations set employees' pay helps us understand how the more uncertain nature of the hiring process shapes organizational routines, which then affect employment outcomes.

Similarly, comparing income differences among hired and promoted employees provide important insights. Assuming that employer changes are more likely to represent a downward or lateral move for women and an upward move for men (Lyness and Schraeder 2006), my results represent a conservative estimate of the gender gap among externally hired employees. That is, if employees move laterally, they may already possess important job-specific skills. For instance, they may have already had the opportunity to manage a team of similar size. In contrast, employees who move upward have to familiarize themselves with the organization as well as with their new responsibilities. Consequently, laterally hired employees should excel faster than employees experiencing an upward move. If women are more likely than men to move laterally when changing employers, then *women should excel faster than men do* (who are more likely to move upward). My results however, show that hired women excel *slower* than externally hired men do, resulting in a widening gender earnings gap. This implies that the actual gender gap is even greater if we could control for employees' previous employment.

Finally, my study focuses exclusively on careers in large, highly formalized organizations. This is an ideal setting because not only do more than 50% of all employees in the U.S. work in large firms with more than 500 employees (SUSB 2008), but also these organizations are large enough to promote internally. The formalized nature enables an examination of how differences in the hiring and promotion process become codified in organizational routines. B2G also represents a very conservative site to earnings disparities, as larger organizations tend to have greater HR departments (Brewster et al. 2006;

Kalleberg et al. 1996) and possibly a higher degree of formalization. Both of these tend to reduce employment disparities (Baron et al. 2007; Kalev et al. 2006).

Smaller organizations may differ in that they are less formalized and provide fewer internal opportunities. Therefore, the context for inter- and intra-organizational job mobility is likely to be different (e.g., earnings growth might be achieved less via promotions but via faster growth in the job). Hence, I believe that my findings are primarily applicable to large, formalized settings. However, to fully understand how more frequent inter-organizational job mobility affects the workforce as a whole, future research should examine how frequent mobility between smaller employers affects earnings disparities.

Finally, while the case study provides the opportunity to examine potential mechanisms by which mode of job entry translates into earnings disparities, the static nature of organizational practices within B2G makes it difficult to assess causality. Without a change in practices over time or a comparison between similar organizations, it is difficult to assess whether specific practices affect mobility outcomes. For instance, it is unclear whether gender disparities at job entry are equally wide among hired and promoted employees because other HR policies minimize discretion at entry or because procedural differences between hired and promoted employees' pay determination do not actually create disparate outcomes.<sup>74</sup> Thus, future research should seize opportunities to compare organizational practices between organizations and/or over time.

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<sup>74</sup> I.e. if we could observe an organization with the same pay-setting process, but without the additional HR policies, would gender disparities still be equally wide among hired and promoted employees at entry? Alternatively, the non-difference at entry could imply that different procedures do not matter or that disparities arising from firm-internal bureaucratic rules are so severe that they cause similarly wide gaps among hired and promoted employees.

## **JOB ENTRY, GENDER EARNINGS DISPARITIES AND ORGANIZATIONAL PRACTICES**

Although the dissertation shows that job entry mode affects how organizations set pay, and that job entry mode is associated with different earnings outcomes for men and women, none of the proposed mechanisms in Chapter 6 could account for widening gender gaps among hired employees. Therefore, I conclude this chapter by discussing what evidence this dissertation provided for and against an organizational perspective on gendered mobility outcomes.

As discussed in Chapter 3, much inequality research focuses on what employees bring into the workplace. These approaches argue that differences in individual characteristics, such as education, work experience and access to networks result in earnings differences. Widening gender disparities among hired employees after entry could be a result of pre-hire differences between men and women that affect them over time. In support, the descriptive statistics show that hired women are significantly younger and have fewer years of experience than hired men do. In contrast, promoted women have more years of experience and are older than promoted men are.

Although I control for observed differences in education and tenure, the experience measure is imprecise and likely overestimates women's experience.<sup>75</sup> Moreover, I do not capture qualitative differences in employees' experiences. For instance, status of the previous firm might affect how competitive employees are (Rider and Tan 2015). Personnel records also do not include information on employees' networks, their marital

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<sup>75</sup> As I have no information on employees' actual experience before coming to B2G, I approximate labor market experience by subtracting employees' years of schooling (based on highest degree) from their age (in 5 year categories). As women's careers are more intermitted, the measure is likely to overestimate women's actual experience, leaving a residual gender gap that is attributable to gender differences in experience and not organizational factors. Additional information from employees' resumes would help addressing this gap and to refine this measure.

and parental status, and under what circumstances employees left their previous employer. A wealth of research discussed in Chapter 3 indicates that these pre-hire factors are correlated with gender and earnings, regardless of organizational practices.

