Bringing Home the Bacon: The Relationships among Breadwinner Role, Performance, and Pay*

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We evaluate the relationships among breadwinner role, performance, and pay. Differences in pay are present despite limited differences in performance. We find a pay premium for primary-breadwinner employees across gender, yet a pay penalty for secondary-breadwinners employees only for women, suggesting an asymmetric relationship among breadwinner role, gender, and pay.

Introduction

From 1960 to 1990, the proportion of two-earner households more than doubled from 25 percent to nearly 60 percent (Wang, Parker, and Taylor 2013), while the number of households with a traditional division of labor —a male sole earner and a female stay-at-home spouse—decreased. Since 1990, the proportion of two-earner households has remained relatively stable (Wang, Parker, and Taylor 2013), yet household structure has continued to evolve in at least two ways. First, the initial rise in two-earner households frequently involved adding a second earner, often female (Percheski 2008), who earned substantially less than her male partner. As a result, the number of earners in the household increased, but the household structure with one primary breadwinner was preserved. Over time, two-earner households have increasingly become dual-breadwinner households with two relatively equivalent breadwinners, who both have significant human capital investments and earnings (Benson 2015; Costa and Kahn 2000). Second, gender dynamics have changed over time such that women are increasingly likely to outearn their male partners in two-earner households; such households increased fourfold from 1960 to 2011 (Wang, Parker, and Taylor 2013). As

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a result, men in partnered households are no longer the de facto primary breadwinner.[1]

These changes have amounted to an expansion in the set of breadwinner roles employees occupy. While historically married men were primary breadwinners and married women were either secondary breadwinners or did not work outside the household, today both men and women in married or partnered households frequently occupy the following roles: primary-breadwinner (i.e., spouse/partner is a secondary breadwinner or not employed), dual-breadwinner (i.e., employee shares breadwinner role relatively equally with a spouse/partner), and secondary-breadwinner (i.e., employee's spouse/partner is the primary breadwinner) employees.

In spite of this dramatic change in the household landscape, there remain significant limitations in our understanding of how fulfilling different breadwinning roles affects employees' work outcomes. Prior work suggests that household type does indeed matter for employees' careers, with the most consistent and widespread evidence pertaining to married men. Married men, previously considered a proxy for primary-breadwinner role, have higher pay and promotion rates as compared to unmarried men (see Juhn and McCue [2017] for a review). In addition, men who are the sole earner in a household earn more and have better career trajectories than men in two-earner households (Hotchkiss and Moore 1999; Landau and Arthur 1992; Pfeffer and Ross 1982; Schneer and Reitman 1993, 2002; Stroh, Brett, and Reilly 1996). Although prior research suggests that breadwinner role affects employee outcomes, current understanding is incomplete for at least three reasons.

First, extant research does not adequately capture the types of breadwinner roles employees frequently occupy in the current labor market. While being a married man was previously a reasonable proxy for primary breadwinner role, this is no longer the case. Likewise, research that differentiates sole- versus two-earner households does not distinguish between two-earner households that include a primary and a secondary breadwinner versus those that include dual breadwinners with relatively equivalent human capital investments and earnings. As a result, extant work does not provide insight into the full range of breadwinning roles employees currently occupy.

Second, nearly all of these prior studies do not include measures of employee performance, which precludes understanding of why breadwinning role affects career outcomes. Theories of household specialization predict that having a spouse/partner who specializes in fulfilling household responsibilities

[1] We largely write in terms of mixed-sex partners and spouses in the paper, but these households, both generally and in our sample, also include same-sex partners and spouses. We cannot distinguish between same-sex or mixed-sex partners and spouses in our sample.

facilitates work performance (Becker 1985; Hersch and Stratton 2000; Kanter 1977; Pfeffer and Ross 1982), with the result that a pay premium for primary-breadwinner employees is justified. Alternatively, the premium may instead be driven by stereotypes (i.e., characteristics are assumed to apply uniformly and often erroneously to all individuals in a group). For example, managers may assume employees with a supporting spouse/partner are more likely to meet the ideal worker norm of uncompromised commitment to their job as compared to those without, resulting in a pay premium in spite of equivalent performance (Acker 1990; Williams 2000). One of the only studies on household type that incorporated performance found that performance differences explained higher promotion rates and pay among married versus single men (Korenman and Neumark 1991). Yet, as noted above, marital status is now a poor proxy for breadwinning role. Knowing whether pay differences associated with different breadwinner roles are driven by performance is critical for understanding why breadwinning roles affect employee career outcomes.

Third, prior work on differences in career outcomes across household type largely focuses on men. Gendered expectations around household responsibilities (Hersch and Stratton 2000), as well as the gendered nature of ideal workers (Acker 1990; Reid 2015; Williams 2000), raise the question as to whether the effects of breadwinner role on career outcomes are contingent upon gender, yet prior evidence is limited. Past studies tend to either evaluate the effect of proxies for breadwinning role (e.g., marital status, or sole- versus two-earner households) in samples of men only (Hotchkiss and Moore 1999; Korenman and Neumark 1991; Pfeffer and Ross 1982; Stroh, Brett and Reilly 1996) or are restricted in the conclusions they can draw about gender due to a limited number of women who are the sole earner in their households (Landau and Arthur 1992; Schneer and Reitman 1993, 2002). A recent exception is Budig and Lim (2016), who found that both male and female primary earners, as measured by work hours relative to one's spouse, earn a pay premium when compared to nonpartnered employees. However, the Budig and Lim study lacked a direct measure of performance and used work hours to proxy for breadwinner role.

The goal of the present research is to provide insight into unanswered questions regarding the effects of breadwinner role on employee outcomes. Drawing on theories from economics, sociology, and social psychology, we develop hypotheses regarding the effect of breadwinner role on employee performance and pay. Specifically, based on theories of household specialization, we hypothesize that primary-breadwinner employees will outperform employees in other breadwinner roles, while the performance of secondary-breadwinner employees will lag employees in other breadwinner roles. We expect that these differences in performance will contribute to higher pay for primary-

breadwinner employees, and lower pay for secondary-breadwinner employees, relative to employees in other breadwinner roles. Further, drawing from theory on the ideal worker norm (Acker 1990; Williams 2000) and the need-based tenet of distributive justice (Deutsch 1975; Leventhal 1976), we expect evaluators to stereotype primary breadwinners as more committed and higher in need and secondary breadwinners as less committed and lower in need, resulting in higher pay for primary-breadwinner employees and lower pay for secondary-breadwinner employees, as compared to employees in other roles, even after taking into account any performance differences.

Further, we investigate whether these hypotheses apply similarly to men and women. Existing theoretical perspectives on gender, including status characteristic theory (Ridgeway and Correll 2000, 2004), expectancy violation theory (Jussim, Coleman, and Lerch 1987; Lanaj and Hollenbeck 2015) and social role theory (Eagly and Steffen 1984), suggest competing predictions regarding how gender may affect the relationships among breadwinner role, performance, and pay. We therefore explore the moderating effect of gender on our hypothesized relationships.

We test our hypotheses using a rich and novel data source. In particular, we link survey responses to administrative records on performance and pay from the corporate headquarters of a Fortune 500 firm for a sample of professional and managerial employees. A key advantage of this sample is that it is homogeneous in context (i.e., same employer, same location), which allows for comparability in pay and performance measures across employees. Using a self-report measure we compare employees based on a comprehensive set of breadwinner categories that capture the expanded set of roles employees occupy within the household: primary-breadwinner, dual-breadwinner, and secondary-breadwinner roles as well as nonpartnered employees. This provides a direct measure of breadwinner role within the household that allows for a more refined comparison across employees than what has been used in prior work. Specifically, we do not have to rely on marital status as a proxy for breadwinning role and can categorize employees in two-earner households as primary, dual, or secondary breadwinners based on employee reports of their household arrangement.

This paper brings four main findings to the literature on the relationship between household type and employee outcomes. First, we find little evidence of differences in performance by breadwinner role despite several theories supporting the idea that primary-breadwinner employees are likely to have the highest job performance, and secondary-breadwinner employees the lowest (Becker 1981, 1985; Hotchkiss and Moore 1999; Jacobsen and Rayack 1996; Kanter 1977; Pfeffer and Ross 1982). Because the assumption that household specialization benefits performance is widely held, this paper's findings imply the need to recalibrate such beliefs.

Second, we find robust differences in pay by breadwinner role. Primary-breadwinner employees earn more relative to employees in all other roles, while the pay of secondary-breadwinner employees is less than primary- and dual-breadwinner employees. These pay differences are present even after accounting for performance, which is consistent with the idea that stereotypes of employees in different breadwinning roles lead to bias in the allocation of pay and potentially other career rewards.

Third, we find that the pay premium for primary-breadwinner employees does not significantly differ by gender. Both male and female primary-breadwinner employees earn significantly more than dual-breadwinner and nonpartnered employees. This finding is consistent with seminal work on social role theory by Eagly and Steffen (1984) as well as recent work by Bear and Glick (2017), which both show that primary-breadwinner employees are evaluated and rewarded similarly in laboratory settings, regardless of their gender. Given these prior studies were conducted in the laboratory, replicating this finding with evidence from the field affords external validity to the conclusion that the effect of the primary-breadwinner role overrides any effects of gender on how career rewards, such as pay, are allocated.

Fourth, we find evidence that among women, secondary-breadwinner employees are paid less than those in all other roles even after accounting for differences in performance. Alternatively, there is no secondary-breadwinner pay penalty among men. This finding combined with no gender difference in the pay premium for primary breadwinner employees suggests an asymmetry with respect to breadwinner role and gender: stereotypes that favor primary breadwinner employees are disassociated with gender, yet those that penalize secondary-breadwinner employees are gendered.

Conceptual Framework

This section presents a framework for understanding how an employee's breadwinner role may affect performance and pay. In this section, we first outline reasons why employees may differ in performance by breadwinner role, which would then influence pay decisions. Next, we consider how stereotypes may influence evaluators' decisions such that pay is allocated differently across employees based on their breadwinner roles, even after accounting for any performance differences. Finally, we consider how the relationship between breadwinner role and performance may vary by gender of the employee as well as the possibility that stereotypes tied to gender may contribute to differences in the relationship between breadwinner role and pay by gender over and above any performance differences.

Differences in pay by breadwinner role due to performance. There are theoretically grounded reasons why employees' performance may differ based on their breadwinner role, thereby contributing to differences in pay.[2] These theories are based on a model of household specialization, such that either the household arrangement induces performance gains or that underlying differences in performance affect the household role an individual occupies.

