Does Having Women in Positions of Power Reduce Gender Inequality In Organizations? A Direct Test

Mabel Abraham
mlba@mit.edu
PhD Candidate, MIT Sloan School of Management
June, 2013

Draft under review: Administrative Science Quarterly
Please do not cite or circulate without permission of the author.

ABSTRACT

This study revisits the common view that female managers attenuate workplace gender inequality among employees. While many of the studies that have explored the relationship between having more women in management and gender inequality have found an association between the two, these studies have inferred that manager influence is driving this observed association. Because direct data on the impact of male versus female managers on the career outcomes of employees is difficult to obtain, prior studies have measured the impact of female managers on gender inequality using industry or organization-level data. This is problematic because it is plausible that organizations with more women in management have less gender inequality not because female managers are having an impact, but rather because the same mechanisms driving women into management are also reducing gender inequality among non-managerial employees. Using unique panel data from a large retail financial services firm, I examine whether female managers contribute to less gender inequality among the employees reporting directly to them. I find that female managers are more likely to allow their subordinates to use flexible work arrangements and that female managers reduce gender inequality in terms of wages, but only for subordinates in the lowest organizational ranks.
INTRODUCTION

Why does gender inequality in organizations persist? Studies in organization theory and sociology have demonstrated that organizational decision makers impact gender inequality by controlling the distribution of rewards to organizational employees (e.g. Reskin, 2000; Elvira and Graham, 2002; Fernandez and Fernandez-Mateo, 2004; Cohen and Huffman, 2007; Bjerk, 2008; Castilla, 2008, 2011; Briscoe and Kellogg 2011). In particular, the gender of the organizational decision maker is posited to play a role, with male managers allocating resources, such as wages, in a way that benefits other men and disadvantages women (Bridges and Nelson, 1989; Nelson and Bridges, 1999; Bielby, 2000; Reskin, 2000). The implicit assumption of these studies is that increasing the prevalence of women in management will lead to the attenuation of gender inequality in the workplace. And, indeed, other studies have shown that a greater proportion of women in management is associated with less gender inequality (e.g. Baron, Mittman, and Newman, 1991; Pfeffer, Davis-Blake, and Julius, 1995; Kulis, 1997; Hultin and Szulkin, 1999; Cohen and Huffman, 2007; Huffman, Cohen, and Pearlman, 2010).

While existing research has demonstrated this association between women in management and gender inequality, it has not accurately identified the underlying mechanism. Studies that have shown lower levels of gender inequality in settings where there are more women in management have speculated that it is female managers that make the difference. They have inferred that, because of homophily, in-group preference and a reduction in gender stereotypes, female managers produce more gender equitable outcomes. For example, past research finding an association between women in management and gender inequality has suggested that female managers attenuate gender inequality within organizations by facilitating interpersonal interactions for female non-managerial employees and reducing the salience of gender (Hultin
Abraham and Szulkin, 1999, 2003). Similarly, other studies attribute this observed association to female managers evaluating female employees more favorably than do male managers (Shin, 2012).

However, while female managers have commonly been credited with reducing workplace gender inequality, the evidence in past studies has been indirect. These studies have shown the relationship between the percent of women in management positions and gender inequality using industry- or organization-level data. This indirect approach is problematic as there are credible alternative explanations for this relationship. Specifically, by associating the percent of women in management with gender differentials among employees, it is impossible to distinguish whether observed differences in gender inequality are the result of the impact of female manager decision making or other unobserved organizational processes. For example, it is plausible that unobserved organizational characteristics may be simultaneously driving the presence of women in management and gender inequality among employees.

Our limited understanding of the mechanisms driving the relationship between women in management and gender inequality is, in part, the result of empirical challenges. Directly identifying the impact that female managers have on gender inequality requires a comparison of gender inequality outcomes for employees reporting directly to male versus female managers, in a setting where managers have the power to affect resource allocation. Using unique longitudinal data from a large retail financial services firm, I address this challenge. By identifying managers and the employees whom they supervise, I can directly link differences in gender-based wage inequality, job segregation, and use of flexible work arrangements among employees to the gender of the manager. I find that female managers are more likely to allow their subordinates to use flexible work arrangements and that female managers reduce gender inequality in terms of wages, but only for subordinates in the lowest organizational ranks. By isolating the effect of
managers on their direct subordinates, this study disentangles the potential effect of female managers on gender inequality from the effect of other factors related to the organizational setting. This more direct examination deepens our understanding of whether female managers attenuate gender inequality by identifying the direct effect of female managers on employee outcomes.

To analyze the effect of female managers on inequality for their subordinates, I proceed as follows. First, I discuss existing organizational and sociological theories describing, and attempting to explain, the relationship between women in positions of power and workplace gender inequality. Second, I introduce the research setting and analytical method used to test whether female managers directly reduce gender inequalities in terms of wages, job segregation, and use of flexible work arrangements. Third, I present results which demonstrate that the impact of female managers for gender inequality is limited to employees in the lowest organizational ranks. I conclude with a discussion of the theoretical and practical implications of the research findings for gender inequality within organizations.

**THE PROPOSED EFFECT OF FEMALE MANAGERS ON GENDER INEQUALITY**

Given that women now hold over forty-percent of all management positions (Bureau of Labor Statistics, 2011), attention of recent research has turned to identifying whether female managers have an impact on workplace gender inequality. Many studies have argued that female managers contribute to more equitable outcomes for other women, thus providing a potential lever for reducing gender inequality (e.g., Ely, 1995; Cotter et al., 1997; Nelson and Bridges, 1999; Hultin and Szulkin, 1999, 2003; Cohen and Huffman, 2007). These studies infer the impact of female managers based on observations that a greater proportion of women in management in a given
industry (e.g. Cohen and Huffman, 2007) or firm (e.g. Hultin and Szulkin, 1999) is associated
with a lower degree of gender inequality in terms of wages (e.g. Hultin and Szulkin, 1999, 2003;
Cohen and Huffman, 2007; Shin, 2012) or job segregation (e.g. Baron et al., 1991; Pfeffer,
Davis-Blake, and Julius, 1995; Kulis, 1997; Huffman, Cohen, and Pearlman, 2010). Drawing on
theories of homophily, in-group bias, and gender, which largely suggest that female managers
will act in a way that leads to advantages for female employees, extant studies have assumed that
female manager influence accounts for this observation that the presence of more women in
management is associated with less gender inequality.

Past studies have proposed two probable pathways through which female managers may
attenuate various forms of gender inequality. First, female managers are posited to have a direct
impact through interactions with, and evaluations of, non-managerial employees. Because of
gender-based homophily (e.g. McPherson, Smith-Lovin, and Cook, 2001) and in-group
preference (e.g. Tajfel and Turner, 1979), past studies posit that female managers facilitate
interpersonal interactions (Hultin and Szulkin 1999, 2003; Ely 1994) and serve as mentors and
sponsors (Ibarra, 1995; Ragins and Scandura, 1999; Johnson and Scandura, 2004; McGinn and
Milkman, 2012) for female non-managerial employees. Consistent with this perspective, Hultin
and Szulkin (1999) attributes their finding of less gender wage inequality in Swedish
organizations with a greater presence of women among managers partially to the interactional
benefits to women of having other women in high-ranking organizational positions. They state
that "female subordinates should be advantaged when other women are an integral part of the
organization's power structure, simply because interaction within organizations is facilitated by
gender similarity between actors" (Hultin and Szulkin, 1999: 459-60). Similarly, Huffman,
Cohen and Pearlman (2010) posits that there may be less gender segregation in organizations
where there are more women in management because female managers are more apt to advocate for female non-managerial employees in those settings. Other studies suggest that while male employees are typically seen as more competent or valuable organizational members on the basis of their gender (Ridgeway, 1991, 1997), in-group biases may lead male and female managers to evaluate employees differently (e.g. Tajfel and Turner, 1979). Consistent with this perspective, Shin (2012) argues that having women on the board of directors leads to more equitable executive wages because female board members evaluate other women more favorably than do male board members.

A second way that female managers are proposed to attenuate gender inequality is indirectly, by reducing the prevalence of common gender stereotypes and leading to more gender equitable organizational reward structures. For example, Stainback and Kwon (2012) argues that the observed association between female managers and gender-based job segregation in their study is consistent with the argument that female managers reduce gender stereotypes and in-group preferences that typically advantage men. This perspective is based on existing research that posits that female managers act to decrease the salience of gender as a category affecting the views of both managerial and non-managerial employees (Ely, 1995) by reducing gender stereotyping (Ely, 1994; Blau, Ferber, and Winkler, 2006; Konrad, Kramer, and Erkut, 2008). Past studies have also attributed the observed association between the female presence in management and gender inequality to the role of female managers in establishing more equitable organizational policies and reward structures (Hultin and Szulkin, 1999, 2003). This argument is based on insights from organizational and sociological research that indicates that members of top management play a considerable role in setting organizational pay rates (Bridges and Nelson, 1989; Nelson and Bridges, 1999), and that female managers, in particular, are more likely to
push for gender equity initiatives (Cohen and Huffman, 2007; Dobbin and Kalev, 2009), even when facing the same organizational and market constraints (Baron et al., 1991).