Most of these individual characteristics however, should affect earnings primarily via job performance. For instance, more family-related reasons for inter-organizational mobility or less work experience would lower earnings for women because they may women's performance negatively. Indeed, when controlling for performance evaluations, gender disparities among hired employees narrow by almost 25%, which constitutes a significant decrease. This suggests that individual characteristics matter and that future research should consider how pre-hire differences affect hired employees after entry.

Although pre-existing characteristics may explain part of the widening gap among hired employees, it is notable that these characteristics do not produce greater gaps among hired employees at entry already. This may indicate that B2G's extensive effort to standardize the initial pay-setting process is effective. That is, using longitudinal personnel records of a large employer, Petersen and Saporta (2004) found significantly wider gender gaps among hired than promoted employees at entry. As interviews with supervisors in my study however, repeatedly discussed other HR practices to minimize disparities, and given that Peterson and Saporta's data was collected several decades ago, the results might imply that organizations have become more effective in minimizing biases in the hiring process. If that is the case, then organizational practices (e.g. central salary recommendations, pay ceilings) can effectively reduce gender disparities in mobility outcomes. Put differently, gender disparities among hired employees might be wider in organizations in which initial pay determination is less standardized. Gender disparities may be equally wide among

hired and promoted employees in organizations with more standardization. Hence, organizational settings might affect outcome disparities regardless of employees' characteristics.

Alternatively, gaps may emerge gradually because pre-hire differences are not yet observable at entry or come about later. For instance, economic theories of organizational learning argue that organizations can only evaluate employees' true match after employees work for the organization (Jovanovic 1979). If unobservable characteristics were not considered in the initial pay-setting process, but positively affect subsequent performance, then pre-hire differences would produce different outcomes only over time.<sup>76</sup> Similarly, if young professionals transition into parenthood only after job entry, then parental status would affect subsequent raises but not starting salaries. However, as discussed above, different characteristics would arguably result in greater earnings because they enable employees to perform on different levels.

The results however, show that performance ratings only account for 25% of the widening gap among hired employees. The remaining effect may result from workplace processes. In this regard, organizational literature suggests two major possibilities: First, the distribution of rewards might leave room for supervisory discretion, which may result in differential treatment of women. (e.g., Baron and Pfeffer 1994; Bielby 2000; Castilla 2015; Kalev et al. 2006; Salancik and Pfeffer 1978; Tetlock 1985). Hired women may be more vulnerable in situations with greater discretion than promoted women as hired employees

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<sup>76</sup> E.g., if organizations only count years of experience, but do not account for qualitative differences when setting starting salaries, then qualitative differences in work experience should only affect earnings after entry.



are still building a track record and thus there is less task-relevant information that may counter the effect of more diffuse status characteristics such as gender.

In this regard, additional in-depth interviews with supervisors across B2G's units might provide important insights into how different units approach the pay raise process.<sup>77</sup> Alternatively, future research can use the personnel data to approximate the effect of supervisory discretion, by comparing settings that are arguably high and low in discretion. For instance, the number of employees with missing performance evaluations within departments might be a useful proxy for an inconsistent application of the merit process. I would expect that gender disparities among hired employees are greater where more performance evaluations are missing.

Alternatively, literature on gendered organizations (e.g., Acker 2006; Burris 1996; Ferguson 1984; Kanter 1977; Williams et al. 2012) would suggest that differences do not arise from the lack of standardization, but from *how* processes are standardized – i.e. policies themselves can have disparate impacts. Although several structural explanations (e.g., closeness to ceiling) did not account for emerging pay disparities among hired employees in Chapter 6, future research can explore other possibilities. For instance, even though I control for employees' paygrade and broad job function, I cannot capture nuanced differences between jobs. In this regard, Acker (1989) and Bielby and Baron (1986) show that jobs are often sex labeled and associated with different rewards. If hired men enter different jobs than hired women, but both men and women enter via promotion into similar

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<sup>77</sup> My current sample within B2G was fairly limited in number and not representative of the different units

jobs, then differences in earnings growth may be due to how these jobs provide access to subsequent pay increases.

In summary, although this study could not identify a particular processes that increases disparities among externally hired employees, organizations' effect on gender differences in earnings outcomes should not be dismissed. Given disparities only arise after entry and that differences in performance ratings can only explain a small portion of the rising gap, may suggest that rising disparities are at least partially due to organizational practices (as opposed to pre-hire differences). For instance, the interview data and the broader literature suggest that gaps may result from inconsistencies in how supervisors give merit-raises. In this regard, Castilla's (2015) case study of changes to the merit-raise system demonstrates that organizational changes can be a very powerful tool to prevent disparate outcomes. This dissertation suggests that above and beyond individual differences in resources, organizations may be key to understanding and ameliorating gender disparities among hired employees.