First, employees are likely to differ in resources they receive from the household based on their breadwinner role. Namely, primary-breadwinner employees are likely to receive multiple forms of support from their partner, who specializes in household management, including time and energy from the relief of household duties as well as emotional and social support ("wife-as-a-resource" theory; Kanter 1977; Pfeffer and Ross 1982). Support from a partner may allow primary-breadwinner employees to dedicate more time and effort to work, which in turn may raise performance; this support is less available to dual-breadwinner and secondary-breadwinner employees as well as to those without a partner.

Second, based on neoclassical economics theory of the family (Becker 1981, 1985), human capital investment may vary by breadwinner role. In particular, primary-breadwinner employees are more likely to acquire greater amounts of human capital as compared to dual-breadwinner, secondary-breadwinner, and nonpartnered employees due to longer career length expectations and greater time available for work, which facilitates ongoing investments. Similarly, human capital investment is likely to be lowest among secondary-breadwinner employees relative to employees in other breadwinner roles because of shorter career-length expectations and fewer ongoing investments. These differences in investments may contribute to relatively higher performance of primary-breadwinner employees and relatively lower performance of secondary-breadwinner employees.

Third, it is possible that breadwinner role influences employee performance through differences in labor-market mobility. Namely, employees who can move more freely across employers are expected to find employment at organizations in which they are most productive (Jovanovic 1979). Accordingly, employees who are primary breadwinners likely face fewer mobility constraints relative to dual-breadwinner and secondary-breadwinner employees (Hotchkiss and Moore 1999). In the context of mobility, nonpartnered employees are likely to be similar to primary-breadwinner employees.

[2] Some of these theories are originally articulated in terms of productivity. Without loss of generality, we describe them here in terms of performance given this is the lens through which firms often view the work done by an employee.

Finally, it is possible that there is selection into breadwinner roles based on underlying ability or tendency for higher performance (cf. Jacobsen and Rayack 1996). Selection implies that employees differ in performance based on breadwinner role but is distinct from the previous explanations in that the breadwinner arrangement itself does not induce higher performance. For instance, employees who are the strongest performers may seek out a spouse or partner who is willing to support their career. As such, an employee who becomes a primary breadwinner may have higher performance than those in the other breadwinner roles. Relatedly, an employee who becomes a secondary breadwinner may have lower performance relative to others if there is negative selection based on performance into this role.

In sum, these mechanisms point to possible differences in performance by breadwinner role, which would influence pay decisions. Overall, the aforementioned mechanisms imply that primary-breadwinner employees are likely to have the highest performance relative to employees in other breadwinner roles. Additionally, these theories point to secondary-breadwinner employees as having the lowest performance relative to those in other roles.

Hypothesis 1A: Primary-breadwinner employees have higher performance relative to employees in other breadwinner roles.

Hypothesis 1B: Secondary-breadwinner employees have lower performance relative to employees in other breadwinner roles.

In turn, we expect that these differences in performance contribute to differences in pay, which is a classical finding across multiple literatures including economics (e.g., Baker, Gibbs, and Holmstrom 1994), sociology (e.g., Rosenbaum 1984), and human resource management (e.g., Lepak and Snell 1999). Namely, higher performance of primary-breadwinner employees is expected to lead to higher pay, while lower performance of secondary-breadwinner employees is expected to lead to lower pay, relative to employees in other breadwinner roles.

Hypothesis 2A: Primary-breadwinner employees have higher performance than those in all other roles, which in turn leads to higher pay.

Hypothesis 2B: Secondary-breadwinner employees have lower performance than those in all other roles, which in turn leads to lower pay.

Differences in pay by breadwinner role due to stereotypes. Over and above any performance differences, pay may differ by breadwinner role due to the influence of stereotypes on evaluators' decisions, leading to bias (i.e.,

differences in outcomes not explained by productivity; Arrow 1974). The influence of stereotypes in pay decisions has been documented in organizations by showing evidence of pay differences across demographic characteristics, like gender, race, and nationality (Castilla 2008), as well as use of work–family policies (Manchester, Leslie, and Kramer 2013), that are not explained by performance and other measures of productivity. Below we describe how beliefs rooted in the stereotypes (i.e., characteristics that are assumed to apply uniformly and often erroneously to all individuals in a group) associated with a given breadwinner role may influence pay decisions, after accounting for any differences in performance.

First, evaluators may perceive employees as varying in their capacity to meet the ideal worker norm based on their breadwinner role, which in turn may influence how employees are paid over and above performance (Acker 1990; Reid 2015; Williams 2000). The ideal worker norm encompasses the notion that employees must be fully committed to work and unencumbered by nonwork responsibilities; employees who are perceived to meet this ideal are rewarded in organizations (cf. Acker 1990; Williams 2000). Primary-breadwinner employees are more likely to be stereotyped as fulfilling the ideal worker norm, and thus perceived as highly committed to work, as compared to employees in all other breadwinner roles because primary-breadwinner employees have a supporting spouse or partner. Alternatively, secondary-breadwinner employees are least likely to be stereotyped as meeting the ideal worker norm, and thus perceived as lowest in their commitment to work, relative to other breadwinner groups because they are the supporting spouse or partner.

Second, evaluators may stereotype employees as varying in their degree of need based on their breadwinner role, which in turn may influence pay decisions (cf. Pfeffer and Ross 1982). The ideal of distributive justice, which includes the principle of need-based justice (e.g., Leventhal 1976; Deutsch 1975), supports the desire by evaluators to grant rewards based on perceptions of need, leading to differences in pay across employees with the same performance. Primary-breadwinner employees are likely stereotyped as having greater need relative to employees from households in which there are two equivalent earners (i.e., dual-breadwinner employees) or fewer household members (i.e., nonpartnered employees). Relatedly, secondary-breadwinner employees are likely stereotyped as having less need than other employees because their spouse or partner is expected to earn enough to satisfy the financial needs of the household.

Overall, evaluators are likely to stereotype primary-breadwinner employees as most committed to work (i.e., fulfilling the ideal worker norm) and as having the greatest need, relative to employees in other breadwinner roles.

Alternatively, evaluators are likely to stereotype secondary-breadwinner employees as least committed to work (i.e., not fulfilling the ideal worker norm) and lowest in perceived need. Evaluators are likely to grant employees higher (lower) pay to employees they perceive as higher (lower) in commitment to work and need, even among employees with the same performance (cf. Leslie et al. 2012). These arguments suggest that primary-breadwinner employees earn more than other employees, even after accounting for any performance differences, and that the reverse is true for secondary-breadwinner employees.

Hypothesis 3A: After controlling for performance, primary-breadwinner employees have higher pay relative to employees in other breadwinner roles.

Hypothesis 3B: After controlling for performance, secondary-breadwinner employees have lower pay relative to employees in other breadwinner roles.

Role of gender. Differences in performance and pay by breadwinner role may vary based on the employee's gender. Different theories suggest competing predictions regarding whether and how the effect of breadwinner role on employee outcomes differs by gender, making the evaluation of differences across breadwinner roles by gender an important empirical exercise.

First, there may be gender differences in the effect of breadwinner role on performance. On the one hand, research on the gender-atypical arrangement of a wife as a primary breadwinner and a stay-at-home husband finds that some of these women continue to have high involvement in household duties (Chelsey 2011). This suggests that women who are primary breadwinners may receive fewer resources from a supporting spouse as compared to men who are primary breadwinners, which may, in turn, limit resources available for work. As a result, any positive effect of being a primary breadwinner on performance may be smaller among women than it is among men. On the other hand, because being a primary breadwinner is counter to gender expectations for women, women who enter that role may be more positively selected on underlying work-relevant abilities (i.e., higher performers) relative to men. As a result, any positive effect of being a primary breadwinner on performance may be larger among women than it is among men.

The same arguments apply for secondary-breadwinner employees, albeit in reverse. Any negative effect of being a secondary breadwinner on performance may be larger among women than among men because social norms dictate that they engage in more household responsibilities relative to men in the same

role. Alternatively, any negative effect of being a secondary breadwinner on performance may be smaller among women than among men because secondary-breadwinner men may be more negatively selected on work-relevant abilities (i.e., lower performers) because this role is less typical for men. Due to these competing predictions, we pose a research question instead of a hypothesis.

Research Question 1: Does the effect of breadwinner role on performance differ for men versus women?

We also consider gender differences in how breadwinner role relates to pay, over and above performance. Three distinct theoretical perspectives lead to three distinct predictions regarding how stereotypes may affect the pay of men versus women in different breadwinning roles.

Perhaps the most compelling prediction is that the effect of breadwinner role on pay will not differ by gender. This is based on theory and evidence regarding the importance of social roles, including breadwinning role, in determining stereotypes, over-and-above the effects of gender. Namely, in their seminal work on social role theory, Eagly and Steffen (1984) theorize and find that women are stereotyped as communal because this trait is needed to succeed in the social role they have most often fulfilled historically (i.e., homemaker) and men are stereotyped as agentic because this trait is needed to succeed in the social role they have most often fulfilled historically (i.e., primary breadwinner). As a result, when no information on social role is provided, raters stereotype women as communal and men as agentic. Yet when cast as homemakers, both men and women are stereotyped as high in communal characteristics and low on agentic characteristics; alternatively, when cast as full-time employees, both men and women are stereotyped as high in agentic characteristics and low in communal characteristics. This suggests that evaluators ascribe the same stereotypes to men and women within a particular breadwinner role, with the result that gender does not affect pay decisions across breadwinner roles, after accounting for performance.

Indeed, recent research conducted in the laboratory finds that mothers who are primary breadwinners are stereotyped and rewarded in the same way as fathers who are primary breadwinners, although a fatherhood pay premium and motherhood pay penalty emerge when breadwinning role is not specified (Bear and Glick 2017). While this prior study focuses on evaluations of parents, the underlying finding that primary-breadwinner role trumps gender in determining how individuals are stereotyped and the subsequent career rewards they receive implies no gender difference in the pay premium for employees in the primary-breadwinner role, over and above performance. Social role theory would similarly suggest no gender difference in the pay penalty for

secondary-breadwinner role, over and above performance, yet this remains an unanswered empirical question.