While most research in this tradition concludes that women in positions of organizational power serve to attenuate gender inequality, some studies offer conflicting findings (e.g. Shin, 2012; Stainback and Kwon, 2012; Blau and DeVaro, 2007). But, even these studies with more pessimistic conclusions about the role of female managers for attenuating gender inequality attribute findings to manager influence. Some studies highlight that female managers face both preferences and barriers, which may preclude them from leading to greater gender equity. For example, while Shin (2012) finds an association between the gender composition of the board of directors and the executive wage gap, there is no evidence of a difference in the executive wage gap based on the gender of the CEO. The absence of an association between having a female CEO and gender inequality in this study is attributed to the unavailability of the CEO for mentoring. Implicit in this line of reasoning is that we would see a reduction in the wage gap in settings with female leaders if those women were available to mentor. Similarly, Penner and colleagues (2012) find that there is no difference in gender wage inequality among supermarket workers based on the gender of the manager. Drawing on status characteristics theory (e.g. Berger et al., 1977; Ridgeway and Correll, 2004, 2006; Heilman and Hayes, 2005; Ridgeway et al., 2009), they argue that female managers may not attenuate wage inequality because, like male managers, they devalue work performed by female employees and perceive male employees to be more valuable contributors.

Together, these arguments suggest that any association between the representation of female managers and the degree of gender inequality is the result of some form of female manager influence. While it is plausible that managers, and female managers in particular, affect the
degree of gender inequality, this conclusion has not been directly tested in extant research. Rather, studies have inferred that the mechanism driving the observed associations between the presence of women in management and gender equality is the result of female manager influence and decision making. Without direct evidence that female managers attenuate gender inequality, it is possible that alternative processes are driving the observed association between women in management and gender inequality. Specifically, unobserved organizational attributes may simultaneously impact the degree of gender inequality and the presence of women in management in a given setting. Developing an accurate theory of the role of female managers for workplace gender inequality, therefore, requires a direct examination that takes the organizational setting into account.

**ALTERNATIVE MECHANISM: ORGANIZATIONAL PROCESSES**

The significance of organizational processes and practices for shaping gender inequality has been clearly established (e.g., Baron and Beilby, 1980; Bridges and Nelson, 1989; Nelson and Bridges, 1999; Reskin, 2003; Castilla, 2008; Kalev, 2009; Castilla, 2011). Organizational resources, including wages and job opportunities, are allocated on the basis of the organization’s reward structure (e.g. Gibbons, 1998; Castilla, 2008). Scholars have argued that organizational practices and policies mediate the impact of both micro and macro social structure and processes (Baron and Beilby, 1980), thus affecting the degree of workplace inequality (e.g. Beilby, 2000; Reskin, 2000; Reskin and McBrier, 2000). At times the formal rules of bureaucratic workplace settings have been posited to lessen the effects of individual workers’ characteristics for gender inequality (e.g. Bielby and Baron, 1986; Huffman and Cohen, 2004; Kmec, 2005), mainly by limiting employers’ ability to act on their stereotypes and biases (Reskin, 2003). On the other hand, organizational processes intended to increase diversity and minimize inequality may serve
to maintain the status quo, such as diversity policies (Kalev, Dobbin, and Kelly 2006), cross-training programs (Kalev 2009), and merit-based pay practices (Castilla 2008).

Because organizational processes play a central role for gender inequality, any account of the effect of manager influence on gender inequality failing to take the organizational context into consideration rests on weak grounds. In the absence of direct evidence, existing accounts are vulnerable to the possibility that organizational processes, and not manager influence, are driving the association between the presence of women in management and gender inequality. Organizations with more women in management may have less gender inequality not because the female managers are having an impact, but rather because the same organizational processes driving women into management are also reducing gender inequality among non-managerial employees. In examining women’s access to management, some studies argue that there are invisible barriers to entry, commonly referred to as "glass ceilings", barring women from ascending the organizational hierarchy and obtaining high-status positions (Morrison et al., 1987; Powell and Butterfield, 1994; Cotter et al., 2001; Albrecht, Björklund, and Vroman, 2003). The degree to which these barriers preclude women from accessing managerial positions has been found to depend on various attributes of the specific organizational setting. For example, more formalized work processes and objective criteria are proposed to minimize inequality in access to management positions, as stated by Reskin and McBrier (2000: 214): “Insofar as formal employment practices require employers to standardize procedures and achievement criteria, managerial sex composition in organizations with highly formalized personnel practices will be less affected by ascription”. Studies in both economics and management posit that the degree to which the organization is “family-friendly” (Smith, Smith, and Verner, 2013), the presence of organizational initiatives including affirmative action plans and diversity committees (Kalev,
Abraham Dobbin, and Kelly, 2006), and women’s representation among board members (Matsa and Miller, 2011; Skaggs, Stainback, and Duncan, 2012) also contribute to facilitating women’s access to senior management positions.

To the extent that organizational processes either facilitate or hinder women’s access to managerial positions in a given setting, those same processes may also impact other forms of workplace gender inequality. The underrepresentation of women in management roles, for example, has been attributed to recruitment and outreach practices that do not seek a broad range of potential workers (Federal Glass Ceiling Commission, 1995; Sturm, 2001). The use of referrals to generate applicant pools for job vacancies provides one such recruitment strategy, particularly for organizations characterized by gender segregation. Because individuals tend to have same-sex contacts (McPherson, Smith-Lovin, and Cook, 2001), organizational reliance on referrals from current employees tends to generate an applicant pool with a gender composition that resembles that of the organization (Reskin and McBrier, 2000; Marsden and Gorman, 2001; Torres and Huffman, 2002; Fernandez and Sosa, 2005). Therefore, this recruitment strategy may simultaneously impact the degree of gender segregation among both managerial and non-managerial roles. Similarly, the standardization of practices that establish managerial responsibility have been argued to both increase managerial diversity (Kalev, Dobbin, and Kelly, 2006; Reskin and McBrier, 2000) and to attenuate job segregation and wage inequality (Bielby, 2000; Reskin, 2000, Castilla, 2008, 2010). Given that organizational attributes may not be as easily observable to researchers examining gender inequality, these organizational features may be masked by the more readily observable measure of women in management. Cohen and Huffman (2007) highlight this concern stating (2207: 698): “endogeneity could confound our
results to the extent that unmeasured variables are driving both the gender wage gap and the representation of women in management.”

In addition to impacting gender inequality, organizational attributes govern the degree of control, or power, managers have over allocating resources to employees. Formalized organizational processes, for example, are associated with not only less gender inequality, but also lower levels of managerial discretion (Beilby, 2000; Reskin and McBrier, 2000). Because differences in gender inequality outcomes can only be attributed to manager influence to the extent that managers have control over their subordinates’ wages, hiring, and promotion, understanding managerial power is critical to any examination of the impact of female managers on gender inequality. Power can be broadly defined as having control over other actors, resources, and things (Wolf and Fligstein, 1979). One critical aspect of managerial power for studies examining differences in the effect of female, relative to male, managers on workplace gender inequality is that this power stems from the actor’s position as manager. Weber ([1914] 1968) defined this type of positional power as “legitimate authority” as it is not innate to the actor, but rather arises from the structural position that an actor occupies. While generally true, the scope and bounds of that power is context specific (Cohen and Huffman, 2007). Yet extant research has largely made the critical assumption that managers have control over the allocation of resource to subordinates (e.g. Baron et al., 1991; Hultin and Szulkin, 1999; Cohen and Huffman, 2007; Penner, Toro-Tulla, and Huffman 2012).

Stainback and Kwon’s (2012: 224) multi-organization study provides support for the importance of knowing the nature of managerial power in a given organizational setting. They find that having more women among managers, a position typically “granted substantial organizational power”, is associated with less gender inequality, whereas having more women among
supervisors, who tend to “hold substantially less organizational power”, does not have an impact (Stainback and Kwon, 2012). In the case of Penner and colleagues’ (2012) study using within-organization employment records for a large U.S.-based grocery retailer, limited managerial control over wages may provide an alternative explanation for their finding that female managers do not reduce wage inequality. While this research matches employees to managers, the grocery retailer they study operates under collective bargaining agreement, which may restrict the level of control managers have over wages. It is plausible that their finding in this grocery retailer is not because female managers devalue women’s work, but rather the result of managers not having sufficient control over wages in this setting.