### **POLICY RECOMMENDATIONS**

The evidence from the interviews and personnel records provides several suggestions for how organizations can create an environment in which entering similar jobs via hire or promotion has the same outcomes for men and women. For optimal implementation, organizations can make these changes in selected units first. This would enable organizations to assess the impact of the practice and improve upon the implementation before applying them to the entire organization.

### **Gender Earnings Disparities at Entry**

As illustrated in Figure 5-5, most of the gender differences in earnings arise at job entry. Moreover, because B2G gives raises as percentage of employees' base salary, these gaps are very persistent over time. As women's earnings would have to increase 36% faster than men's earnings to close initial starting differences after four years,<sup>78</sup> it would be very difficult to close the gap by just relying on subsequent earnings increases. Instead, an investment into preventing gender disparities at job entry would be most effective and likely least costly "politically."<sup>79</sup> Therefore, the following two recommendations address the reduction of earnings differences at job entry.

#### ***1. Maintain central role of HR in the pay setting process.***

The evidence tentatively suggests that standardization and centralization of the pay setting process minimizes disparate treatment, especially in the hiring process. Although Petersen and Saporta (2004) found greater gender differences among newly hired employees, gender differences are equally wide among hired and promoted employees at B2G. The interviews repeatedly discussed how HR policies standardized the initial pay setting process. Hence, maintaining high levels of pay standardization via HR policies at job entry<sup>80</sup> is an important step in suppressing gender disparities among hired employees (Kalev et al. 2006).

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<sup>78</sup> E.g. if men received a 3% raise each year, an equivalent women would need a 4.08% increase for 4 years just to close the gap that is due to initial starting differences.

<sup>79</sup> I.e. defending substantially greater raises for women over sustained periods and holding supervisors accountable for compressing pay differences would require more organizational effort than prevent differences at entry when salaries are already more centrally set by HR.

<sup>80</sup> Specifically: External Hires: assignment of pay grades and salary recommendations by HR compensation professionals (transparency & consistency), requesting justifications from supervisors for offering above or below that salary recommendations (accountability), pay floors and ceilings imposed by pay grades. Internal Promotions: Publish policy on how much employees' pay increases per pay grade and whether and how supervisors take into account employees' "range penetration" (transparency). Request Justification if supervisors deviate from policy (accountability).

## **2. Review existing pay-setting procedures at job entry.**

There may be several sources for gender disparities. Among hired employees, qualitative differences between employees' work experiences (e.g. prestige of previous firm, specific jobs skills) and how managers *attribute monetary values to employees' experience* might introduce gender differences. A previous audit study showed that employees perceived the same resume as more qualified when applicants were male than when the name on the resume was female (Steinpreis et al. 1999). Thus different recruiters and compensation specialists may attribute different monetary values to men and women's experiences even when the experience is equivalent. Organizations can evaluate whether unconscious gender differences in valuation of work experience generate differences in initial earnings by distributing simulated resumes that vary only in the gender of the applicant's name among recruiters and compensation specialists (without the knowledge of the evaluators). If such an audit study would reveal gender differences, then organizations can reduce gender gaps in starting salaries by improving evaluation guidelines and re-training evaluators to be more aware of potential biases.

In addition to differences in how organizations evaluate men and women's work experience, gender differences in pay may also arise because of gender differences *in social networks*. Previous research shows that because of gender differences in employees' social networks, men are more likely to receive job leads (McDonald et al. 2009) and are perhaps more likely to be directly recruited by the hiring agent, whereas women might be more likely to apply to a job add. Employees are more likely to receive higher starting salaries when they already know someone in the organization (Brodth 1994). Organizations can assess to what extent social networks and differences in men and women's recruitment are responsible for initial starting salaries by collecting

information on how employees found the job, which employee made the referral, and whether the hiring manager or recruiter knew the applicant directly.

Similarly, gender differences among hired employees are likely to arise in the *negotiation process*, as women often negotiate less assertively (e.g., Babcock and Laschever 2003) and because women's assertive behavior is perceived differently by hiring managers (e.g., Ayres and Siegelman 1995). To examine to what extent negotiations are responsible for initial gender gaps, organizations could collect information on initial salary offers (or offers recommended by HR) and final starting salary for each employee. If negotiations are responsible for a majority of the gap, then organizations can a) take measures to reduce the importance of negotiations for starting salaries or b) make the negotiation situation (i.e. negotiation norms and salary ranges) less ambiguous (Bowles et al. 2005).

With regard to promoted employees, gender differences at the point of hire are preserved among promoted employees when *pay increases are relative to employees' base salary*. I.e. When men and women receive a 3% pay increase for each pay grade they climb, then organizations effectively "import" previous gender differences into the new job, resulting in a significant gender gap at entry among promoted men and women. Organizations can reduce initial gender gap by more explicitly taking into account employees' relative position in the range prior to the promotion.