Despite the argument from social role theory that the effects of breadwinner role are the same for both genders, there are contrasting predictions in the literature stemming from alternative theoretical perspectives. In particular, status characteristics theory and expectancy violation theory both suggest that gender will moderate the relationship between breadwinner role and pay but offer opposing predictions regarding the direction of the moderating effect of gender.

On the one hand, status characteristics theory suggests any positive effect of being a primary breadwinner on pay is weaker for women as compared to men. Namely, status characteristics theory posits that women are stereotyped as having lower competence and lower commitment relative to men (Correll, Benard, and Paik 2007). Breadwinner role does not supersede gender in this theoretical perspective; rather, gender serves as the primary lens through which individuals are viewed (Ridgeway and Correll 2000, 2004). As a result, status characteristic theory suggests not only a main effect of gender on pay, such that women are paid less than men due to stereotypes that they are less competent and committed, but also that gender may moderate the effect of breadwinner role on pay, over and above performance. To the extent that women are perceived as less competent and committed than men, and gender is a primary lens through which employees are viewed, any positive effect of being a primary breadwinner on pay may be smaller among women than among men (i.e., negative stereotypes about women suppress positive stereotypes about primary breadwinner for women, whereas positive stereotypes about men amplify positive stereotypes about primary breadwinners). Likewise, any negative effect of being a secondary breadwinner on pay may be larger among women than among men (i.e., negative stereotypes about women exacerbate negative stereotypes about secondary breadwinners, whereas positive stereotypes of men ameliorate negative stereotypes about secondary breadwinners).

On the other hand, expectancy violation theory suggests that any positive effect of being a primary breadwinner may be larger for women than for men. Expectancy violation theory states that individuals who violate stereotypes of their group are evaluated more extremely in the direction of the violation, as compared to individuals who do not violate stereotypic expectations (Jussim, Coleman, and Lerch 1987). For example, women who violate stereotypic expectations by demonstrating agentic behaviors associated with leadership are evaluated more positively as leaders, relative to men who display the same agentic behaviors (Lanaj and Hollenbeck 2015). In the case of breadwinner role, this theory implies that any positive effect of being a primary breadwinner on pay may be larger for women than for men. Female primary-

breadwinner employees violate stereotypic expectations, given that women have traditionally been more likely to fulfill the role of homemaker than of primary breadwinner. As a result, any positive stereotypes of primary-breadwinner employees will be more extreme for women than for men. This theory also suggests that any negative effect of being a secondary breadwinner on pay will be larger for men than it is for women. Male secondary-breadwinner employees violate stereotypic expectations given that historically men have been less likely than women to occupy the secondary-breadwinner role, resulting in more extreme negative stereotypes of male, as compared to female, secondary breadwinners. Given the competing perspectives, we advance the following research question:

> *Research Question 2: After controlling for performance, does the effect of breadwinner role on pay differ by gender?*

Sample and Variables

We investigate the aforementioned hypotheses and research questions using a novel data source that combines administrative records with survey responses. This allows us to evaluate the relationship between breadwinner role, as reported by the employee, and performance and pay from organizational records.

Sample. Our data consists of survey responses linked to administrative records for a sample of professional and managerial employees from the corporate headquarters of a Fortune 500 firm. We emailed survey invitations to 5579 employees in the fall of 2009 and received responses from 1833 employees (33 percent response rate).[3] We restrict the sample to those who are sufficiently high in the organization to be rated on leadership attributes and to those who have nonmissing values for the variables used in our analysis, which results in a sample size of 1377.[4] The professional and managerial employees represented in our sample work in a variety of functions, including

[3] We identified two groups of employees within the organization to invite to participate in our study. The first are employees belonging to a group whose purpose is to communicate on industry-relevant issues, while the purpose of the second group is to provide networking and career support.

[4] A total of 160 were excluded due to insufficiently high job level; 146 had missing records for 2008 performance measures and 149 had incomplete survey responses. There was no significant difference in administrative measures between those with complete versus incomplete data from the survey.

product development, technology, marketing, supply chain, finance, legal, human resources, and sales.

This organization is particularly well suited for investigating whether differences in pay across breadwinner roles are explained by performance because of its institutional features. Namely, there is a two-level review process for employee performance that has features of transparency and accountability, which has been shown to reduce the incidence of bias in organizational decisions (Castilla 2015). In the first level, teams of managers rate employees based on their annual contribution relative to individual goals; the group nature of the review allows for higher levels of transparency compared to single-manager review. In the second level, the organization's executives review ratings from the manager teams, which provides accountability for managers in the first level. The organization uses this two-stage process to calibrate ratings across the organization to ensure consistency in its assessment of talent. As a comparison, while individual managers are expected to use ratings as an input into pay decisions, conversations with employees at the organization highlight the role of managerial discretion and limited transparency in pay-setting decisions. Therefore, while it is possible that stereotypes associated with breadwinner roles influence both performance ratings (cf. Elvira and Town 2001; Castilla 2008) and pay, features of the annual review process at this organization make the influence of stereotypes relatively unlikely for performance ratings, yet more likely for pay due to lower transparency and accountability.

Variables. The variables used in the analysis are from two sources: administrative records and an online survey. The descriptive statistics and correlations of the variables for the sample are reported in Table 1. Below we describe our measures of breadwinner role, the outcomes of performance and pay, as well as control variables used in the analysis.

We classify employees into breadwinner roles based on responses to two questions on the survey. First, we use the marital status question to identify nonpartnered employees ("No Partner"); those who indicated a marital status of never married (n = 104) or divorced/not remarried (n = 106) were assigned to this group. Second, for those who indicated married (n = 1108), partnered (n = 44), or separated (n = 15) on the marital status question, we further classified them based on their response to the breadwinner question, "Who is the primary breadwinner in your household?" (Response options: *Me, Both me and my spouse/partner, My spouse/partner,* or *Other*).[5] Employees who responded with *me* are classified as "Primary-breadwinner" employees;

[5] No employees who are married/partnered/separated responded "Other" to the primary breadwinner question.

TABLE 1

DESCRIPTIVE STATISTICS AND CORRELATIONS

	Mean	St. Dev.	1	2	3	4	5	6	7
1. Primary breadwinner	0.51	0.50	1.00						
2. Dual breadwinner	0.29	0.45	–0.65**	1.00					
3. Secondary breadwinner	0.05	0.22	–0.23**	–0.14**	1.00				
4. No partner	0.15	0.36	–0.43**	–0.27**	–0.10**	1.00			
5. Pay in 2009	$112,662	40296	0.22**	–0.05	–0.11**	–0.17**	1.00		
6. Task performance (2008)	3.37	0.58	0.01	0.01	–0.03	–0.01	0.04	1.00	
7. Leadership performance (2008)	3.30	0.27	0.02	0.05	–0.01	–0.08**	0.28**	0.47**	1.00
8. Age	44.73	9.14	0.14**	–0.09**	–0.04	–0.05	0.40**	–0.16**	–0.13**
9. White	0.92	0.28	0.07**	–0.06*	0.03	–0.05	0.03	–0.00	0.01
10. Parent	0.78	0.41	0.19**	0.02	0.05*	–0.32**	0.16**	–0.03	–0.02
11. Female	0.53	0.50	–0.30**	0.20**	0.11**	0.11**	–0.21**	0.02	–0.01
12. Doctoral degree	0.15	0.36	–0.00	0.07*	–0.07*	–0.04	0.29**	–0.00	0.13**
13. Master's degree	0.28	0.45	0.04	–0.02	0.04	–0.05	0.11**	0.03	0.06*
14. Bachelor's degree	0.47	0.50	0.01	–0.02	–0.02	0.03	–0.17**	–0.01	–0.08**
15. Associate's degree	0.05	0.23	–0.05	–0.02	0.03	0.07*	–0.19**	–0.03	–0.12**
16. High school diploma	0.03	0.18	–0.06*	0.00	0.05	0.04	–0.16**	–0.00	–0.04
17. Tenure (years)	17.45	9.74	0.16**	–0.08**	–0.08**	–0.07**	0.39**	–0.09**	–0.07**
18. Career interruption (bBinary)	0.34	0.47	–0.11**	0.12**	0.14**	–0.09**	–0.08**	–0.03	–0.05
19. Weekly hours	45.36	12.86	0.04	–0.07**	–0.08**	0.07**	0.15**	0.06*	0.12**
20. Housework (weekly hours)	16.80	11.78	–0.08**	0.11**	0.12**	–0.10**	–0.11**	–0.02	–0.06*
21. Career aspirations [a]	3.79	0.87	0.02	–0.00	–0.04	–0.00	0.07**	0.11**	0.20**
22. Organizational commitment [b]	5.31	1.04	0.04	–0.02	–0.01	–0.02	0.10**	0.01	0.10**
23. Work identity [b]	3.81	0.99	0.01	–0.04	–0.05*	0.08**	0.19**	0.06*	0.15**
24. Personal-life identity [b]	5.33	0.93	0.01	0.06*	0.03	–0.10**	–0.10**	–0.02	–0.05
25. Personal life-to-work conflict [a]	2.04	0.50	0.02	0.01	0.01	–0.04	–0.02	0.01	–0.03

	8	9	10	11	12	13	14	15	16
1. Primary breadwinner									

TABLE 1 (cont.)

	8	9	10	11	12	13	14	15	16
2. Dual breadwinner									
3. Secondary breadwinner									
4. No partner									
5. Pay in 2009									
6. Task performance (2008)									
7. Leadership performance (2008)									
8. Age	1.00								
9. White	–0.00	1.00							
10. Parent	0.29**	0.00	1.00						
11. Female	–0.16**	–0.06*	–0.07*	1.00					
12. Doctoral degree	0.06*	–0.07**	–0.04	–0.17**	1.00				
13. Master's degree	–0.04	–0.05*	–0.04	0.09**	–0.27**	1.00			
14. Bachelor's degree	–0.08**	0.08**	0.02	0.00	–0.40**	–0.60**	1.00		
15. Associate's degree	0.11**	0.04	0.07**	0.02	–0.10**	–0.15**	–0.23**	1.00	
16. High school diploma	0.06*	0.01	0.04	0.10**	–0.08**	–0.12**	–0.18**	–0.05	1.00
17. Tenure	0.74**	0.05	0.24**	–0.13**	–0.10**	–0.08**	0.06*	0.12**	0.08**
18. Career interruption (binary)	–0.00	–0.05*	0.24**	0.41**	–0.11**	0.03	0.03	0.03	0.02
19. Weekly hours	0.05	0.01	–0.01	–0.07**	0.01	–0.01	0.00	0.03	–0.03
20. Housework (weekly hours)	–0.10**	0.02	0.21**	0.17**	0.01	–0.03	0.01	0.03	–0.01
21. Career aspirations [a]	–0.31**	–0.04	–0.05	0.01	0.02	0.06*	0.01	–0.12**	–0.07*
22. Organizational commitment [b]	0.15**	0.02	0.13**	0.05	–0.02	–0.04	0.01	0.02	0.08**
23. Work identity [b]	0.07*	–0.03	–0.03	–0.02	0.08**	–0.00	–0.06*	0.03	–0.01
24. Personal-life identity [b]	–0.15**	0.01	0.07**	0.04	–0.08**	0.03	0.02	–0.03	0.06*
25. Personal life-to-work conflict [a]	0.02	–0.00	0.13**	0.00	–0.01	0.02	0.00	–0.02	–0.02

	17	18	19	20	21	22	23	24	25
1. Primary breadwinner									
2. Dual breadwinner									
3. Secondary breadwinner									
4. No Partner									

TABLE 1 (cont.)