Furthermore, to the extent that managers have the power to affect employee outcomes, they are most apt to have an impact on those employees reporting to them directly. Therefore, in order to determine whether male and female managers have a differential effect on gender inequality among non-managerial employees, it is necessary to compare employees reporting directly to male and female managers. Despite using aggregate industry-level data in their analyses, Cohen and Huffman (2007) highlights the importance of considering true reporting structures stating that they “remain interested in within-organization effects of managerial composition on gender inequality…this more direct effect remains the most plausible pathway by which female managers influence gendered outcomes.” Similarly, using organizational-level data, Hultin and

---

1 Penner et al. (2012) makes the claim that managers have control in their research setting; however the retail grocer they study has several distinct features that cast doubt on the appropriateness of this setting for addressing whether female managers impact wage inequality. First, as the original paper analyzing these data states, “all non-managerial employees were covered by collective bargaining agreements” in this setting (Ransom & Oaxaca 2005: 222). Furthermore, this employer was found guilty in a gender discrimination suit having “to pay several million dollars in ‘back pay’” (Ransom & Oaxaca 2005: 221). Lastly, the within job wage ranges for both non-managerial and managerial employees were narrow, with standard deviations for hourly wages ranging from $0.00 to $1.13. Therefore, while the authors do not find that female managers reduce gender inequality, it is plausible that this finding may be attributed to particular features of the setting. For additional details on this setting, see Ransom and Oaxaca (2005).
Szulkin (2003) finds that the presence of women among lower-level managers, who are likely the direct managers of non-managerial employees, had a greater effect on wage inequality than did women among higher-level managers. Yet most studies examining the relationship between manager gender and gender-based inequality base findings on analyses of datasets that do not match individual employees to the male and female managers to whom they report (see Penner, Toro-Tulla, and Huffman, 2012 for an exception). Rather than looking at differences in gender inequality for subordinates of male versus female managers, these studies proxy manager-subordinate reporting relationships using aggregate level data at either the industry- or organization-level to compare whether a higher proportion of women in management is associated with less gender inequality among non-managerial employees in a given setting (e.g. Cohen, Broschak, and Haveman, 1998; Hultin and Szuklin, 1999; Giuliano, Levine, and Leonard, 2006; Cohen and Huffman, 2007; Kurtulis and Tomaskovic-Devey, 2009).

This indirect approach in extant studies confounds mechanisms of managerial impact with mechanisms related to selection. This is problematic because the observed relationships might be spurious in nature such that unobserved organizational factors, and not individual female managers, are driving the findings of extant studies. In order to accurately attribute the association between women in management and gender inequality to the impact of female managers, it is necessary to isolate manager influence from mechanisms related to the organizational setting. I argue that in order to achieve this, studies must examine differences in gender inequality for those reporting directly to male and female managers, in settings where managers have unhindered control over relevant resources. Using a unique research setting where I am able to link non-managerial employees to their immediate manager and where managers have explicit control over relevant resources, this study unpacks the causal processes
by which managers impact workplace gender inequality by isolating managerial influence mechanisms from organizational processes.

METHODS

Research Setting

This study examines the relationship between manager gender and three distinct forms of gender-based workplace inequality – wage inequality, job segregation, and the relative use of flexible work arrangements - for non-managerial employees through a case study of multiple branches in a globally diversified financial services firm (FinServ). FinServ provided the annual personnel databases for all employees in its U.S. operations for the 41-month period from January 1996 through May 1999 (the study period). These databases capture demographic characteristics, including gender, race, and age, as well as employment specific characteristics, including tenure, salary, and full-time status. In order to accurately understand whether male and female managers have differential effects on gender inequality in terms of wages, job allocation, or the use of flexibility, it is necessary to have data on entire work groups where the reporting structure between manager and non-managerial workers can be definitively identified. Therefore, this study focuses on a subset of FinServ, namely the retail branches, where the databases included complete workgroups with organizational codes linking individual managers to each non-managerial employee reporting to them. Since managers are most likely to have an impact on those employees reporting to them directly, these data provide a uniquely well-suited setting for understanding the impact of female managers on gender inequality. Given that such data are difficult to access, especially across multiple firms, I exploit the richness of data that results from
focusing on a single firm (see Sørensen, 2000; Fernandez, Castilla, and Moore, 2000; and Petersen et al., 2000 for similar approaches).

FinServ’s retail branches are client facing offices that offer a wide range of financial products and services to retail financial services customers. Among others, these services and products include mutual fund accounts, mortgages and margin lending accounts. These retail branches employ individuals in 6 unique positions: five non-managerial and one managerial. Each branch employs an average of approximately eight non-managerial workers (SD = 2.91) each reporting to a single branch manager. Using several HR databases, I was able to construct a longitudinal database for all 1,992 non-managerial employees and 156 managers employed in FinServ’s 120 retail branches across eight U.S. states during the study period. This database is unbalanced, with each employee having between one and four years of data,\(^2\) for a total of 3,888 person years - 357 person years are branch managers and 3,531 person years are non-managerial employees. Since longitudinal models used in the analysis of wage inequality exclude persons with single observations, all data analyses employed the same exclusion – a total of 882 people\(^3\) - in order to base comparisons on the same cases. The final analyses are based on 3,006 person years – 2,649 non-managerial and 357 managers - or 1,266 persons – 1,110 non-managerial employees and 156 managers.

In addition to the aforementioned personnel data, this analysis draws on several organizational documents, including manager training documents and FinServ’s Employee Handbook (herein,  

---

\(^2\) Employees in this setting may be present for all years in the study, enter the retail branches after the beginning of the study (i.e. left censored), exit the retail branches before the end of the study window (i.e. right censored), or both enter the retail branches after the beginning of the study window and exit before the end of the study window (i.e. both right and left censored).

\(^3\) For 882 individuals, there is a single observation as these people are right, left, or both right and left censored. All persons with 1 year of observations were non-managerial employees, therefore none of the excluded persons were managers. The gender composition of these excluded non-managerial employees mirrors the study population as 69.5% of these people are female.
Handbook), to illustrate the role of managers in this setting. In a branch manager training session conducted the year prior to the start of the study window, for example, managers were encouraged to act in an entrepreneurial capacity as they were instructed to "behave like you are in business for yourself" and to "hold yourself accountable for outcomes." In terms of compensation in particular, an organizational goal to "empower managers to make compensation decisions" and to "institute flexible versus mechanical compensation" was reiterated to managers during this training session. When addressing the degree of control that managers have over compensation, the Handbook similarly indicates that the "branch manager owns compensation decisions." In terms of hiring and promotion, the branch manager "recruits, trains, manages, and develops a high performance team," "identifies staffing levels", and "plans, approves, and appropriately paces all training." While HR plays a supporting role to “help supervisors review and plan employment activities” and encourages managers to “give preference to internals,” managers have control over hiring and promotion decisions as they are empowered to select an appropriate candidate for an opening. Similarly in terms of allowing employees to use flexible work options the Handbook indicates that managers “are encouraged to explore and use flexible work options” and the manager “has the final decision as to who may participate and may adjust work schedules at any time.” Whereas existing studies make the critical assumption that managers have control over the decisions impacting relevant outcomes (e.g. Baron et al., 1991; Hultin and Szulkin, 1999; Cohen and Huffman, 2007; Penner, Toro-Tulla, and Huffman, 2012), together these organizational statements provide explicit evidence that the branch managers in this setting indeed have control over wages, allocation to jobs, and use of flexible work options for their subordinates.
By examining differences in outcomes for employees reporting to female versus male managers within FinServ’s retail branches, I am also able to compare structurally equivalent subunits (i.e. branches). Each manager in this setting oversees a single comparable branch that employs individuals in each of the non-managerial positions. These managers operate under the same organizational guidelines, particularly as related to the outcomes of interest in this study. Therefore, this analysis exploits within organization variation in these subunits, while controlling for potentially confounding attributes that may vary across branches. In other words, by focusing on the retail branches of FinServ, this study is better able to disentangle whether the gender of an employee’s manager has implications for gender inequality by isolating manager gender and controlling factors such as organizational policies, manager tenure, and work group size. Together, these features make the retail branches of FinServ well-suited for identifying whether female managers have an impact on gender inequality among the non-managerial employees reporting to them.

**Dependent Variables**

My analyses use three distinct dependent variables to estimate the degree of gender inequality in terms of wages, job segregation and the use of flexible work arrangements. Each of these variables varies annually between 1996 and 1999 and was created using data from FinServ’s personnel database.

*Wages.* To measure non-managerial employee wages, I used the natural logarithm of pre-tax hourly wages. Using hourly wages provides a measure for employee compensation that is independent of differences in the number of hours worked or fluctuations in work schedule.
Position. In their 1995 study, Peterson and Morgan argue that the gender wage gap is largely eradicated when men and women in the same job are compared (see also Kilbourne et al., 1994). In other words, allocative processes account for a large part of wage inequality (Petersen and Saporta, 2004; Fernandez and Mors, 2008). Therefore, to fully understand whether female managers impact gender inequality, it is necessary to examine whether the degree of gender-based job segregation differs among employees reporting to female versus male managers. While supply-side factors have been found to contribute to the gender composition of jobs (Fernandez and Sosa, 2005; Fernandez and Abraham, 2010; Barbulescu and Bidwell, 2012), many economic and organizational sociologists have argued that organizational factors also play a role (Baron, 1984; Bielby and Baron, 1986; Nelson and Bridges, 1999; Tomaskovic-Devey and Skaggs, 1999; Sørensen, 2007). Given that the 5 non-managerial branch positions follow a clear hierarchy (see Figure 1, positions and the branch hierarchy discussed in detail below), position was coded as a five-category ordinal variable. Position is coded as follows: 1 for employees in the lowest branch position of teller, 2 for representatives, 3 for officers, 4 for executives, and 5 for relationship managers.