### **Gender earnings disparities over time**

In addition to the gap at entry, disparities widen over time among hired employees. Multivariate analyses suggest that four years after entry 23% of the gender gap among

hired employees resulted from post-hire factors that are beyond the compounded effect of earnings differences at entry. Therefore, based on the interviews and the literature, the following three recommendations address a) the improvement of the performance evaluation process, b) the improvement of the performance-reward linkage and c) changes in how raises are calculated.

### *Performance Evaluations*

Interviews suggest that some employees might not receive annual performance evaluations. Similarly, respondents indicated that some supervisors may submit performance ratings, but do may not base the rates on employees' performance (i.e. ratings are over- or under-inflated).

Given that performance evaluations are relatively subjective in nature, they can be a major source for gender differences in earnings (e.g., Acker 2006; Castilla 2008; Elvira and Town 2001). If organizations use a merit-based system (instead of an across-the-board-system), they can limit disparate outcomes by *holding supervisors accountable for adhering to the performance evaluation process*. In this regard, experimental research repeatedly demonstrated that transparency and having to justify ratings publicly substantially reduced biases (Lerner and Tetlock 1999; Salancik and Pfeffer 1978; Tetlock 1985; Tetlock and Mitchell 2009). Hence, several supervisors already mentioned calibration meetings, in which supervisors meet as a group to discuss the performance ratings they gave. Arguably, the presence of HR representative would further increase the effectiveness of calibration meetings as it may increase the perception of accountability among supervisors. Moreover,

the transparency of performance evaluations might be improved when supervisors keep a written record of employees' accomplishments or poor performance throughout the year (i.e. keeping performance logs.)

### *Performance-Reward Linkage*

#### A consistent policy

Interviews also suggest that supervisors may not use performance evaluations and employees' "range penetration" consistently. For instance, some units determined pay increases centrally. In this instance, all employees with the same performance rating receive the same merit-increase, leaving little room for factors other than performance ratings to affect pay increases.<sup>81</sup> Other supervisors had more discretion over how they distribute pay increases. This might expose employees to more supervisory bias

Similarly, supervisors had different philosophies regarding employees' range penetration. Some supervisors thought all employees with the same performance rating should receive the same relative pay increases (e.g., 3%) regardless of their range penetration. Others believed that employees' lower in the range should receive relatively greater pay increases. Disparate outcomes, especially among hired employees, may be avoided by instituting a consistent policy that states whether merit-increases depend on performance ratings alone or on merit and position. Social-psychological research demonstrates that individuals perceive lower rewards as more justified for women and minorities (Berger et al. 1985; Hegtvedt and Johnson 2000). If left to supervisors'

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<sup>81</sup> The only way that inconsistencies may arise then is if performance ratings are "inflated" in some units but not others. I.e. if the highest performance rating occurs more frequently in unit A than unit B, then employees in unit A with the highest rating will receive smaller pay increases than employees with the highest rating in unit B.

discretion, supervisors may perceive men's position lower in the range as more "unjustified" than when women are located lower in the range. Therefore, supervisors may be more likely to give a boost to lower earning employees when they are male. Hence, the organizations should try to formulate a policy on how to determine performance rewards and implement it across all units.

#### Accountability

Even with a consistent policy, differences may not disappear until organizations hold supervisors accountable for adhering to the policy. In this regard, organizations can request managers to report merit increases separately by employees' performance and gender (and other ascriptive statistics), which would reveal inconsistencies. Similarly, organizations can track non-merit pay increases (e.g. market adjustments) to examine which employees receive these types of raises. In this regard, a recent organizational experiment by Castilla (2015) demonstrated that holding supervisors accountable for how they use performance evaluations in pay raise decisions eliminated all gender differences in pay increases.

#### *Switch from relative earnings increases to increases in total amounts.*

All supervisors in the interviews gave merit-raises in terms of percentages relative to employees' base salary. This has several consequences: First, giving proportional pay increases preserves and compounds initial earnings differences among hired and promoted employees.<sup>82</sup> Second, unless done centrally, it required a lot of effort for supervisors to adjust for employees' position in the range. Managers had to determine how much employees with a certain performance rating should receive and then how this percentage

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<sup>82</sup> E.g., if employee A starts at \$50,000 and employee B at \$45,000, then the initial differences between them is \$5,000. If both get a three percent increase, then employee A will earn \$51,500 and employee B \$46,350. Therefore, the difference between them grows to \$5,150/ year (or 10%).



should differ for those above and below the mid-point. As this process is time-consuming, managers might not have the time or resources to account for range penetration. Third, employees' (in the upper range) might become demoralized when receiving a lower percentage.