	17	18	19	20	21	22	23	24	25
5. Pay in 2009									
6. Task performance (2008)									
7. Leadership performance (2008)									
8. Age									
9. White									
10. Parent									
11. Female									
12. Doctoral degree									
13. Master's degree									
14. Bachelor's degree									
15. Associate's degree									
16. High school diploma									
17. Tenure	1.00								
18. Career interruption (binary)	–0.01	1.00							
19. Weekly hours	0.10**	–0.08**	1.00						
20. Housework (weekly hours)	–0.06*	0.24**	–0.07**	1.00					
21. Career aspirations [a]	–0.25**	–0.06*	0.08**	–0.03	1.00				
22. Organizational commitment [b]	0.20**	0.05	0.04	–0.04	0.18**	1.00			
23. Work identity [b]	0.04	–0.06*	0.16**	–0.11**	0.29**	0.27**	1.00		
24. Personal-life identity [b]	–0.05	0.08**	–0.10**	0.14**	–0.09**	–0.08**	–0.47**	1.00	
25. Personal life-to-work conflict [a]	0.07*	0.14**	–0.04	0.18**	–0.10**	–0.07**	–0.13**	0.11**	1.00

NOTES: [a]1 to 5 response scale.
[b]1 to 7 response scale.
*p-value < 0.05; **p-value < 0.01.

employees who responded with *both* are classified as "Dual-breadwinner" employees; employees who respond *my spouse/partner* are classified as "Secondary-breadwinner" employees.[6]

Table 2 shows the distribution of employees across breadwinner roles and by gender. Of the 1377 employees in our final sample, 704 are primary-breadwinner employees, 396 are dual-breadwinner employees, and 67 are secondary-breadwinner employees; 210 are not partnered. There is a difference in the distribution across breadwinner roles by gender. Most men (67 percent) are primary-breadwinner employees, while the distribution is bimodal for women in that there is an equally large representation in primary-breadwinner (37 percent) and dual-breadwinner (37 percent) roles.

Our study differs from past research on household type and career outcomes in that we ask employees to self-report their breadwinner role instead of inferring it based on marital status, number of earners in the household (i.e., sole- versus two-earner households), or relative work hours. Because we use a self-reported measure in this study, we compare information on employees' contribution to household earnings across breadwinner roles as a robustness check. We compute an implied share of household income earned for each employee in our sample using our administrative records on pay and a survey question on total household income.[7] Appendix Figure 1 displays a box plot of a five-number summary (fifth percentile, Q1, median, Q3, ninety-fifth percentile) for each breadwinner role. The median of each group corresponds to what one would expect for relative earnings contributions across roles: nonpartnered employees contribute the most (median = 100 percent), followed closely by primary-breadwinner employees (median = 91 percent); dual-breadwinner (median = 58 percent) and secondary-breadwinner (46 percent) employees are a more distant third and fourth in this ranking.

We considered the possibility of gender differences in how employees self-report breadwinner role. For instance, women may be more likely to self-report as a dual breadwinner, while men might be more likely to report themselves as a primary breadwinner for the same earnings contribution to the household to avoid violating gendered expectations. We investigate this by testing whether the earnings contribution to the household within a given breadwinner role differs by gender. We find no evidence of statistically significant differences by gender in average earnings contribution for dual-breadwinner and

[6] Note that never married and divorced employees also responded to the breadwinner question; nearly all indicated they are the primary breadwinner (97 and 93 percent, respectively). We keep this group distinct from the primary-breadwinner employees who are married/partnered/separated given that there is no scope for household specialization within nonpartnered households.

[7] Information on household income was only reported for $n = 1183$, or 86 percent of the final sample.

TABLE 2

DISTRIBUTION OF SAMPLE BY BREADWINNER ROLE AND GENDER

	Primary Breadwinner	Dual Breadwinner	Secondary Breadwinner	Notpartnered Employee	Total
Men	436	125	15	72	648
Women	268	271	52	138	729
Total	704	396	67	210	1377

secondary-breadwinner employees. For primary-breadwinner employees, we find that average earnings contribution for women (88 percent) is significantly lower than that for men (99 percent). Therefore, this finding mitigates the concern that men may tend to overreport primary breadwinner role.[8]

We have a measure of pay from administrative records that is the sum of salary and bonus pay, representing total earnings for 2009. As shown in Table 2, the sample is comprised of high-earning employees; the sample mean of pay is nearly $113,000 (s.d. = $40,300). Due to a skewed distribution of pay, we use the natural log of pay as the dependent variable when estimating the linear regression models.

The dataset also includes information on job level; employees in the sample span sixteen levels. Conceptually, pay and job level are closely interrelated given that job level is the result of promotion decisions; pay and promotions are the two main indicators of extrinsic career success (Ng et al. 2005). In organizations, promotions are used to facilitate pay raises (e.g., Korenman and Neumark 1991) as well as used in conjunction with pay raises to reward employees (e.g., Baker, Gibbs, and Holmstrom 1994). Empirically, 94 percent of the variation in pay is explained by job level in our sample, and the organization is structured such that all employees in a given job level fall within a given pay band, and bands do not overlap across job levels. Therefore, pay and job level are essentially interchangeable in this organization ($r = 0.957$). In our analysis we use pay as the dependent variable because it is easier to interpret, as compared to job level; however, the pattern of findings is statistically the same when we use job level instead of pay as the dependent variable.

We also have administrative records on the two dimensions of employee performance assessed as part of the organization's annual review process in 2008: task performance and leadership performance.[9] Task performance

[8] Lower implied percent of household income for female primary-breadwinner employees relative to male is likely due to the former having a higher share of employed spouses relative to the latter.

[9] These are the most recent performance assessments relevant for the 2009 pay decision.

evaluates how well the employee performs on meeting the requirements of the job in the given year, which may include performance on planning and organizing, administration and paperwork, technical ability, and business judgment. Employees are evaluated on a single 5-point scale; the average for our sample is 3.37 (s.d. = 0.58). Leadership performance evaluates the employee on five dimensions, such as deploying strategic decision making, making decisions that advance the goals of the organization, and effectively managing subordinates. The employee's score is an average over the five dimensions, each measured on a 5-point scale. The average composite score in our sample is 3.30 (s.d. = 0.27). Conceptually, task and leadership performance ratings are meant to capture separate, yet related, dimensions of productivity. We find a statistically significant positive correlation between the measures (r = 0.47; Table 1).

We collected additional information on the survey to use as controls in our regression analysis for predicting performance and pay differences across employees. We collected demographics (age, gender, race/ethnicity, parental role), human capital measures, hours, and career and life attitudes. The means, standard deviations, and correlations for these variables are reported in Table 1. For demographics, our sample has a mean age of 44.73 (s.d. = 9.14); we enter age as a quadratic in the regression analysis. For gender, we construct a dummy variable for female (53 percent are female). For race/ethnicity, we construct a dummy variable for White (92 percent are White). For parental role, we construct a dummy variable for having at least one child (78 percent are parents).

For human capital, we capture highest degree attained (15 percent with Ph.D., 28 percent with master's degree, 47 percent with bachelor's degree, 5 percent with associate's degree, and 3 percent with high school degree), which are entered as separate dummy variables in the regression analysis. We control for tenure at the organization (mean = 17.45 years, s.d. = 9.74 years), which is entered as a quadratic in the regression analysis. We also include a dummy variable for whether the individual had a career interruption (34 percent).[10] For hours, we include weekly work hours (mean = 45.36, s.d. = 12.86) and weekly hours spent on housework (mean = 16.80, s.d. = 11.78) as control variables.

We have several measures for work and personal life attitudes. For work attitudes, we measured career aspirations (six items; Gray and O'Brien 2007; e.g., "I hope to become a leader in my field"; 1 = not at all true to

[10] We asked whether the employee had experienced a career interruption; if yes, we asked about the length and reason. Including length in the analysis instead of the dummy variable did not change the statistical findings.

5 = very true; mean = 3.79, s.d. = 0.87), organizational commitment (six items; Meyer, Allen, and Smith 1993; e.g., "Working at this organization has a great deal of personal meaning for me"; 1 = strongly disagree to 7 = strongly agree; mean = 5.31, s.d. = 1.04), and work identity (four items; adapted from Kanungo 1982; e.g., "The most important things that happen to me involve my work"; 1 = strongly disagree to 7 = strongly agree; mean = 3.81, s.d. = 0.99). For personal-life attitudes, we included questions on personal-life-to-work conflict (labeled as "Life-Work Conflict," six items; Carlson, Kacmar, and Williams 2000; e.g., "Does the time you spend on personal responsibilities interfere with your work responsibilities?"; 1 = never to 5 = always; mean = 2.04, s.d. = 0.50) and personal-life identity (four items; adapted from Kanungo, 1982; e.g., "The most important things that happen to me involve my personal life"; 1 = strongly disagree to 7 = strongly agree; mean = 5.33, s.d. = 0.93).