Part-time. In addition to wages and allocation to jobs, organizational employees may face gender-based inequities in terms of other resources such as flexible work arrangements. While one argument against perceiving access to flexibility as a resource is that flexible work is sometimes linked to penalties for employees,\(^4\) there is also evidence that employees working under flexible work arrangements “earn wages at least equal to their fixed schedule counterparts”

\(^4\) In the research setting presented herein, a comparison of hourly wages of part-time and full-time employees reveals that employees to not suffer a wage penalty for using flexible work arrangements. Also, part-time employees working at least 25 hours per week are eligible for all of the benefits available to full-time employees including, medical benefits, company match to retirement savings plan contributions, tuition reimbursement and paid time off.
Abraham (Weeden, 2005). Furthermore, studies have argued that both male and female workers cite flexibility as the most desirable feature to have in a job (Glass and Estes, 1997; Golden, 2001) as it enables employees to manage their work and non-work responsibilities. While this preference exists, opportunities for flexible work vary greatly, both across and within organizations (Kelly and Kalev, 2006; Wharton, Chivers, and Blair-Loy, 2008). As Galinsky and colleagues (1996) argue, managerial support is not only important, but may actually be more significant than formal policies in determining the use of flexibility in organizations. While there has not been any examination looking at differences in the use of flexibility based on manager gender, some studies suggest that a difference may exist. For example, some studies suggest that the presence of formal policies will be higher in organizations that have more women in management (Dreher, 2003). Similarly, Dobbin and Kalev (2009) find that organizations with a higher proportion of women, particularly white women, in management are more likely to adopt diversity programs.

In this study, flexible work is measured as whether non-managerial employees are employed as part-time employees. This variable is measured by a dichotomous dummy variable where part-time equals 1 if the employee has a part-time work arrangement and 0 otherwise. In this setting, part-time work provides evidence of both reduced work hours and flexibility in scheduling given that branches operate during normal business hours (i.e. approximately 8:30am-6:00pm). Therefore, part-time employees work different shifts within this window.

**Explanatory and Control Variables**

The main explanatory variables are *Employee female* and *Manager female* to capture the gender of the focal employee and the employee’s manager, both coded 1 for female and 0 for male. Both *Employee female* and *Manager female* are used in all models predicting each of the dependent
variables. The main focus of this study is to determine whether male and female managers impact outcomes for male versus female employees differently. Therefore, the interaction between Manager female and Employee female is included to capture this difference.

**Controls for wage models.** All of the wage models include controls for a number of characteristics of individual non-managerial employees including a set of dummy variables for three of the four racial categories: African-American, Asian, Caucasian, Hispanic. The largest category, Caucasian, is omitted as the reference category. Employee age and Employee tenure are measured in years for each year from 1996 to 1999 based on the employee’s date of birth and date of hire, respectively. Marital status is coded 1 if the employee is married in a given year and 0 otherwise. Additionally, the interaction of Employee female and Marital status is included in all wage models as some gender scholars have found that differences in pay and promotion are related to expectations about workers family responsibilities (Roth, 2008). The notion of the “unencumbered ideal worker” (Bailyn, Drago, and Kochan, 2011) suggests that managers may prefer single male employees most. By including the main and interaction effects for Marital status, these models account for this possible association.

Models also include a control for Manager tenure, as male and female managers differ in average tenure. Manager tenure is measured in years, for each year from 1996 to 1999, based on the manager's date of hire. A third set of controls are related to characteristics of the individual branches. One argument may be that larger branches are of higher status indicating that managers of larger branches may differ in some substantive way from managers of smaller branches. Therefore, all models control for Branch size, coded as number of employees including manager, for each year from 1996 to 1999. Lastly, all models include state fixed effects for the state where the branch is located to account for any regional differences in wages.
Model Specification

I estimate three sets of models to examine whether gender inequality outcomes differ based on manager gender. First, I use multivariate analyses with the logarithm of pre-tax hourly wages as the dependent variable to examine whether relative wages for male and female employees differs by manager gender. Because employees in this setting are nested within branches, individuals within branches may have more in common than individuals across branches. This indicates that employees within branches may not be independent, violating a key assumption of ordinary least squares (OLS), therefore OLS may result in biased estimates of standard errors (Osborne, 2000). Furthermore, the data I am analyzing are pooled, cross-sectional time series (yearly) data. A common approach for analyzing data that are structured in this way is to use fixed-effects models, which would capture within-individual and within-branch, over time variation. Given my research question, I am inherently interested in the gender of non-managerial employees and the gender of branch manager, two attributes that are time-invariant.\(^5\) Therefore, a fixed-effects model is not suitable for this study as both employee gender and branch manager gender would be dropped from such models. Therefore, I estimate various cross-sectional time-series linear models using the method of generalized estimating equations (GEE).\(^6\)

\(^5\) Theoretically, branch manager may vary in cases where a branch is managed by a female manager in one year and a male manager in a subsequent year (or vice versa), for example. During this time period, however, these switches in manager gender were very rare. Only 3 branches, for a total of 4 percent of persons, experienced such an event. Furthermore, the direction of this switch in branch manager gender was not consistent: 1 branch went from having a female to a male manager and the other 2 branches went from a male to a female manager. In most cases this switch in manager occurred in either the first or the last year of the study period making the period of time that either the initial or subsequent manager was in charge of the branch insufficient for drawing comparisons between managers within a branch. Therefore, branch fixed effects would not allow for estimating parameters for the effect of manager gender for most cases in this study.

\(^6\) Results are largely consistent when estimating models using less structure on the variance-covariance matrix (i.e. OLS).
As aforementioned, the data that I am analyzing are unbalanced as individuals may enter the dataset after the start of the study window and/or exit before the close of the study window. Given that these data include repeat observations for individuals\(^7\) over time, I ran diagnostics to test the assumptions of homoscedasticity and that errors are not auto-correlated across time periods. As expected, errors in these data are heteroskedastic, as the variance of the errors varies across individual non-managerial employees. Additionally, the Woolridge test for autocorrelation in panel data reveals that there exists first-order auto-correlation, where the errors at time \(t\) are correlated with the errors at time \(t-1\). Thus, longitudinal GEE models accounting for both heteroskedasticity and first-order autocorrelation are used to estimate the effect of manager gender on gender-based wage inequality.

Second, I use log-linear hierarchical models to examine whether job segregation or the relative use of flexible work varies for employees based on manager gender. Log-linear models are a special class of models that appropriately deal with comparisons of categorical data (Bishop, Fienberg, and Holland, 1975; Haberman, 1978). Specifically, these models uncover the potential relationships among categorical variables in a multiway contingency table. In terms of job segregation, log linear models allow for testing the null hypothesis that manager gender is independent of the joint distribution of male and female employees to the five non-managerial branch jobs. In order to test whether the gender composition of jobs across the branch hierarchy is the same for employees reporting to female and male managers, I estimate the following log-linear model comparing the relationship between \(Employee\) female and \(Branch\) position by \(Manager\) female

---

\(^7\) For 882 individuals, there is a single observation as these people are right, left, or both right and left censored. Therefore, when clustering standard errors to account for the fact that errors are correlated across time periods by individual, these 882 individuals are dropped from the analysis. All models, then, are based on the remaining 2,649 person-years for those individuals with 2 or more observation.
where F is *Employee female*, B is *Branch position*, and M is *Manager female*.

Similarly for use of flexible work arrangements, log-linear models allow for testing the null hypothesis that manager gender is independent of the joint distribution of male and female employees to part-time work arrangements. In order to test whether the relative use of part-time by female versus male employees is the same for employees reporting to female and male managers, I estimate the following log-linear model

\{FP\} \{M\}

where F is *Employee female*, P is *Part-time*, and M is *Manager female*.

**RESULTS**

The branch employees in this setting span 6 distinct organizational positions: teller, representative, officer, account executive, relationship manager, and branch manager. The first five positions listed are non-managerial positions, each of which may be either exempt or non-exempt, and the last position, branch manager, is exempt. Individuals in these non-managerial positions report directly to the branch manager. Figure 1 depicts the hierarchy of positions, as claimed in FinServ documents as the career path within a branch, as well as the key responsibilities of each role. FinServ terms non-managerial positions within the branch "manage self" positions, as these positions not have any personnel management responsibilities. The position of branch manager is the only "manage others" position, as a key set of responsibilities is related to personnel management and managing the branch team.

[Insert FIGURE 1 about here]
While the positions to the left of the dotted line in figure 1 do not have managerial responsibilities, there is a clear hierarchy among the non-managerial branch positions in terms of responsibilities and wages. There is a structure of cumulative skills and knowledge within the branches of FinServ such that incumbents of each position were expected to be expert in particular skills associated with their position as well as the skills of each lower level position. For example, representatives are focused on unsecured products and sales and service, but they are also responsible for the tasks of tellers, namely basic products and transactions. Table 1 8 reports the distribution of employees across branch positions and mean hourly wages for each branch position. Consistent with this branch hierarchy, the mean hourly wage increases steadily with the lowest position being teller (mean = $12.24, SD = $1.82) and the highest non-managerial position being relationship manager (mean = $32.17, SD = $7.90). The mean hourly wage increases by a minimum of $2.65 (mean of $4.35) for each increase in non-managerial position along this hierarchy. In terms of the distribution of non-managerial employees across the branch hierarchy, table 1 shows that over 70 percent of all employees occupy the lower-level positions of teller, representative and officer.