Giving increases in total dollar amounts would address all of these problems. For instance, instead of giving employees a 3% increase they may receive a \$500 dollar increase.<sup>83</sup> Total amounts would *by default* compress salary differences between hired and promoted employees (or other social groups).<sup>84</sup> That is, as \$500 may constitute a 2.5% increase for higher-paid employees, but a 4% increase for lower-paid employees, total dollar amounts would automatically reduce disparities. Moreover, supervisors would not have to calculate raise percentages separately for employees above and below the mid-point. Instead, raises would constitute a relatively greater increase for employees lower in the range by default. Finally, total dollar amounts might conceal that raises are relatively smaller for employees higher in the range. Therefore, supervisors might encounter less resistance from employees higher in the range for compressing salaries – as everyone with a rating of 5 received \$500. Such a policy may alleviate the problem of inconsistent consideration of employees' range penetration while automatically compressing salary differences between equally well-performing employees.

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<sup>83</sup> Dollar amounts could be calculated as percentage of grade mid-points.

<sup>84</sup> E.g., if employee A starts at \$50,000 and employee B at \$45,000, then the initial differences between them is \$5,000. If both get a \$1,000 increase, then employee A will earn \$51,000 and employee B \$46,000. Therefore, the difference between them stay at \$5000, which equates to a 9% gap.

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## Chapter 9 -Appendix

### Appendix A. Information sheet

#### Emory University – Laney Graduate School Information Sheet

**Project Title:** Job Avenues and Career Outcomes: How does entering a job via hire or promotion affect future career outcomes?

**Principal Investigator:** Anne-Kathrin Kronberg, PhD Student, Department of Sociology  
**Faculty Advisor:** Irene Browne, PhD

#### Introduction

I would like to invite you to participate in my research study. This form tells you everything you need to think about before you decide to agree to be in the study or not to be in the study. It is entirely your choice. If you decide to take part, you can change your mind later on and withdraw from the research study anytime. The decision to join or not join the research study will not affect any of your benefits at any organization where you are an employee.

I invited you to participate in this study because you supervise professional employees in a large employment organization and because you hired and promoted employees in the past year. Because I am interested in supervisors with at least some work experience, participants should have at least 5 years of work experience. Overall, this study will include interviews with approximately 30 participants. I will conduct all interviews with the participants. The interviews will last approximately 1-2 hours.

#### Purpose

The purpose of this study is to explore how professional careers unfold in today's workplaces. Specifically I would like to learn how companies go about hiring new employees and promote existing employees today. This study will help us understand how people build their careers in the 21<sup>st</sup> century.

#### Procedures

The interview will take approximately 1-2 hours. I will use a guide to ask you about your experiences as supervisor. With your permission, I will record the interview using a digital audio recorder. The interview will take place at a place convenient for you and that both you and I agreed on.

#### Confidentiality

Certain offices and people other than me may look at your study records. That is, government agencies and/or Emory employees overseeing proper study conduct may look at your study records. These offices include the Emory Institutional Review Board

and the Emory Office of Research Compliance. Emory will keep any research records we produce private to the extent that I am required to do so by law.

I will delete all audio recordings once I complete transcribing (i.e. produce a written copy (transcript) of the interview in a word processing document). I will use a pseudonym rather than your name, company or job title on any study records. Your name and other facts that might point to you (such as the name of your company) will appear neither in transcripts nor when I present or publish this study.

Study records can be opened by court order or produced in response to a subpoena or a request for production of documents unless a Certificate of Confidentiality is in place for this study.

There is no Certificate of Confidentiality in place for this study.

### **Risks and Discomforts**

The only foreseeable risk is a breach of confidentiality (see confidentiality section).

### **Benefits**

This study will have no direct benefits for you. The purpose of this study is to learn more about how individuals build their careers in the 21<sup>st</sup> century. The study results may be used to help other people in the future.

### **Compensation**

In appreciation of your time commitment, you will receive a \$25 Amazon gift card.

### **Withdrawal from the Study**

Your participation in this study is entirely voluntary. You have the right to leave this study at any time without penalty. You may stop the interview at any time. You may also decline to answer any question asked during the interview.

### **Questions**

If you have any questions, I invite you to ask them now. If you have any questions, concerns or complaints in regards to this study or your participation later, you may contact me, Anne Kronberg, at 404-610-2379 or [anne.kronberg@emory.edu](mailto:anne.kronberg@emory.edu).

If you have questions about your rights as a research subject or if you have questions, concerns or complaints about the research, you may contact the Emory Institutional Review Board at 404-712-0720 or 877-503-9797 or [irb@emory.edu](mailto:irb@emory.edu).

## Appendix B. Script for oral consent

Hello,

Thank you for making the time to meet with and for participating in my dissertation research. To get us started, I would like to tell you about my study and the interviews before you decide to agree to be in the study or not to be in the study.