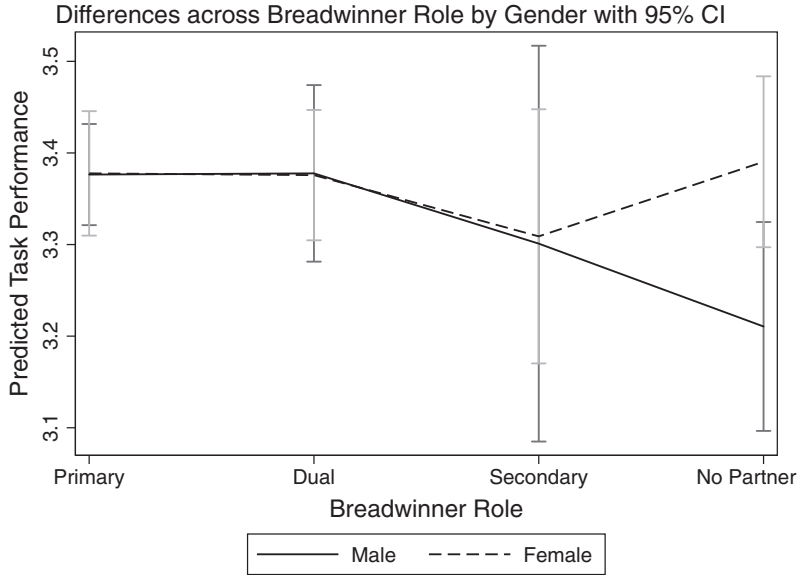
Difference in means by breadwinner role. Table 3 reports results from an ANOVA (analysis of variance) comparing differences in means across the four groups: primary-breadwinner, dual-breadwinner, secondary-breadwinner, and nonpartnered employees. We find evidence of differences in pay, with primary-breadwinner employees earning significantly more than all other groups, and secondary-breadwinner employees also earning significantly less than dual-breadwinner employees. In terms of performance, the only difference is that nonpartnered employees are rated significantly lower than dual-breadwinner employees on leadership performance. As for demographics and human capital differences, primary-breadwinner employees are more likely to be men and have longer tenure relative to those in other roles; they are also older on average relative to dual-breadwinner and nonpartnered employees. Nonpartnered employees are less likely to be parents as compared with employees in other groups yet tend to be more similar to primary-breadwinner employees than to dual-breadwinner and secondary-breadwinner employees in terms of (not) having a career interruption, having longer work hours, doing less housework, and having higher work identity.

Results and Discussion

We use a series of ordinal least squares (OLS) regression models to evaluate our hypotheses on the relationships among breadwinner role, performance, and pay. We control for demographics, human capital, hours, and work- and personal-life attitudes in the analysis. To facilitate evaluation of our hypotheses,

FIGURE 1

Relationship between Breadwinner Role and Task Performance by Gender



Notes: Figure 1 Plots Average Predicted Differences in Performance Across Breadwinner Role by Each Gender Along with 95-Percent Confidence Intervals Assuming Equal Values of the Other Included Covariates for Task Performance. These Differences in Average Predictions come from the Regression Model in Table 6 (Column 1).

we estimate the regression model in two ways. First, we set primary-breadwinner employees as the excluded category such that coefficients from the regression analysis directly compare dual-breadwinner, secondary-breadwinner, and nonpartnered employees to primary-breadwinner employees. Second, we set secondary-breadwinner employees as the excluded category to evaluate primary-breadwinner, dual-breadwinner, and nonpartnered employees relative to secondary-breadwinner employees. In this section we also present evidence as to whether our hypothesized relationships vary by gender. In all regression analyses we cluster the standard errors at the supervisor level as employees are partially nested within supervisor.

Breadwinner role and performance. We test hypotheses 1A and 1B for task and leadership performance and report the findings in Table 4. For task performance, we find no evidence of differences in the performance of primary-breadwinner employees relative to employees in other breadwinner roles

TABLE 3

DIFFERENCES IN MEANS ACROSS BREADWINNER ROLES (ANOVA)

	Primary Breadwinner		Dual Breadwinner		Secondary Breadwinner		No Partner	
	Mean	St. Dev.	Mean	St. Dev.	Mean	St. Dev.	Mean	St. Dev.
Pay in 2009	121,213[2,3,4]	42,385	109,646[1,3,4]	38,141	92,665[1,2]	32,536	96,059[1,2]	29,919
Task performance (2008)	3.37	0.59	3.38	0.589	3.28	0.486	3.35	0.535
Leadership performance (2008)	3.31	0.28	3.32[4]	0.26	3.29	0.28	3.25[2]	0.26
Age	45.94[2,4]	8.93	43.37[1]	8.86	43.25	7.54	43.69[1]	10.49
White	0.94[2]	0.24	0.89[1]	0.32	0.95	0.21	0.89	0.32
Parent	0.86[4]	0.35	0.79[4]	0.41	0.88[4]	0.33	0.47[1,2,3]	0.50
Female	0.38[2,3,4]	0.49	0.68[1]	0.47	0.78[1]	0.42	0.66[1]	0.48
Doctoral degree	0.15	0.36	0.19[3]	0.39	0.04[2]	0.21	0.12	0.33
Master's degree	0.30	0.46	0.27	0.45	0.36	0.48	0.23	0.42
Bachelor's degree	0.48	0.50	0.45	0.50	0.43	0.50	0.50	0.50
Associate's degree	0.04[4]	0.21	0.05[4]	0.21	0.09	0.29	0.09[1,2]	0.29
High school diploma	0.02	0.15	0.04	0.19	0.07	0.27	0.05	0.22
Tenure (years)	18.94[2,3,4]	9.80	16.24[1]	9.47	14.09[1]	7.82	15.791[1]	9.79
Career interruption (binary)	0.29[2,3]	0.46	0.43[1,3,4]	0.50	0.64[1,2,4]	0.48	0.24[2,3]	0.28
Weekly hours worked	45.90[3]	11.02	43.95[4]	11.47	40.98[1,4]	10.15	47.63[2,3]	19.60
Housework (weekly hours)	15.94[2,3]	10.79	18.76[1,3,4]	12.10	23.22[4]	19.49	13.95[2,3]	9.69
Career aspirations	3.81	0.86	3.79	0.88	3.63	0.89	3.79	0.93
commitment	5.34	1.05	5.28	1.03	5.26	0.95	5.25	1.07
Work identity	3.81	0.98	3.74[4]	0.98	3.57[4]	0.90	4.00[2,3]	1.04
Personal-life identity	5.34[4]	0.92	5.42[4]	0.87	5.44[4]	0.98	5.1[1,2,3]	1.03
Personal life-to-work conflict	2.05	0.50	2.05	0.50	2.07	0.57	1.99	0.48

NOTES: Subscripts indicate significant differences by breadwinner status (p-value < .05); 1 = significantly differs from primary breadwinners; 2 = significantly differs from dual breadwinners; 3 = significantly differs from secondary breadwinners; 4 = significantly differs from no partner.

TABLE 4

Relationship between Breadwinner Role and Performance

	Task Performance		Leadership Performance	
	1	2	3	4
Primary breadwinner		0.08		–0.012
		(0.065)		(0.034)
Dual breadwinner	–0.009	0.071	0.012	0.000
	(0.038)	(0.067)	(0.016)	(0.035)
Secondary breadwinner	–0.080		0.012	
	(0.065)		(0.034)	
No partner	–0.055	0.025	–0.058**	–0.069+
	(0.045)	(0.071)	(0.022)	(0.037)
Female	0.005	0.005	0.031+	0.031+
	(0.043)	(0.043)	(0.018)	(0.018)
White	0.001	0.001	0.038	0.038
	(0.054)	(0.054)	(0.025)	(0.025)
Parent	0.043	0.043	0.019	0.019
	(0.045)	(0.045)	(0.020)	(0.020)
Doctoral degree	0.024	0.024	0.106**	0.106**
	(0.049)	(0.049)	(0.025)	(0.025)
Master's degree	0.033	0.033	0.047**	0.047**
	(0.038)	(0.038)	(0.017)	(0.017)
Associate's degree	–0.016	–0.016	–0.069**	–0.069**
	(0.063)	(0.063)	(0.023)	(0.023)
High school degree	0.059	0.059	–0.011	–0.011
	(0.108)	(0.108)	(0.039)	(0.039)
Career interruption (binary)	–0.033	–0.033	–0.016	–0.016
	(0.037)	(0.037)	(0.017)	(0.017)
Weekly hours	0.003*	0.003*	0.002**	0.002**
	(0.001)	(0.001)	(0.001)	(0.001)
Housework (weekly hours)	–0.001	–0.001	–0.002*	–0.002*
	(0.001)	(0.001)	(0.001)	(0.001)
Career aspirations	0.024	0.024	0.028**	0.028**
	(0.020)	(0.020)	(0.009)	(0.009)
Organizational commitment	–0.003	–0.003	0.015*	0.015*
	(0.016)	(0.016)	(0.008)	(0.008)
Work identity	0.029	0.029	0.026**	0.026**
	(0.019)	(0.019)	(0.009)	(0.009)
Personal-life identity	–0.006	–0.006	0.002	0.002
	(0.018)	(0.018)	(0.009)	(0.009)
Personal life-to-work conflict	0.036	0.036	0.003	0.003
	(0.031)	(0.031)	(0.015)	(0.015)
Constant	3.388**	3.308**	2.795**	2.807**
	(0.372)	(0.371)	(0.195)	(0.200)
R-squared	0.057	0.057	0.157	0.157

NOTES: Estimated using OLS with standard errors clustered by supervisor. Excluded breadwinner role is primary breadwinner in columns 1 and 3; excluded breadwinner role is secondary breadwinner in columns 2 and 4. Dependent variable is performance: task performance is measured on a 5-point scale (columns 1 and 2), and leadership performance is an average of six items, each measured on a 5-point scale (columns 3 and 4). Additional controls include quadratic in age and tenure and dummy variables for each division (7) and each survey invitation group (2). Sample size is 1377.

+ p-value < 0.10; * p-value < 0.05; ** p-value < 0.01.

(column 1: dual-breadwinner, b = –0.009, *p*-value = n.s.; secondary-breadwinner, b = –0.080, *p*-value = n.s.; no partner, b = –0.055, *p*-value = n.s.). We also find no evidence of differences in task performance of secondary-breadwinner employees relative to employees in other breadwinner roles (column 2: dual-breadwinner, b = 0.071, *p*-value = n.s.; no partner, b = 0.025, *p*-value = n.s). For leadership performance, we also find no evidence of differences in the performance of primary-breadwinner employees relative to dual-breadwinner (column 3: dual-breadwinner, b = 0.012, *p*-value = n.s.) and secondary-breadwinner employees (column 3, b = 0.012, *p*-value = n.s.) as well as no differences in the leadership performance of secondary-breadwinner employees relative to dual-breadwinner employees (column 4: b = 0.000, *p*-value = n.s.). Therefore, we do not find support for hypotheses 1A and 1B for either measure of performance.[11]

The only statistically significant difference we find for performance involves nonpartnered employees: they have lower leadership performance relative to primary-breadwinner employees at standard significance levels (Table 4, column 3, b = –0.058, *p*-value < 0.01), lower leadership performance relative to secondary-breadwinner employees at marginal significance levels (column 4, b = –0.069, *p*-value = 0.058), and lower leadership performance relative to dual-breadwinner employees at standard significance levels (regression results not included in tables: b = –0.079, *p* = 0.038).