[Insert TABLE 1 about here]

The branch managers comprise approximately 15 percent of all employees in the retail branches. Of particular interest for this study, each branch is head by a single manager and these managers are the sole employees in the retail branches with personnel responsibilities overseeing all other employees and branch operations. Table 2 reports descriptive statistics for branch managers, both overall and by manager gender. The average hourly wage for managers was approximately

---

8 For simplicity, all descriptive statistics are presented for 1999. The patterns presented in each of the descriptive tables for 1999 are consistent with similar tables constructed for each of the 4 years, 1996 – 1999, included in this study.
$33.98 in 1999 (SD = $7.55) with approximately 46 percent of managers being female. Given that the focus of this study is to determine whether the degree of gender inequality among employees differs based on the gender of their manager, it is important to identify if male and female managers in this setting differ in any substantive ways other than gender. While female managers earn slightly less than male managers on average, this difference in wages is not significant. Similarly, male and female managers do not differ significantly in either their racial composition, with both groups being equally diverse in terms of race, or their mean age. Female managers are more tenured, however, having over four years more tenure ($P<.05$), on average, when compared to male managers. To the extent that more experienced managers have more power within the organization, this difference indicates that female managers should possess at least as much control over resource allocation as male managers.

[Insert TABLE 2 about here]

The first column of table 3 presents overall descriptive statistics for male and female non-managerial employees irrespective of whether they report to a male or female manager. The second and third columns of table 3 separate non-managerial employees based on the gender of their manager to determine whether the employees reporting to male and female managers differ in any substantive way. As column 1 of table 3 reveals, on average there are eight non-managerial employees in each branch and approximately 70 percent of all non-managerial employees are female. Comparing overall mean hourly wages across all jobs for female and male employees indicates that female employees earn approximately 74 cents for every dollar that men earn ($P<.001$). Female employees are nearly five times as likely to work part time ($P<.05$),

---

9 Educational information (i.e. highest degree) is only populated for 35 percent of employees included in the study population. This information is provided by employees on a voluntarily basis. Since it is unclear whether this information is missing at random, education is not included in the main analyses.
are about two years older, and have nearly two more years of tenure on average (P<.05) than men. Male and female employees do not differ, however, in their likelihood of being married or in terms of racial composition.

[Insert TABLE 3 about here]

Given the aim of this study, it is necessary to not only determine whether male and female non-managerial employees differ, but also whether male and female managers oversee comparable individuals. The next two columns of table 3 present key descriptive statistics for all variables of interest for employees by branch manager gender allowing for a comparison of female non-managerial employees, as well as male employees, reporting to female versus male managers. The final column of table 3 presents the results of t-tests of these within non-managerial employee gender comparisons. Male and female managers oversee branches that are similarly female, but female managers manage smaller branches on average (7 versus 8 employees, P<.001). Neither male nor female non-managerial employees reporting to female managers differ significantly in terms of wages, the propensity to work part-time, or race when compared to those reporting to male managers. Female non-managerial employees reporting to female managers do have longer tenure on average (8 vs. 6.2 years, P<.05) than female employees reporting to male managers. While average tenure for male employees does not differ, male employees reporting to female managers are older (38.6 vs. 35.2 years, P<.05) and more likely to be married (57.8 vs. 39.5 percent, P<.05) than those men reporting to male managers.

Female Managers and Wage Inequality

Table 4 presents results from the three models estimating the effect of manager gender on non-managerial employee log hourly wages. Model 1 reveals that, irrespective of manager gender,
non-managerial female employees earn 14.9 percent \( (p < .001) \) less than their male counterparts. In order to assess whether female managers impact this evident gender inequality in wages, Model 2 introduces both the main effect of manager gender and the interaction effect between manager gender and gender of the non-managerial employee. First, the negative effect of female remains, indicating that among employees reporting to male managers (the reference category for manager female), female employees earn approximately 16 percent \( (p < .05) \) less than male employees. The negative main effect of manager gender indicates that non-managerial male employees (the reference category for female) reporting to female managers earn slightly over five percent less \( (p < .05) \) than those reporting to male managers.

[Insert TABLE 4 about here]

The relevant comparison for testing the proposition that female managers will reduce wage inequality, however, is whether the wage gap between male and female employees is lower among those reporting to female managers as compared to those reporting to male managers. Given that the coefficient of the interaction term is insignificant, we can conclude that this is not the case. While employees reporting to female managers earn less than those reporting to male managers, the relative wage for female versus male employees, or the gender wage gap, does not differ based on manager gender.

Thus far, this analysis has not compared male and female non-managerial employees working in the same organizational positions, or jobs. As aforementioned, the gender wage gap has been shown to virtually disappear when men and women in the same job are compared (e.g. Kilbourne et al., 1994; Petersen and Morgan, 1995; Petersen and Saporta, 2004). Therefore, to fully understand whether female managers impact wage inequality, it is necessary to compare wages...
for male and female non-managerial employees within branch position. Model 3 is a fully interacted model estimating the effect of manager gender on male versus female employee wages, introducing dummy variables for the non-managerial branch positions (teller is the omitted category). It is worth noting that the positive relationship between each of the dummy variables for the non-managerial positions indicates that male representatives, officers, account executives, and relationship managers reporting to male managers earn 16, 37, 58, and 79 percent more, respectively, than male tellers reporting to male managers. This pattern is in line with the pattern revealed in Table 1, that mean wages for each job are significantly higher than mean wages for the reference category of teller. Since teller is the omitted branch position, the observed negative relationship between employee gender and wages reflects the within-job gender wage gap for tellers reporting to male managers (the reference group for manager female). Among tellers reporting to male managers, female tellers earn five percent less ($p < .05$) than male tellers. The within-job gender wage gap for each of the other four branch positions is presented by the two-way interactions between employee gender (female) and each of the branch position. These results indicate that other than tellers, gender wage inequality only exists among executives with female executives earning nearly eight percent less than their male counterparts. Therefore, consistent with extant theory, once we compare wages for men and women working in the same branch positions, wage inequality is attenuated.

In order to determine whether female managers reduce wage inequality within branch position, it is necessary to compare the relative wages of male and female employees reporting to female versus male managers. These effects are represented by the coefficients of manager gender (main effect, two-way interactions, and three-way interactions). The negative main effect of manager gender indicates that tellers reporting to female managers earn three percent less ($p < .10$) than
those reporting to male managers. Additionally, the positive coefficient of the interaction of manager gender and employee gender indicates that female tellers earn nearly four percent more when reporting to a female versus a male manager. Together these results indicate that female managers attenuate gender wage inequality among tellers. The only other position where there is evidence of gender wage inequality is among executives, with female executives earning nearly eight percent less than male executives. This wage inequality, however, does not differ based on manager gender.

To illustrate how this gender wage inequality among tellers differs based on whether employees report to a female or a male manager I used the coefficients from model 3 (Table 4) to construct the two-by-two table presented in table 5. This table compares the mean hourly wages for the typical\textsuperscript{10} male and female teller based on whether they report to a male or female manager. These figures allow for a comparison of the gender wage gap among tellers reporting to female relative to male managers. Among tellers reporting to female managers, female tellers earn 99 cents for every dollar that male tellers earn. Comparatively, female tellers earn 95 cents for every dollar that male tellers earn when employees reporting to male managers are considered. This result provides some support that female managers attenuate wage inequality for subordinates when compared to their male counterparts. There is less gender inequality in terms of wages for subordinates reporting directly to female managers, however, this effect is limited to the lowest position in the organizational hierarchy, that of teller.

**Female Managers and Job Segregation**

\textsuperscript{10} Predicted values for hourly salary were calculated using Model 3 (Table 5) for a typical teller profile: a white, single individual, working fulltime, with average tenure and age reporting to a manager with average tenure. The resulting natural logarithm of hourly wages for each group (e.g. men reporting to male managers) was then exponentiated for ease of interpretation. This approach, as opposed to simply calculating means for groups, allows mean hourly wages to take into account all controls from Model 3.
In terms of the distribution of female non-managerial employees across the levels of the branch hierarchy, figure 2 illustrates the degree to which jobs are segregated in terms of gender, by branch position. Consistent with the glass ceiling hypothesis, the proportion of women in lower-level positions of teller and representative is considerably higher than the proportion of women in the higher-level positions of account executive and relationship manager (p<.01; LR chi-square = 163.35, d.f. = 4). While this pattern is evident, this is simply a descriptive pattern as these are post-hire data which do not provide insight into the mechanisms leading to this apparent glass ceiling (for a similar discussion of the limitations of post-hire data see Fernandez and Weinberg, 1997; Fernandez and Abraham, 2010, 2011). For example, not knowing the proportion of women that are in the consideration set for higher-level positions (i.e. relationship manager) makes it equally plausible that 1) women are simply not applying to higher level jobs (as has been shown by Barbulescu and Bidwell, 2012 and Fernandez and Abraham, 2010, 2011, for example) or 2) managers are showing a preference in selection for male applicants for higher level jobs. In order to isolate the mechanisms at play in creating these observed patterns it is necessary to examine pre-hire data (see Fernandez and Abraham, 2010, 2011 and Fernandez and Weinberg, 1997 for an example).

[Insert FIG 2 and FIG 3 about here]

In the absence of data on the applicant pools, however, these analyses can at least determine whether the observed glass ceiling pattern differs based on whether employees report to a male versus a female manager. As figure 2 illustrates, this descriptive pattern appears to be quite similar for subordinates of both female and male managers. Model 1 in table 6 presents the likelihood ratio chi-squared statistics and related p-values for the log-linear independence models for each of the four years included in these data to test whether the gender composition of jobs
differ based on manager gender. This model tests the null hypotheses that the distribution of male and female employees across the five levels of the branch hierarchy is independent of manager gender. While I am not able to draw any conclusions regarding the impact of female relative to male managers on this distribution of women across levels of the organizational hierarchy, the insignificant likelihood ratio chi-square for each year indicates that this independence model is a good fit for the data. The distribution of employees across the hierarchy does not differ based on the gender of the manager, therefore, to the extent that non-managerial jobs are skewed in terms of gender, they are equally segregated regardless of the gender of the branch manager.