You may have heard a lot about jobs becoming less secure in the past decades. This study examines how entering a job via hire or promotion affects employees' careers. For this reason I would like to understand better what actually happens during and after the hiring and promotion process. I was hoping you can share your personal experience with me today.

Of course, your participation is completely voluntary and all information will be held anonymous and confidential. Now, I would like for you to read this information sheet and then I'll ask you whether or not you would like to participate in the study – either way you will receive a \$25 gift card for your time commitment. Take as much time as you need to read the sheet and let me know if you have any questions!

[Wait while potential participant is reading the sheet]

After reading the information sheet, do you have any questions? Are you willing to participate in the study or would you rather not be interviewed?

*If Yes:* Wonderful. Thank you so much – let's get started. You can skip any questions and end the interview any time you like. Would you mind if I audio record this interview? Once I transcribe the interview, where I will replace your name and company with a pseudonym, I will delete this audio recording.

*If No:* I understand! Thank you so much for meeting with me. As an appreciation of your time I would like to give you a \$25 Amazon gift card. In case you know someone else who fits my study criteria and who might be interested in participating, feel free to forward the email I sent you. Alternatively they can contact me using this phone number or email any time they like [give my personal card].

## Appendix C. Recruitment email

Hello,

my name is Anne Kronberg and I am a PhD student at Emory University. For my dissertation, I am conducting an interview study on careers of Finance, IT, and HR professionals in large organizations. I am investigating how entering a job via hire or promotion affects employees' careers and I would like to learn what it means to add a newly hired employee to your team or to promote an existing employee. For this reason, I am looking for supervisors who hired or promoted someone in the past year.

If you have hired or promoted an employee in the past year, would you be willing to share your experience with me? Interviews usually take 1.5-2 hours and we can meet at a location and time that is convenient for you. In appreciation of your time commitment, you will receive a \$25 Amazon gift card. Your participation would be greatly appreciated!

All information (e.g. your name, job title and employer) will be kept strictly confidential. Your participation will be completely voluntary and anonymous.

If you are interested in being interviewed, please contact me by replying to this email ([anne.kronberg@emory.edu](mailto:anne.kronberg@emory.edu)). You can also contact me at 404-610-2379. If you are unsure of whether you wish to participate and would like to ask me any questions before deciding, please contact me and I will be happy to answer any questions or address any concerns.

With kind regards,  
~ Anne



## Appendix D. Interview guide, full version

Thank you so much for meeting with me today. As you might know, I am a graduate student and this interview is for my dissertation research, where I examine how being hired or promoted affects employees in the long term. Your expertise as a supervisor is vital to help me understand how hiring and promotion decisions are made. It is very important to me to really understand the process, so feel free to give me as much detailed examples from your own experience as you like. Of course, your responses are strictly confidential, and the use of material from this interview will be done in a way that protects your and your employer's anonymity. You can ask me any questions you like during the interview and you may choose to decline answering any of my questions. Do you have any questions for me before we begin?

### Part A: Background

To begin, I would like to learn more about you and the kind of work you do.

1. Can you tell me a little bit about your employment history with your current employer?
2. What kinds of responsibilities do you have as a supervisor on a daily basis?

### Part B: Hiring Process

Next, I would like to learn more about what happens when a new employee is hired who has not previously worked for the company. I imagine that each company or even department has their own way of finding and picking applicants and I would like to learn about the specific experiences you have had.

Let's talk about when you hired your most recent employee. Can you walk me through the steps you took from when you first considered hiring a new employee to when that employee was actually hired?

### Probes

#### *Starting the process*

1. What lead up to you needing to hire a new person? (e.g. vacancy, expansion...)
2. Where did you announce this opportunity?

#### *Applicant pool and finding the right person*

3. How did you go about finding good candidates in the applicant pool?
4. What was the deciding factor in favor of the applicant you offered the position to?

#### *Who made the hiring decision?*

5. What were your responsibilities in the hiring process?
6. What other parties, if any, did you coordinate with? How did you go about coordinating with them?

#### *Developing and negotiation of the offer*

7. Once you identified your final candidate, how did you decide on the specifics of the initial offer, like vacation time and pay?
8. What other parties did you consult or needed approval from to finalize the offer?
9. Did the job candidate accept your offer right away? If no, can you tell me what happened?

### **Part C: Promotion Process**

Next, let's talk about when you promoted your most recent employee from within your company. Can you walk me through the steps you took from when you first considered promoting an existing employee to when that employee started his or her job?

#### **Probes**

##### *Starting the process*

1. What lead up to you wanting to promote? (e.g. employee approached you asking for a promotion, job vacancy opened up that needed to be filled)
2. Where did you announce this position?