Multiple theories contend that household specialization influences employee contributions to the organization, yet we find no evidence of performance differences between primary-breadwinner, dual-breadwinner, and secondary-breadwinner employees. The only finding that emerges is that nonpartnered employees perform significantly worse than their married counterparts on leadership performance. Together, these findings are inconsistent with household specialization leading to performance gains. Instead, they suggest that marriage is positively related to aspects of performance, perhaps due to positive selection into marriage (Juhn and McCue 2017; Korenman and Neumark 1991) or work–family enrichment (i.e., marriage/partnership imparts leadership skills). Because performance benefits stemming from household specialization is a commonly held mental model, our findings suggest the need to revisit such assumptions.

Despite the theoretical rationale for why performance may vary by breadwinner role, actual differences in performance may be limited. First, freeing up

[11] One may be concerned about the possibility of past differences in performance across breadwinner roles. This is unlikely, however, given these data are a snapshot of career trajectories, not terminal positions in the firm. Therefore, any systematic difference in performance across breadwinner roles would show up in any given year.

of household duties may not translate into higher performance on the job. Research shows that single and married men spend the same amount of time on household responsibilities, which calls into question the importance of having a supporting spouse for performance at work (Hersch and Stratton 2000). Second, research on work–family enrichment allows for the opportunity for the family domain to have a positive influence on the work domain, namely through family roles providing resources or skills that can be used in their work role (Greenhaus and Powell 2006). Therefore, benefits gained from having responsibility for household duties may counteract any costs associated with those duties, mitigating any performance differences.

Breadwinner role and pay. We have two sets of hypotheses involving pay differences by breadwinner role. We predicted that the effect of breadwinner role on performance (hypotheses 1A and 1B) explains, at least in part, any effect of breadwinner role on pay (hypotheses 2A and 2B). Given we did not find support for hypotheses 1A and 1B (i.e., the expected effects of breadwinner role on performance were nonsignificant), hypotheses 2A and 2A are necessarily not supported. We therefore assess if there are differences in pay by breadwinner role, over and above performance (hypotheses 3A and 3B).

In Table 5 we report differences in natural log of annual pay for primary-breadwinner employees relative to employees in other breadwinner roles (column 1) and for secondary-breadwinner employees relative to employees in other breadwinner roles (column 2) controlling for measures of human capital, hours, attitudes, and performance. We find evidence of significant differences in pay over and above these controls. Primary breadwinner employees earn significantly more than dual-breadwinner (column 1: b = –0.038, p-value < 0.01), secondary-breadwinner (column 1: b = –0.119, p-value < 0.01) and nonpartnered (column 1: b = –0.086, p-value < 0.01) employees. These differences are economically meaningful; primary breadwinner employees outearn secondary-breadwinner employees by 12.6 percent, outearn nonpartnered employees by 9.0 percent, and outearn dual-breadwinner employees by 3.8 percent.[12] Secondary-breadwinner employees also earn significantly less than dual-breadwinner employees (column 2: b = 0.081, p-value < 0.01), but their pay is not different from nonpartnered employees (column 2: b = 0.033, p-value = n.s.). Therefore, hypothesis 3A is fully supported and hypothesis 3B is partially supported. In terms of comparisons outside our hypotheses, dual-breadwinner employees earn significantly more than nonpartnered employees (regression results not reported: b = 0.051, p-value < 0.01).

[12] Percent difference in pay across roles is calculated as *percent = exp(coefficient) - 1*

TABLE 5

RELATIONSHIP BETWEEN BREADWINNER ROLE AND PAY

	1	2	3	4
Primary breadwinner		0.119**		0.117**
		(0.030)		(0.028)
Dual breadwinner	–0.038**	0.081**	–0.040**	0.077**
	(0.014)	(0.030)	(0.013)	(0.029)
Secondary breadwinner	–0.119**		–0.117**	
	(0.030)		(0.028)	
No partner	–0.086**	0.033	–0.077**	0.040
	(0.018)	(0.033)	(0.017)	(0.032)
Female	–0.020	–0.020	–0.019	–0.019
	(0.015)	(0.015)	(0.014)	(0.014)
White	0.062**	0.062**	0.061**	0.061**
	(0.021)	(0.021)	(0.019)	(0.019)
Parent	0.036*	0.036*	0.024	0.024
	(0.017)	(0.017)	(0.016)	(0.016)
Doctoral degree	0.251**	0.251**	0.214**	0.214**
	(0.019)	(0.019)	(0.019)	(0.019)
Master's degree	0.130**	0.130**	0.112**	0.112**
	(0.014)	(0.014)	(0.013)	(0.013)
Associate's degree	–0.279**	–0.279**	–0.260**	–0.260**
	(0.029)	(0.029)	(0.029)	(0.029)
High school degree	–0.305**	–0.305**	–0.277**	–0.277**
	(0.038)	(0.038)	(0.037)	(0.037)
Career interruption (binary)	0.013	0.013	0.013	0.013
	(0.015)	(0.015)	(0.014)	(0.014)
Weekly hours	0.001*	0.001*	0.001*	0.001*
	(0.000)	(0.000)	(0.000)	(0.000)
Housework (weekly hours)	–0.001+	–0.001+	–0.001	–0.001
	(0.001)	(0.001)	(0.000)	(0.000)
Career aspirations	0.037**	0.037**	0.027**	0.027**
	(0.007)	(0.007)	(0.007)	(0.007)
Organizational commitment	–0.013*	–0.013*	–0.012*	–0.012*
	(0.006)	(0.006)	(0.006)	(0.006)
Work identity	0.030**	0.030**	0.026**	0.026**
	(0.007)	(0.007)	(0.007)	(0.007)
Personal-life identity	0.008	0.008	0.01	0.01
	(0.007)	(0.007)	(0.007)	(0.007)
Personal life-to-work conflict	–0.013	–0.013	–0.006	–0.006
	(0.012)	(0.012)	(0.011)	(0.011)
Task performance	–0.018	–0.018	–0.017	–0.017
	(0.012)	(0.012)	(0.011)	(0.011)
Leadership performance	0.304**	0.304**	0.163**	0.163**
	(0.027)	(0.027)	(0.029)	(0.029)
Potential to be director or higher			0.307**	0.307**
			(0.023)	(0.023)
Potential to be manager or higher			0.099**	0.099**
			(0.014)	(0.014)

TABLE 5 (cont.)

	1	2	3	4
Constant	8.963**	8.845**	9.518**	9.401**
	(0.203)	(0.204)	(0.181)	(0.181)
R-squared	0.591	0.591	0.636	0.636

NOTES: Estimated using OLS with standard errors clustered by supervisor. Excluded breadwinner role is primary breadwinner in columns 1 and 3; excluded breadwinner role is secondary breadwinner in columns 2 and 4. Dependent variable is natural log of pay for 2009. Additional controls include quadratic in age and tenure and dummy variables for each division (7) and each survey invitation group (2). Sample size is 1377.
+ p-value < 0.10; * p-value < 0.05; ** p-value < 0.01.

One possible concern when considering these findings is that the included measures of performance are incomplete; they may not capture all aspects of an employee's contribution to the organization that are relevant for pay. To help alleviate this concern, we also include information from administrative records on the ratings of advancement potential as assessed by the organization. This is a forward-looking assessment that anticipates performance in future positions, which may include additional information that affects pay that is not captured in current performance ratings. Employees are rated on a 3-point scale, which is based on how high in the organization the employee is expected to rise. A potential rating of 1 ("not high potential") indicates that the employee is not likely to advance past middle management, while a rating of 2 ("high potential") indicates the employee is likely to become a senior manager and a potential rating of 3 ("very high potential") indicates that the employee is likely to become a director or above.[13] We repeat the regression analysis for pay after including dummy variables for whether the employee was rated as high potential or very high potential (Table 5, columns 3 and 4). Our conclusions are unchanged when we control for this additional assessment of the employee.

Overall, primary breadwinner employees fare the best in terms of annual pay: they earn significantly more than employees in all other breadwinner roles. Alternatively, secondary breadwinners are disadvantaged relative to employees in other breadwinner roles, except in comparison to nonpartnered employees. These differences across breadwinner roles are present over and above differences in performance as well as assessments of advancement potential provided by the organization and extensive controls collected via the survey, including measures of human capital, hours, and work and life attitudes.

The pay difference we find by breadwinner role represents bias to the extent that it is not explained by difference in productivity (Arrow 1974). If primary breadwinner employees create more value for the organization, then we would

[13] The majority of employees are rated as not high potential (66 percent), while 26 percent are rated as high potential and just 8 percent are rated as very high potential based on the 2008 evaluations.

expect that performance assessments would capture such a difference and that pay would be commensurate across groups after accounting for performance. Analogously, we would expect that the pay penalty for secondary-breadwinner employees would be explained by lower performance. However, we do not find evidence of such differences in performance, and the pay differences we estimate hold even after accounting for any differences in performance. Therefore, although we cannot test the role of stereotypes directly, our results are consistent with our theoretical arguments, which suggest that evaluators may stereotype primary-breadwinner (secondary-breadwinner) employees as higher (lower) in commitment and need than employees in other breadwinner roles, which contributes, at least in part, to the pay premium (penalty) they receive.

How can bias emerge in pay decisions, yet not in performance ratings? Understanding the institutional setting for these two decisions is likely to be insightful here. As described earlier, two separate processes govern pay and performance in the organization. Performance uses a two-level review process for employee evaluations that has features of transparency and accountability, which have been proposed and shown to reduce the incidence of bias in organizational decisions (Castilla 2008, 2015), while there is no such review process for pay decisions. Therefore, the setting and relevant theories of organizational decision making point to the greater likelihood that stereotypes influence pay decisions, leading to bias, as compared to performance assessments at this organization.