[Insert Table 6 about here]

**Female Managers and Flexible Work Arrangements**

Figure 4 shows the proportion of non-managerial employees, both male and female, working part-time by manager gender. Employees are nearly twice as likely to work part-time (5.9 percent vs. 10.8 percent) when reporting to a female versus a male manager (p<.1; LR chi-square = 3.17, d.f. = 1). Figure 5 shows the relative use of part-time by male and female non-managerial employees reporting to female versus male managers. The proportion of female, relative to male, employees working part-time is significantly higher among employees reporting to both female (p<.1; LR chi-square = 3.01, d.f. = 1) and male managers (p<.05; LR chi-square = 5.33, d.f. = 1) indicating that women are more likely to work part-time. Unsurprisingly, these differences in the use of flexibility suggest that there is an association between gender and flexibility. They do not, however, indicate whether female managers are more egalitarian in allowing their male and female subordinates to use flexible work arrangements. As with the job segregation analyses, this
is simply a descriptive pattern as these data do not provide insight into the mechanisms leading to this outcome. For example, not knowing the proportion of men versus women that requested part-time work makes it equally plausible that 1) men are requesting part-time work at lower rates or 2) managers are showing a preference for female employees in deciding who to allow to work part-time. In order to isolate the mechanisms at play in creating these observed patterns it would be necessary to identify which employees requested flexible work arrangements (for a similar discussion of the limitations of post-hire data see Fernandez and Weinberg 1997; Fernandez and Abraham 2010, 2011).

[Insert FIG 4 and FIG 5 about here]

In order to assess whether this evident gender inequality in use of flexibility differs for those reporting to female versus male managers, Model 2 in table 6 presents the likelihood ratio chi-squared statistics and related p-values for the log-linear independence models for each of the four years included in these data. This model tests the null hypotheses that the distribution of male and female employees to part-time work is independent of manager gender. While I am not able to draw any conclusions regarding the impact of female relative to male managers on this distribution of men and women to part-time work, the results indicate that the relative proportion of men and women working part-time does not differ based on the gender of the manager. In other words, to the extent that there exists gender inequality in the use of flexibility in this setting, this inequality is consistent for employees reporting to both male and female managers.

**DISCUSSION**

Given the rise in women’s presence among managers, this study aims to uncover whether, and under what conditions, female managers reduce gender inequality among the non-managerial
employees reporting to them. While recent studies have attributed the lower levels of gender inequality in settings where there are more women in management to the impact of female managers, these studies have not provided direct evidence for this mechanism. Using unique personnel data from 120 branches of a large retail financial services firm where the reporting structure is identified and managers have authority over employee outcomes, I find that female managers contribute to differences in outcomes for subordinates in two distinct ways. First, they provide greater access to equitable wages, but only among employees in the lowest level organizational position. While the overall gender wage gap does not differ based on manager gender, female managers do attenuate gender inequality in wages among tellers. Second, they provide greater access to flexible work arrangements for both male and female employees. While I do not find that female managers are more equitable in term of access to flexible work arrangements, both male and female employees reporting to female managers are nearly twice as likely to work part-time.

These findings have several implications for research on the organizational bases of gender inequality and workplace flexibility. This case-study design provides the first direct evidence of the relationship between the gender of the manager and the gendered outcomes of subordinates in a setting where actual manager-subordinate relationships are identified and managers have control over outcomes. By illustrating the power of an organizational grounded approach for developing a more complete understanding of the role of women in management on gender inequality of subordinates, this study serves as a useful corrective to past approaches which seek to address the organizational bases of gender inequality employing only indirect evidence on these questions.
In terms of the impact of female managers on wage inequality, this study ascertains the importance of identifying managerial control over setting wages. Given Penner and colleagues’ (2012) finding that female managers have no impact on wage inequality among the low-skill, supermarket workforce they study, my finding that female managers attenuate wage inequality among tellers is somewhat surprising. This study casts doubt on Penner et al.’s (2012) claim that, despite the collective bargaining agreement, female managers in their setting have the necessary control to impact wage inequality. Given that differences in wage inequality can only be attributed to the managers to the extent that those managers have control over allocating wages, their finding may result from the fact that managers lack control over wages in this setting.

Furthermore, attempting to identify whether female managers attenuate gender wage inequality without looking at within-job wage inequality may lead to an incomplete answer. If conclusions about the impact of female managers were drawn solely by comparing the overall wage inequality across all branch positions in this setting, one would conclude that female managers do not reduce gender inequality. A more careful examination of wage inequality within specific branch positions, however, reveals boundary conditions regarding when female managers may attenuate inequality, namely among employees in lower level organizational positions. Future research identifying additional boundary conditions for when female managers are more apt to impact gender inequality is needed.

While these data do not allow for identifying the specific mechanisms of manager influence, previous research is informative in identifying a potential explanation for the finding that female managers only attenuate wage inequality in the lower organizational ranks. Value threat theory suggests that as the lower status group, women may fear that others will not perceive them as
valuable members of the organization making them less apt to support other women within the organization (Reagans, 2005; Duguid, 2011; Duguid, Lloyd, and Tolbert 2012). Therefore, women in positions with the power to affect outcomes of subordinates may act similarly to their male counterparts, even if they do not hold gender stereotypes disadvantaging women. It is plausible that female managers feel less threat breaking with the norm of wage inequality among employees in the lower-level branch position of teller than in higher-level positions, such as account executive. While this is plausible, additional research is necessary to identify whether female managers decisions to reduce inequality is driven by concerns over their own organizational value. Interviews with both male and female managers would be informative for identifying the degree to which female managers are more concerned with how they are perceived by other organizational actors. A second possibility is to compare the impact of female managers on gender inequality across settings where their status relative to male counterparts varies.

By examining gender differences in the allocation of an understudied resource, namely flexibility, by managers, this study also broadens our knowledge of whether female managers impact resource allocation to subordinates differently from male managers. This finding, at a minimum, suggests that employees reporting to female managers may be more able to leverage flexible work options. As aforementioned, without knowledge of how employees were given flexibility it is unclear whether employees reporting to female managers requested flexibility at a higher rate or if female managers are more accommodating in extending flexibility. However, irrespective of which mechanism is leading to the higher rate of flexibility among those reporting to female managers, this finding indicates that working for a female manager increases an employee’s likelihood of using a flexible work arrangement. In order to isolate the mechanisms
at play, future research should aim to examine differences not only in flexibility use but in requesting flexibility for those reporting to female as compared to male managers.

Additionally, the higher likelihood for employees reporting to female managers to use flexibility may be particularly beneficial for women. In recent studies, women have been found to experience depletion, or detrimental effects from their multiple roles, whereas men tend to experience enrichment, or positive spillover effects (Rothbard, 2001). Therefore, the fact that employees use flexibility more when reporting to a female manager may serve as an indirect benefit for female employees reporting to female, as opposed to male, managers. To the extent that flexibility is more valued by women as it reduces the negative experience from balancing work and non-work responsibilities, the higher likelihood for employees to use flexibility when reporting to a female manager may be more beneficial for women, than for men, reporting to female managers.

In addition to advantages to the individual employee, some studies have posited that flexibility is associated with positive organizational outcomes. For individuals who prefer greater segmentation between their work and non-work lives, flexible work options that facilitate this separation have been found to lead to greater organizational commitment (Rothbard, Phillips, and Dumas, 2005). This suggests that if female managers are both extending flexibility more and to the employees most in need of segmentation, they may positively impact both their subordinates and organizational outcomes. There is promise for future research to unpack the managerial process of allocating flexibility to male and female employees. A more in-depth examination of this process in a setting with the same features of the organization studied here, namely where reporting structures are identified and managers have control over allocating flexibility, is necessary. Specifically, gaining access to formal flexible work arrangements would
allow for a comparison of different forms of flexibility and provide insight into employee, as well as employer, preferences in terms of flexible work arrangements.
References

Albrecht, J., A. Björklund, S. Vroman.  


Barbulescu, R., and M. Bidwell.  

Baron, J. N.  

Baron, J. N., and W. T. Bielby.  


Bielby, W. T.  

Bielby, W. T., and J. N. Baron.  

Bishop, Y.M. M., S.E. Fienberg, and P.W. Holland.  

Bjerk, D.

Blau, F. D., and J. DeVaro.

Blau, F. D., M. A. Ferber, and A. E. Winkler.
2009 The Economics of Women, Men, and Work. 6th ed. Prentice Hall.


Briscoe, F., and K. Kellogg.


Cardoso, A. R., and R. Winter-Ebmer.
2007 “Female-Led Firms and Gender Wage Policies.” ILR Review, 64 (1).

Castilla, E. J.

Castilla, E. J.

1998 “And Then There were More? The Effect of Organizational Sex Composition on the Hiring and Promotion of Managers.” American Sociological Review, 63:711-727.

Cohen, P. N., and M. L. Huffman.

Abraham


Dreher, G.