##### *Applicant Pool and Finding the right person*

3. How did you go about finding good candidates in the applicant pool?
4. What was the deciding factor in favor of the applicant you offered the position to?

##### *Who made the hiring decision?*

5. What were your responsibilities in the promotion process?
6. What other parties, if any, did you coordinate with? How did you go about coordinating with them?

##### *Developing and Negotiation of the offer*

7. Once you decided whether/ which applicant you would like to promote, how did you go about putting the specific of offer together, such as vacation time and pay?
8. What other parties did you consult or needed approval from to finalize the offer?
9. Did the job candidate accept your offer right away? If no, can you tell me what happened?

### **Part C: Performance Evaluations and Pay-Raises**

Next, I would like talk about what happens once employees enter their job and how they advance over time.

#### **Performance Evaluations**

1. How do you go about evaluating your employees?
2. In your team what would you say are the most important criteria?
3. When you think of an employee who got the highest performance rating last year, what made that employee stand out?
4. When you think of an employee who got a lower performance rating last year, what made that employee stand out?
5. If you could create your 'ideal employee' from scratch, what would he or she be like?

#### **Merit-Increases**

6. How do you go about giving employees merit increases?
  - a. Probe: what criteria do you take into account when deciding on the specific percentage?
7. What administrative steps do you need to take to authorize pay raises?

8. How did your employee respond to the raise? Was he/she satisfied or did he/she ask for a greater raise?
9. Are there other kinds of pay increases an employee can receive through something other than a merit-based raise?

### **Part D: After entering the job**

I would like to talk to you about how employees advance their careers and what potential struggles they might experience advancing their career.

#### *Challenges and Advantages*

##### *...in General*

1. Can you think about an employee who quickly advanced in your department or organization? What do you think made that employee so successful?
2. Can you think about an employee who struggled to advance his or her career? What do you think lead up to this?

##### *... for hired employees*

3. What do you think is biggest challenge of being hired?
4. What advice would you give a newly hired employee to overcome these challenges?
5. What do you think is biggest advantage of being hired?

##### *... for promoted employees*

6. What do you think is biggest challenge of being promoted?
7. What advice would you give a newly hired employee to overcome these challenges?
8. What do you think is biggest advantage of being promoted?

#### *Relative Advantage?*

9. If you could choose between hiring a new employee or promoting an existing employee, which one would you prefer and why?
10. If you had two equally good mid-level employees – one was promoted into the position and the other one was hired externally at the same time. Which one would get a promotion first and why?

**Show Scenarios** – Overall, the literature is divided on how entering a job via hire or promotion affects income and it proposes a number of scenarios. [*Explain scenarios – See Appendix B*]

11. Looking at these, which one do you think is most common in your organization?  
*Probe:* What do you think is contributing to this pattern in your organization?  
*Probe:* If they only focus on the initial gap, ask about pay compression after job entry again to clarify.
12. In what kinds of situations or settings would see the other scenario? [Scenario C if they mentioned B before and Scenario B if they mentioned C]

13. Which scenario is more fair, Scenario B or C?

**Part E - Closing:**

1. You mentioned that you have been working (in this sector) for several years now – are there any new trends in how people are hired or are advancing their career nowadays.
2. Before we wrap up, is there anything else you wanted to share – either related to something we've already discussed or something new you wanted to raise?
3. Do you have any questions for me?

## **Appendix E. Interview guide, short version**

Thank you so much for meeting with me today. As you might know, I am a graduate student and this interview is for my dissertation research, where I examine how being hired or promoted affects employees in the long term. Your expertise as a supervisor is vital to help me understand how hiring and promotion decisions are made. It is very important to me to really understand the process, so feel free to give me as much detailed examples from your own experience as you like. Of course, your responses are strictly confidential, and the use of material from this interview will be done in a way that protects your and your employer's anonymity. You can ask me any questions you like during the interview and you may choose to decline answering any of my questions. Do you have any questions for me before we begin?

### **Part A: Background**

To begin, I would like to learn more about you and the kind of work you do.

3. Can you tell me a little bit about your employment history with your current employer?
4. What kinds of responsibilities do you have as a supervisor on a daily basis?

### **Part C: Performance Evaluations and Pay-Raises**

First, I would like talk about what happens once employees enter their job and how they advance over time.

#### **Performance Evaluations**

10. How do you go about evaluating your employees?
11. In your team what would you say are the most important criteria?
12. When you think of an employee who got the highest performance rating last year, what made that employee stand out?
13. When you think of an employee who got a lower performance rating last year, what made that employee stand out?
14. If you could create your 'ideal employee' from scratch, what would he or she be like?

#### **Merit-Increases**

15. How do you go about giving employees merit increases?
  - a. Probe: what criteria do you take into account when deciding on the specific percentage?
16. What administrative steps do you need to take to authorize pay raises?
17. How did your employee respond to the raise? Was he/she satisfied or did he/she ask for a greater raise?
18. Are there other kinds of pay increases an employee can receive through something other than a merit-based raise?