Differences by gender. We investigate whether our hypothesized relationships for performance and for pay vary by gender using two approaches: we include interaction terms between gender and each breadwinner role, and we split the sample by gender to allow for a fully interacted regression model.[14] For the interaction specification, we use primary-breadwinner employees as the excluded category for simplicity and include figures to facilitate comparison across all groups. For the split sample, we conduct the analysis in two ways, varying which breadwinner role is the excluded category (i.e., primary-breadwinner versus secondary-breadwinner role).[15]

Results for task and leadership performance are presented in Tables 6 and 7. For task performance, we estimate a statistically significant interaction

[14] A fully interacted regression model implies that the moderating factor of interest (i.e., gender) is interacted with each included covariate; estimating the regression model by gender achieves the same specification.

[15] We also investigated whether parental status moderates the relationships among breadwinner role, performance, and pay. We largely do not find evidence for this. The one exception is that, among nonparents, secondary-breadwinner employees have significantly lower pay relative to employees with no partner, while this is not the case among parents. Therefore, the finding in the overall sample that there is no difference in pay between secondary-breadwinner employees and nonpartnered employees is driven by parents, who comprise most of our sample (78 percent are parents).

TABLE 6

Relationship between Breadwinner Role and Task Performance by Gender

	All	Males		Females	
	1	2	3	4	5
Primary breadwinner			0.089		0.058
			(0.114)		(0.082)
Dual breadwinner	0.001	–0.003	0.086	0.000	0.059
	(0.056)	(0.056)	(0.120)	(0.051)	(0.083)
Secondary breadwinner	–0.075	–0.089		–0.058	
	(0.114)	(0.114)		(0.082)	
No partner	–0.166*	–0.238**	–0.149	0.058	0.116
	(0.064)	(0.069)	(0.129)	(0.059)	(0.086)
Primary x Female					
Dual x Female	–0.003				
	(0.074)				
Secondary x Female	0.007				
	(0.138)				
No partner x Female	0.179*				
	(0.086)				
Female	–0.023				
	(0.053)				
White	0.002	–0.133	–0.133	0.108	0.108
	(0.055)	(0.086)	(0.086)	(0.072)	(0.072)
Parent	0.039	–0.079	–0.079	0.143*	0.143*
	(0.045)	(0.073)	(0.073)	(0.058)	(0.058)
Doctoral degree	0.018	–0.063	–0.063	0.123	0.123
	(0.049)	(0.066)	(0.066)	(0.083)	(0.083)
Master's degree	0.031	–0.017	–0.017	0.071	0.071
	(0.038)	(0.058)	(0.058)	(0.051)	(0.051)
Associate's degree	–0.015	0.016	0.016	–0.001	–0.001
	(0.064)	(0.097)	(0.097)	(0.087)	(0.087)
High school degree	0.06	0.158	0.158	0.074	0.074
	(0.108)	(0.216)	(0.216)	(0.124)	(0.124)
Career interruption (binary)	–0.025	–0.072	–0.072	–0.023	–0.023
	(0.037)	(0.062)	(0.062)	(0.049)	(0.049)
Weekly hours	0.003*	0.006*	0.006*	0.001	0.001
	(0.001)	(0.003)	(0.003)	(0.001)	(0.001)
Housework (weekly hours)	–0.001	–0.001	–0.001	–0.002	–0.002
	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)
Career aspirations	0.026	0.006	0.006	0.048+	0.048+
	(0.020)	(0.030)	(0.030)	(0.027)	(0.027)
Organizational commitment	–0.003	0.017	0.017	–0.03	–0.03
	(0.016)	(0.023)	(0.023)	(0.023)	(0.023)
Work identity	0.032+	0.026	0.026	0.031	0.031
	(0.019)	(0.029)	(0.029)	(0.024)	(0.024)
Personal-life identity	–0.006	–0.033	–0.033	0.014	0.014
	(0.018)	(0.028)	(0.028)	(0.024)	(0.024)

TABLE 6 (cont.)

	All	Males		Females	
	1	2	3	4	5
Personal life-to-work conflict	0.038	0.035	0.035	0.042	0.042
	(0.031)	(0.045)	(0.045)	(0.044)	(0.044)
Constant	3.406**	4.381**	4.293**	3.008**	2.950**
	(0.372)	(0.590)	(0.601)	(0.575)	(0.570)
R-squared	0.059	0.1	0.1	0.073	0.073
Mean (St. Dev.) of DV	3.366 (0.577)	3.356 (0.579)		3.374 (0.575)	
Observations	1377	648	648	729	729

NOTES: Estimated using OLS with standard errors clustered by supervisor. Excluded breadwinner role is primary breadwinner in columns 1, 3, and 5; excluded breadwinner role is secondary breadwinner in columns 2 and 4. Dependent variable is task performance, measured on a 5-point scale. Additional controls include quadratic in age and tenure, dummy variable for each division, and each survey invitation group. + p-value < 0.10; * p-value < 0.05; ** p-value < 0.01.

between the indicator for gender and nonpartnered employee (i.e., relative to primary-breadwinner employees; Table 6, column 1: b = 0.179, p-value = 0 .037). We plot this finding in Figure 1, which shows a divergence in predicted task performance between males and females for nonpartnered employees relative to other breadwinner roles. When we split the sample by gender, we find that the task performance of primary-breadwinner employees is significantly higher than nonpartnered employees for males (Table 6, column 3; b = –0.238, p-value < 0.01), but not for females (Table 6, column 5: b = 0.058, p-value = n.s.). In addition, dual-breadwinner employees have higher task performance than nonpartnered employees among males (regression results not reported: b = 0.232, p-value = 0.01), but not females (regression results not reported: b = –0.052, p-value = n.s.). For leadership performance, we find no evidence of differences in the relationship between breadwinner role and performance by gender in that none of the gender interaction terms are statistically significant (Table 7, column 1) and no differences emerge when we split the sample by gender (Table 7, columns 2 through 5).

Overall, we find no evidence that our hypothesized relationships for breadwinner role and performance vary by gender. Instead, these results provide additional evidence for differences in performance between married and nonmarried employees in that nonpartnered males perform worse than both primary-breadwinner and dual-breadwinner males; this pattern is not present among females.

For pay, we find evidence that gender moderates our hypothesized relationships. In Table 8 the gender by breadwinner role interaction term involving secondary-breadwinner employees is marginally significant (relative to primary breadwinner, column 1: b = –0.109, p-value = 0.085). Figure 2 plots the predicted differences in ln(pay) from this model and shows that the pay penalty

TABLE 7

Relationship between Breadwinner Role and Leadership Performance by Gender

	All	Males		Females	
	1	2	3	4	5
Primary breadwinner			0.064		–0.028
			(0.049)		(0.039)
Dual breadwinner	0.027	0.023	0.087	0.001	–0.027
	(0.027)	(0.026)	(0.053)	(0.020)	(0.040)
Secondary breadwinner	–0.039	–0.064		0.028	
	(0.068)	(0.049)		(0.039)	
No partner	–0.044	–0.079*	–0.015	–0.051+	–0.079+
	(0.032)	(0.035)	(0.057)	(0.028)	(0.044)
Primary x Female					
Dual x Female	–0.025				
	(0.034)				
Secondary x Female	0.062				
	(0.079)				
No partner x Female	–0.023				
	(0.041)				
Female	0.040+				
	(0.024)				
White	0.038	–0.036	–0.036	0.092**	0.092**
	(0.025)	(0.045)	(0.045)	(0.028)	(0.028)
Parent	0.02	–0.03	–0.03	0.075**	0.075**
	(0.020)	(0.032)	(0.032)	(0.027)	(0.027)
Doctoral degree	0.104**	0.087*	0.087*	0.138**	0.138**
	(0.026)	(0.035)	(0.035)	(0.034)	(0.034)
Master's degree	0.048**	0.021	0.021	0.064**	0.064**
	(0.017)	(0.026)	(0.026)	(0.021)	(0.021)
Associate's degree	–0.070**	–0.049	–0.049	–0.085**	–0.085**
	(0.023)	(0.038)	(0.038)	(0.027)	(0.027)
High school degree	–0.011	0.144+	0.144+	–0.043	–0.043
	(0.039)	(0.076)	(0.076)	(0.044)	(0.044)
Career interruption (binary)	–0.017	0.02	0.02	–0.044*	–0.044*
	(0.017)	(0.031)	(0.031)	(0.021)	(0.021)
Weekly hours	0.002**	0.004**	0.004**	0.002**	0.002**
	(0.001)	(0.001)	(0.001)	(0.000)	(0.000)
Housework (weekly hours)	–0.002**	–0.002	–0.002	–0.002*	–0.002*
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Career aspirations	0.028**	0.026+	0.026+	0.032**	0.032**
	(0.009)	(0.014)	(0.014)	(0.012)	(0.012)
Organizational commitment	0.015*	0.026*	0.026*	0.004	0.004
	(0.007)	(0.011)	(0.011)	(0.010)	(0.010)
Work identity	0.026**	0.025+	0.025+	0.027*	0.027*
	(0.009)	(0.013)	(0.013)	(0.012)	(0.012)
Personal-life identity	0.002	–0.005	–0.005	0.011	0.011
	(0.009)	(0.014)	(0.014)	(0.012)	(0.012)

TABLE 7 (cont.)

	All	Males		Females	
	1	2	3	4	5
Personal life-to-work conflict	0.003	–0.014	–0.014	0.009	0.009
	(0.015)	(0.023)	(0.023)	(0.019)	(0.019)
Constant	2.787**	2.910**	2.847**	2.861**	2.888**
	(0.194)	(0.297)	(0.301)	(0.260)	(0.264)
R-squared	0.158	0.165	0.165	0.205	0.205
Mean (St. Dev.) of DV	3.303 (0.271)	3.306 (0.280)		3.302 (0.262)	
Observations	1377	648	648	729	729

NOTES: Estimated using OLS with standard errors clustered by supervisor. Excluded breadwinner role is primary breadwinner in columns 1, 3, and 5; excluded breadwinner role is secondary breadwinner in columns 2 and 4. Dependent variable is leadership performance, which is the average of six items each measured on a 5-point scale. Additional controls include quadratic in age and tenure, dummy variable for each division and each survey invitation group. + p-value < 0.10; * p-value < 0.05; ** p-value < 0.01.

for secondary-breadwinner employees is larger for females than males yet shows no difference in the pay premium for primary-breadwinner employees by gender.