Duguid, M. M.


2004 “Glass Ceilings: Status of Women as Officials and Managers in the Private Sector”

Ely, R. J.

Ely, R. J.

Federal Glass Ceiling Commission.


2010 “From Metaphors to Mechanisms: Gender Sorting In(to) an Organizational Hierarchy.” Paper presented at the annual meetings of the American Sociological Association in Atlanta, Georgia


2005  “Gendering the Job: Networks and Recruitment at a Call Center.” The American Journal of Sociology 111: 859–904.


Galinsky, E., J. Bond, and D. Friedman.  

Gibbons, R.  


Golden, L.  
2001  “Flexible work schedules: what are we trading off to get them?” Monthly Labor Review, 124:50.

Helgeson, S.  
Huffman, M. L., and P. N. Cohen.

Huffman, M. L., P. N. Cohen, and J. Pearlman.

Hultin, M., and R. Szulkin.

Hultin, M., and R. Szulkin.

Ibarra, H.

Johnson N.B., T. A. Scandura.

Kalev, A.

Kalev, A., F. Dobbin, and E. Kelly.

Kelly, E., and A. Kalev.
2006  “Managing flexible work arrangements in US organizations: formalized discretion or 'a right to ask'.” Socio - Economic Review, 4: 379.

Konrad, A. M. V. Kramer, and S.  

Kulis, S.  


Marsden, P. V., and E. H. Gorman.  


Nelson, R. L.  

Osborne, J. W.


Petersen, T, and L. A. Morgan.

Petersen, T., and I. Saporta.

Petersen, T., I. Saporta, and M. Seidel.

Pfeffer, J.

Powell, G. N., and D. A. Butterfield.


Reagans, R.

Reskin, B. F.

2000 “Why Not Ascription? Organizations' Employment of Male and Female Managers.”

Reskin, B.F.
2003 “Including Mechanisms in Our Models of Ascriptive Inequality.” American Sociological

Ridgeway, C. L.
Social Forces, 70: 367 – 386.

Ridgeway, C. L.
1997 “Interaction and the Conservation of Gender Inequality: Considering Employment.”

Ridgeway, C. L., and S. J. Correll.
2004 “Unpacking the Gender System: A Theoretical Perspective on Gender Beliefs and Social
Relations.” Gender and Society 18: 510-531.

Ridgeway, C. L., and S. J. Correll.

Roth, L. M.
University Press.

Rothbard, N. P.
2001 “Enriching or Depleting? The Dynamics of Engagement in Work and Family Roles.”

2005 “Managing Multiple Roles: Work-Family Policies and Individuals’ Desires for

Shin, T.
2012 “The Gender Gap in Executive Compensation.” The ANNALS of the American
Academy of Political and Social Science, 639: 258–278.

Skaggs, S., K. Stainback, and P. Duncan.
2012 “Shaking Things up or Business as Usual? The Influence of Female Corporate Executives and Board of Directors on Women’s Managerial Representation.” Social Science Research, 41: 936–948.


Weeden, K. A.

Wharton, A. S., S. Chivers, and M. Blair-Loy.

Wolf, W. C., and N. D. Fligstein.
Figure 1. Branch Positions: Hierarchy and Description of Responsibilities

Non-Managerial Positions
“manage self”

Managerial Positions
“manage others”

Teller
- Basic products & transactions

Representative
- Financial planning & investments
- Advanced sales

Officer
- Focus on small business customers
- International products

Relationship Manager
- Focus on high net worth customers
- Complex products & services

Executive
- Leadership
- People management
- Business management & growth

Branch Manager
<table>
<thead>
<tr>
<th>Composition</th>
<th>Percentage*</th>
<th>Mean (SD)</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teller</td>
<td>21.17 (101)</td>
<td>12.24 (1.82)</td>
<td>7.50</td>
<td>22.50</td>
</tr>
<tr>
<td>Representative</td>
<td>14.47 (69)</td>
<td>14.89 (1.83)</td>
<td>11.27</td>
<td>20.34</td>
</tr>
<tr>
<td>Officer</td>
<td>34.59 (165)</td>
<td>19.11 (3.37)</td>
<td>13.08</td>
<td>34.01</td>
</tr>
<tr>
<td>Account Executive</td>
<td>4.82 (23)</td>
<td>22.85 (3.80)</td>
<td>13.44</td>
<td>31.25</td>
</tr>
<tr>
<td>Relationship Manager</td>
<td>9.85 (47)</td>
<td>32.17 (7.90)</td>
<td>19.23</td>
<td>53.31</td>
</tr>
<tr>
<td>Branch Manager</td>
<td>15.09 (72)</td>
<td>33.98 (7.55)</td>
<td>21.64</td>
<td>55.82</td>
</tr>
<tr>
<td>Overall</td>
<td>100 (477)</td>
<td>20.76 (9.01)</td>
<td>7.50</td>
<td>55.82</td>
</tr>
</tbody>
</table>

*Parentheses indicate number of employees
<table>
<thead>
<tr>
<th></th>
<th>Overall</th>
<th>Female Managers</th>
<th>Male Managers</th>
<th>t-test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean (SD) Percentage</td>
<td>Mean (SD) Percentage</td>
<td>Mean (SD) Percentage</td>
<td></td>
</tr>
<tr>
<td>Hourly Wages</td>
<td>33.98 (7.55)</td>
<td>33.13 (7.11)</td>
<td>34.69 (7.93)</td>
<td></td>
</tr>
<tr>
<td>Age (in years)</td>
<td>42.33 (9.02)</td>
<td>44.28 (9.68)</td>
<td>40.68 (8.19)</td>
<td></td>
</tr>
<tr>
<td>Tenure</td>
<td>10.20 (9.17)</td>
<td>12.72 (8.44)</td>
<td>8.07 (9.32)</td>
<td>*</td>
</tr>
<tr>
<td>Parttime</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Female</td>
<td>45.83</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African-American</td>
<td>12.50</td>
<td>12.12</td>
<td>12.82</td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>15.28</td>
<td>15.15</td>
<td>15.38</td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>63.89</td>
<td>69.70</td>
<td>58.97</td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td>8.33</td>
<td>3.03</td>
<td>12.82</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>72</td>
<td>33</td>
<td>39</td>
<td></td>
</tr>
</tbody>
</table>

FN: This table is for 1999, but all patterns are the same for all 4 years.

*** p ≤ 0.001, ** p ≤ 0.01, * p ≤ 0.05, ^ p ≤ 0.10 (all two-sided t-tests comparing employees reporting to female versus male managers)
Table 3. Basic Descriptive Statistics for Variables of Interest for Non-managerial Employees, by Employee Gender and Manager Gender, 1999

<table>
<thead>
<tr>
<th></th>
<th>Overall</th>
<th>Female Managers</th>
<th>Male Managers</th>
<th>t-test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean (SD)</td>
<td>Percentage</td>
<td>Mean (SD)</td>
<td>Percentage</td>
</tr>
<tr>
<td><strong>All Employees</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size</td>
<td>8.12 (2.91)</td>
<td>69.36</td>
<td>7.40 (2.24)</td>
<td>71.56</td>
</tr>
<tr>
<td><strong>Female Employees</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hourly Wages</td>
<td>16.64 (4.99)</td>
<td>10.21</td>
<td>16.30 (4.39)</td>
<td>13.11</td>
</tr>
<tr>
<td>Part-time</td>
<td>38.49 (10.33)</td>
<td>7.68</td>
<td>38.63 (10.43)</td>
<td>8.08 (7.44)</td>
</tr>
<tr>
<td>Age (in years)</td>
<td>7.68 (6.51)</td>
<td>38.05 (10.16)</td>
<td>6.21 (5.58)</td>
<td>8.02</td>
</tr>
<tr>
<td>Tenure (in years)</td>
<td>7.68 (6.51)</td>
<td>38.05 (10.16)</td>
<td>6.21 (5.58)</td>
<td>8.02</td>
</tr>
<tr>
<td>Married</td>
<td>46.91</td>
<td>43.66</td>
<td>39.34</td>
<td>46.91</td>
</tr>
<tr>
<td>African-American</td>
<td>7.38</td>
<td>5.99</td>
<td>3.15</td>
<td>33.95</td>
</tr>
<tr>
<td>Asian</td>
<td>40.74</td>
<td>32.75</td>
<td>31.15</td>
<td>33.95</td>
</tr>
<tr>
<td>Caucasian</td>
<td>40.74</td>
<td>42.25</td>
<td>44.26</td>
<td>40.74</td>
</tr>
<tr>
<td>Hispanic</td>
<td>20.37</td>
<td>19.01</td>
<td>17.21</td>
<td>20.37</td>
</tr>
<tr>
<td><strong>Male Employees</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hourly Wages</td>
<td>22.55 (9.01)</td>
<td>2.48</td>
<td>21.51 (8.60)</td>
<td>4.44</td>
</tr>
<tr>
<td>Part-time</td>
<td>35.15 (8.83)</td>
<td>5.64</td>
<td>36.63 (9.95)</td>
<td>6.31 (7.41)</td>
</tr>
<tr>
<td>Age (in years)</td>
<td>39.47</td>
<td>46.28</td>
<td>57.78</td>
<td>39.47</td>
</tr>
<tr>
<td>African-American</td>
<td>10.53</td>
<td>8.26</td>
<td>4.44</td>
<td>10.53</td>
</tr>
<tr>
<td>Asian</td>
<td>21.05</td>
<td>22.31</td>
<td>24.44</td>
<td>21.05</td>
</tr>
<tr>
<td>Caucasian</td>
<td>52.63</td>
<td>53.72</td>
<td>55.56</td>
<td>52.63</td>
</tr>
<tr>
<td>Hispanic</td>
<td>15.79</td>
<td>15.70</td>
<td>15.56</td>
<td>15.79</td>
</tr>
</tbody>
</table>

FN: This table is for 1999, but all patterns are the same for all 4 years.