### **Part D: After entering the job**

I would like to talk to you about how employees advance their careers and what potential struggles they might experience advancing their career.

*Challenges and Advantages  
...in General*

14. Can you think about an employee who quickly advanced in your department or organization? What do you think made that employee so successful?
15. Can you think about an employee who struggled to advance his or her career? What do you think lead up to this?

*... for hired employees*

16. What do you think is biggest challenge of being hired?
17. What advice would you give a newly hired employee to overcome these challenges?
18. What do you think is biggest advantage of being hired?

*... for promoted employees*

19. What do you think is biggest challenge of being promoted?
20. What advice would you give a newly hired employee to overcome these challenges?
21. What do you think is biggest advantage of being promoted?

*Relative Advantage?*

22. If you could choose between hiring a new employee or promoting an existing employee, which one would you prefer and why?
23. If you had two equally good mid-level employees – one was promoted into the position and the other one was hired externally at the same time. Which one would get a promotion first and why?

**Show Scenarios** – Overall, the literature is divided on how entering a job via hire or promotion affects income and it proposes a number of scenarios. [*Explain scenarios – See Appendix B*]

24. Looking at these, which one do you think is most common in your organization?  
*Probe:* What do you think is contributing to this pattern in your organization?  
*Probe:* If they only focus on the initial gap, ask about pay compression after job entry again to clarify.
25. In what kinds of situations or settings would see the other scenario? [Scenario C if they mentioned B before and Scenario B if they mentioned C]
26. Which scenario is more fair, Scenario B or C?

**Part E - Closing:**

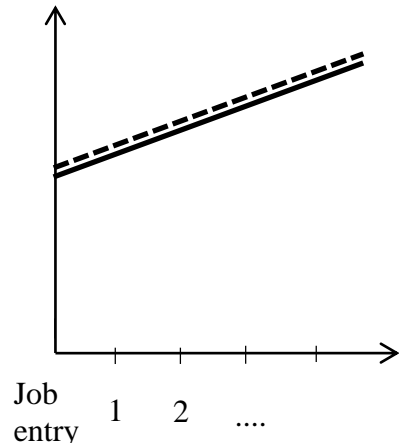
1. You mentioned that you have been working (in this sector) for several years now – are there any new trends in how people are hired or are advancing their career nowadays.
4. Before we wrap up, is there anything else you wanted to share – either related to something we've already discussed or something new you wanted to raise?
5. Do you have any questions for me?

**Appendix F. Income scenarios**

Imagine two identical jobs and two equally well performing employees

**Scenario 1**

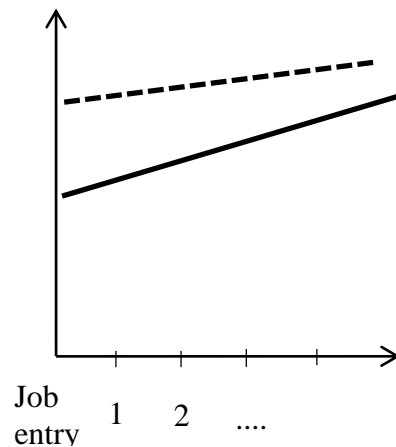
*Both* come in at the same salary at equal rates



Years in the job

**Scenario 2**

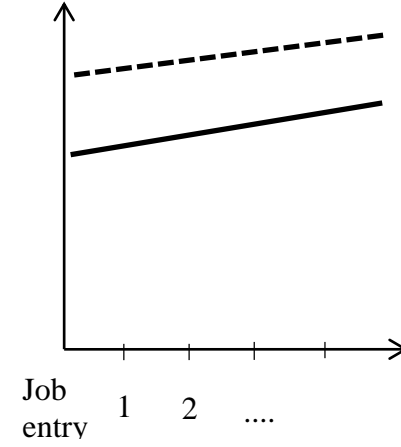
*Hired* employees earn more at entry but *promoted* employees get greater raises



Years in the job

**Scenario 3**

*Hired* employees earn more at entry and *both* have same salary increases



Years in the job

----- Hired Employee  
 \_\_\_\_\_ Promoted Employee

**Appendix G. Demographics survey**

A few “vital statistics” questions:

1. What is your approximate age? \_\_\_\_\_
2. What is your highest degree? \_\_\_\_\_
3. What race or ethnicity do you consider yourself? \_\_\_\_\_
4. Are you currently ....
  - Single
  - Married / living with partner
  - Widowed / Divorced
5. How many children are currently living in your household? \_\_\_\_\_
  - How old is the oldest? \_\_\_\_\_
  - How old is the youngest? \_\_\_\_\_