*** p ≤ 0.001, ** p ≤ 0.01, * p ≤ 0.05, ^ p ≤ 0.10 (all two-sided t-tests comparing employees reporting to female versus male managers)
Table 4. Generalized Estimation Equation Regression Models Predicting Log Hourly Wages of Non-Managerial Employees

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>-0.149***</td>
<td>-0.157***</td>
<td>-0.050*</td>
</tr>
<tr>
<td></td>
<td>(0.024)</td>
<td>(0.025)</td>
<td>(0.020)</td>
</tr>
<tr>
<td>Manager Female</td>
<td>-0.052***</td>
<td>-0.032^</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.015)</td>
<td>(0.018)</td>
<td></td>
</tr>
<tr>
<td>Manager Female x Female</td>
<td>0.026</td>
<td>0.039^</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.018)</td>
<td>(0.021)</td>
<td></td>
</tr>
<tr>
<td>Representative</td>
<td></td>
<td>0.164***</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.024)</td>
<td></td>
</tr>
<tr>
<td>Officer</td>
<td></td>
<td>0.373***</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.020)</td>
<td></td>
</tr>
<tr>
<td>Executive</td>
<td></td>
<td>0.581***</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.031)</td>
<td></td>
</tr>
<tr>
<td>Relationship Manager</td>
<td></td>
<td>0.791***</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.032)</td>
<td></td>
</tr>
<tr>
<td>Rep x Mgr Female</td>
<td>-0.003</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.031)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Officer x Mgr Female</td>
<td></td>
<td>0.006</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.024)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exec x Mgr Female</td>
<td>0.006</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.046)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relation x Mgr Female</td>
<td></td>
<td>-0.043</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.043)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rep x Female</td>
<td>-0.009</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.027)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Officer x Female</td>
<td>-0.030</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.023)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exec x Female</td>
<td>-0.058</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.050)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relation x Female</td>
<td>-0.077^</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.044)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rep x Female x Mgr Female</td>
<td>-0.043</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.035)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Officer x Female x Mgr Female</td>
<td>-0.024</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.029)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exec x Female x Mgr Female</td>
<td>0.036</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.070)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relation x Female x Mgr Female</td>
<td></td>
<td>-0.021</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Estimate 1</td>
<td>Estimate 2</td>
<td>Estimate 3</td>
</tr>
<tr>
<td>--------------------------</td>
<td>------------</td>
<td>------------</td>
<td>------------</td>
</tr>
<tr>
<td>Black</td>
<td>-0.066*</td>
<td>-0.069**</td>
<td>-0.017</td>
</tr>
<tr>
<td></td>
<td>(0.026)</td>
<td>(0.026)</td>
<td>(0.014)</td>
</tr>
<tr>
<td>Asian</td>
<td>-0.015</td>
<td>-0.016</td>
<td>0.008</td>
</tr>
<tr>
<td></td>
<td>(0.023)</td>
<td>(0.023)</td>
<td>(0.012)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>-0.103***</td>
<td>-0.103***</td>
<td>-0.018</td>
</tr>
<tr>
<td></td>
<td>(0.023)</td>
<td>(0.023)</td>
<td>(0.012)</td>
</tr>
<tr>
<td>Age</td>
<td>0.008***</td>
<td>0.008***</td>
<td>0.005***</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>Tenure</td>
<td>0.016***</td>
<td>0.016***</td>
<td>0.008***</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>Married</td>
<td>0.211***</td>
<td>0.213***</td>
<td>0.060***</td>
</tr>
<tr>
<td></td>
<td>(0.031)</td>
<td>(0.031)</td>
<td>(0.018)</td>
</tr>
<tr>
<td>Married x Female</td>
<td>-0.196***</td>
<td>-0.200***</td>
<td>-0.051*</td>
</tr>
<tr>
<td></td>
<td>(0.037)</td>
<td>(0.037)</td>
<td>(0.021)</td>
</tr>
<tr>
<td>Branch Size (num. employees)</td>
<td>-0.000</td>
<td>-0.000</td>
<td>-0.001*</td>
</tr>
<tr>
<td></td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
</tr>
<tr>
<td>Manager Tenure</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.000)</td>
</tr>
<tr>
<td>Constant</td>
<td>2.481***</td>
<td>2.504***</td>
<td>2.325***</td>
</tr>
<tr>
<td></td>
<td>(0.038)</td>
<td>(0.038)</td>
<td>(0.025)</td>
</tr>
<tr>
<td>N</td>
<td>2,649</td>
<td>2,649</td>
<td>2,649</td>
</tr>
<tr>
<td>Number of Groups</td>
<td>1,110</td>
<td>1,110</td>
<td>1,110</td>
</tr>
<tr>
<td>Time Periods</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Wald Chi2</td>
<td>816.37 ***</td>
<td>845.64 ***</td>
<td>4840.82 ***</td>
</tr>
<tr>
<td>DF</td>
<td>17</td>
<td>19</td>
<td>35</td>
</tr>
</tbody>
</table>

Standard errors in parentheses

*** p<0.001, ** p<0.01, * p<0.05, ^ p<0.10

FN: All models include dummy variables for race, controls for employee age, employee age-squared, employee tenure, employee tenure-squared, manager tenure, manager tenure-squared, size of branch, and fixed effects for the state where the branch is located. The omitted category for race is "caucasian"; for job title is "teller"; for female is "male"; and for manager female is "manager male".
Table 5. Comparing Predicted Hourly Salary (in $) for Typical Male and Female Tellers by Manager Gender

<table>
<thead>
<tr>
<th></th>
<th>Female Manager</th>
<th>Male Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Female Teller</strong></td>
<td>11.98</td>
<td>11.90</td>
</tr>
<tr>
<td><strong>Male Teller</strong></td>
<td>12.12</td>
<td>12.51</td>
</tr>
</tbody>
</table>

**Gender Wage Gap**

- **in $**
  - Female: -0.13
  - Male: -0.61

- **F\textsubscript{wage} as % of M\textsubscript{wage}**
  - Female: 98.91
  - Male: 95.12

FN: Predicted values for hourly salary from Model 3 (Table 5) for a typical teller profile: a white, single individual, working fulltime, with average tenure and age reporting to a manager with average tenure.
Figure 2. Percent Female by Job for Non-Managerial Employees, 1999

<table>
<thead>
<tr>
<th>Role</th>
<th>% Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teller</td>
<td>90%</td>
</tr>
<tr>
<td>Representative</td>
<td>80%</td>
</tr>
<tr>
<td>Officer</td>
<td>70%</td>
</tr>
<tr>
<td>Account Executive</td>
<td>30%</td>
</tr>
<tr>
<td>Relationship Manager</td>
<td>20%</td>
</tr>
</tbody>
</table>
Figure 3. Percent Female by Job for Non-Managerial Employees, by Manager Gender, 1999

- Female Managers
- Male Managers
Table 6. Log-Linear Tests of Independence between Joint Distribution of Non-Managerial Employees to Jobs or Parttime and Manager Gender

<table>
<thead>
<tr>
<th>Model</th>
<th>Variables(^a)</th>
<th>DF</th>
<th>1999 Likelihood Ratio Chi-Square(^b)</th>
<th>1998 Likelihood Ratio Chi-Square(^b)</th>
<th>1997 Likelihood Ratio Chi-Square(^b)</th>
<th>1996 Likelihood Ratio Chi-Square(^b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1: Job Allocation</td>
<td>[FB] [M]</td>
<td>9</td>
<td>9.05 (0.43)</td>
<td>12.86 (0.17)</td>
<td>14.82 (0.10)</td>
<td>8.93 (0.44)</td>
</tr>
<tr>
<td>Model 2: Parttime</td>
<td>[FP] [M]</td>
<td>3</td>
<td>4.21 (0.24)</td>
<td>4.51 (0.21)</td>
<td>4.85 (0.18)</td>
<td>1.17 (0.76)</td>
</tr>
<tr>
<td>N</td>
<td></td>
<td></td>
<td>405</td>
<td>732</td>
<td>948</td>
<td>564</td>
</tr>
</tbody>
</table>

P-values in parentheses.

\(^a\) F = employee female (0 = male, 1 = female), M = manager female (0 = male, 1 = female), B = branch position (i.e. teller, representative, officer, account executive, relationship manager), and P = part-time (0 = not parttime, 1 = parttime)

\(^b\) Likelihood Ratio Chi-square statistic allows for a test of the null hypothesis that the joint distribution of non-managerial employee gender and either job allocation or parttime is *not independent* of branch manager gender.

*** p<0.001, ** p<0.01, * p<0.05, ^ p<0.10
Figure 4. Percent Non-Managerial Employees Parttime, by Manager Gender, 1999