This pattern is apparent when we split the sample by gender (Table 8). We find that the primary-breadwinner pay premium relative to dual-breadwinner and nonpartnered employee is present and very similar in magnitude for both males (column 2: dual-breadwinner, b = –0.040, p-value = 0.04; no partner, b = –0.076, p-value < 0.01) and females (column 4: dual-breadwinner, b = –0.035, p-value = 0.07; no partner, b = –0.081, p-value < 0.01). In contrast the pay penalty for secondary-breadwinner employees is only present among females (column 5: primary-breadwinner: b = 0.154, p-value < 0.01; dual-breadwinner, b = 0.118, p-value < 0.01; no partner, b = 0.073, p-value = 0.068), and not among males (column 3: primary-breadwinner: b = 0.031, p-value = n.s.; dual-breadwinner, b = –0.009, p-value = n.s.; no partner, b = –0.046, p-value = n.s.). Therefore, we find that the hypothesized pay premium for primary-breadwinner employees does not vary by gender, but the pay penalty for secondary-breadwinner employees does.[16]

Our findings provide important empirical evidence for understanding gender differences in career outcomes in the workplace. Along with those of Budig and Lim (2016) and Bear and Glick (2017), we find evidence that the primary-breadwinner role is disassociated with gender, meaning that the employee's social role (i.e., primary breadwinner) has a greater influence on pay

[16] It is worth noting that our sample includes just fifteen male secondary-breadwinner employees, which may limit conclusions we can draw. At the same time, finding evidence of statistically significant differences despite having a small sample mitigates the concern that lack of power is driving this finding.

TABLE 8

Relationship between Breadwinner Role and Pay by Gender

	All	Males		Females	
	1	2	3	4	5
Primary breadwinner			0.031		0.154**
			(0.053)		(0.037)
Dual breadwinner	–0.048*	–0.040*	–0.009	–0.035+	0.118**
	(0.019)	(0.019)	(0.055)	(0.020)	(0.035)
Secondary breadwinner	–0.035	–0.031		–0.154**	
	(0.051)	(0.053)		(0.037)	
No partner	–0.081**	–0.076**	–0.046	–0.081**	0.073+
	(0.027)	(0.028)	(0.057)	(0.024)	(0.040)
Primary x Female					
Dual x Female	0.015				
	(0.028)				
Secondary x Female	–0.109+				
	(0.063)				
No partner x Female	–0.009				
	(0.035)				
Female	–0.019				
	(0.020)				
White	0.062**	0.040	0.040	0.085**	0.085**
	(0.021)	(0.029)	(0.029)	(0.028)	(0.028)
Parent	0.036*	0.027	0.027	0.033	0.033
	(0.017)	(0.022)	(0.022)	(0.025)	(0.025)
Doctoral degree	0.253**	0.236**	0.236**	0.263**	0.263**
	(0.020)	(0.024)	(0.024)	(0.032)	(0.032)
Master's degree	0.129**	0.111**	0.111**	0.135**	0.135**
	(0.014)	(0.020)	(0.020)	(0.020)	(0.020)
Associate's degree	–0.277**	–0.223**	–0.223**	–0.302**	–0.302**
	(0.030)	(0.040)	(0.040)	(0.043)	(0.043)
High school degree	–0.306**	–0.300**	–0.300**	–0.285**	–0.285**
	(0.038)	(0.069)	(0.069)	(0.045)	(0.045)
Career interruption (binary)	0.013	–0.025	–0.025	0.031	0.031
	(0.015)	(0.022)	(0.022)	(0.021)	(0.021)
Weekly hours	0.001*	0.002*	0.002*	0.001+	0.001+
	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)
Housework (weekly hours)	–0.001+	–0.003**	–0.003**	0.000	0.000
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Career aspirations	0.036**	0.039**	0.039**	0.037**	0.037**
	(0.007)	(0.009)	(0.009)	(0.011)	(0.011)
Organizational commitment	–0.013*	–0.002	–0.002	–0.024*	–0.024*
	(0.006)	(0.008)	(0.008)	(0.010)	(0.010)
Work identity	0.030**	0.024*	0.024*	0.032**	0.032**
	(0.007)	(0.010)	(0.010)	(0.010)	(0.010)
Personal-life identity	0.008	0.028**	0.028**	–0.008	–0.008
	(0.007)	(0.010)	(0.010)	(0.010)	(0.010)

TABLE 8 (cont.)

	All	Males		Females	
	1	2	3	4	5
Personal life-to-work conflict	–0.013	–0.015	–0.015	–0.009	–0.009
	(0.012)	(0.017)	(0.017)	(0.017)	(0.017)
Task performance	–0.018	–0.017	–0.017	–0.028	–0.028
	(0.012)	(0.016)	(0.016)	(0.018)	(0.018)
Leadership performance	0.305**	0.282**	0.282**	0.333**	0.333**
	(0.027)	(0.033)	(0.033)	(0.040)	(0.040)
Constant	8.965**	9.025**	8.994**	8.894**	8.740**
	(0.202)	(0.282)	(0.290)	(0.248)	(0.247)
R-squared	0.592	0.604	0.604	0.565	0.565
Mean (St. Dev.) of pay	$112,662	$121,439		$104,860	
	(40,296)	(40,480)		(38,512)	
Observations	1377	648	648	729	729

NOTES: Estimated using OLS with standard errors clustered by supervisor. Excluded breadwinner role is primary breadwinner in columns 1, 3, and 5; excluded breadwinner role is secondary breadwinner in columns 2 and 4. Dependent variable is natural log of pay in 2009. Additional controls include quadratic in age and tenure, dummy variable for each division, and each survey invitation group. + p-value < 0.10; * p-value < 0.05; ** p-value < 0.01.

(Eagly and Steffen 1984) than their gender per se does (Lanaj and Hollenbeck 2015; Ridgeway and Correll 2004). Finding that the primary-breadwinner pay premium does not differ by gender suggests that stereotypes of primary breadwinners as high in commitment (i.e., ideal workers) and/or need apply to both men and women primary breadwinners alike.

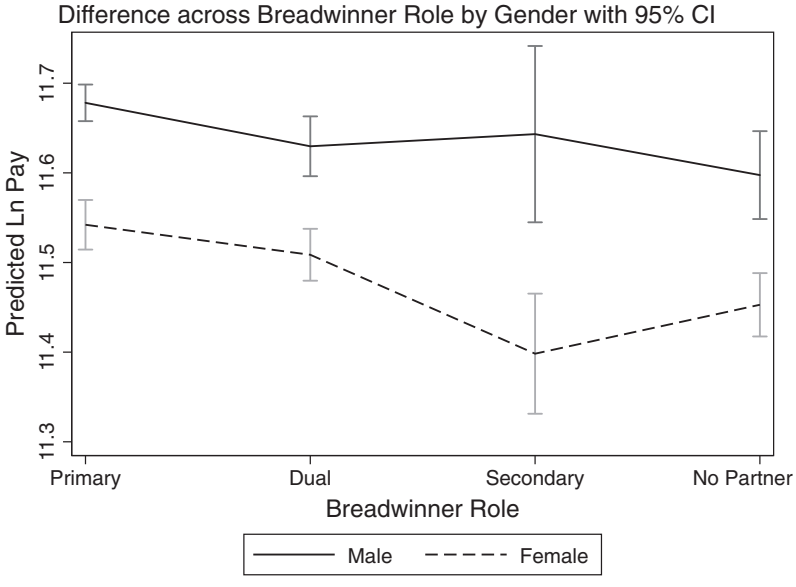
At the same time, we find that the pay of secondary-breadwinner employees differs by gender. Pay is significantly lower for secondary-breadwinner employees as compared to that of primary-breadwinner, dual-breadwinner, and nonpartnered employees among women, while this is not the case among men. This indicates an asymmetry in the relationship between breadwinner role and gender: while gender does not seem to influence stereotypes of primary-breadwinner employees, gender seems to be the vehicle through which negative stereotypes of secondary-breadwinner employees manifest. The direction of this effect is consistent with status characteristics theory (Correll, Benard, and Paik 2007; Ridgeway and Correll 2000, 2004) in that women in the secondary-breadwinner role appear to be more vulnerable to negative stereotypes as compared to men in that role.

Conclusions

We investigate differences in performance and pay by breadwinner role using a sample of professional and managerial employees from the corporate

FIGURE 2

Relationship between Breadwinner Role and Pay by Gender



NOTES: Figure 2 Plots Average Predicted Differences in ln(pay) Across Breadwinner Role by each Gender along with 95-Percent Confidence Intervals Assuming Equal Values of the Other Included Covariates. These Differences in Average Predictions come from the Regression Model in Table 8 (Column 1).

headquarters of a Fortune 500 organization. Using employee self-reports of breadwinner role, we compare differences across primary-breadwinner, dual-breadwinner, secondary-breadwinner, and nonpartnered employees, which allows for a comparison across the expanded set of breadwinner roles occupied by employees within organizations today. We hypothesize higher performance and higher pay over and above performance for primary-breadwinner employees, while lower performance and lower pay over and above performance for secondary-breadwinner employees. While we find no support for the hypotheses involving performance differences, we find support for pay differences over and above performance: primary-breadwinner employees outearn employees from all other breadwinner roles, while secondary-breadwinner employees tend to lag. These overall findings for pay mask differences by gender in that we find asymmetric results on the relationship between breadwinner role and pay by gender. While the pay premium for primary-breadwinner employees

relative to dual-breadwinner and nonpartnered employees does not differ for men and women, the pay penalty for secondary-breadwinner employees relative to employees in all other roles is present among women, but not among men.

Because pay differences are present over and above performance, our findings suggest that these pay differences are evidence of bias. While we cannot measure the mechanisms at work directly, our findings are consistent with our theory, which suggests that stereotypes of primary-breadwinner employees as high in both commitment (i.e., the ideal worker norm) and need (i.e., distributive justice theory) contribute to the primary-breadwinner pay premium for both men and women. In contrast, our findings suggest that stereotypes of secondary-breadwinner employees as low in commitment and need contribute to the secondary-breadwinner pay penalty for women only.

In terms of implications, these findings uncover breadwinner role as a potential source of discrimination in organizations. Although breadwinner role is not a protected class, our findings suggest that differentially rewarding employees based on breadwinner role is unlikely to be an efficient practice. Namely, with such a practice, the organization would be paying primary-breadwinner employees more despite no evidence that they have higher performance relative to other partnered employees (i.e., dual-breadwinner and secondary-breadwinner employees). Further, organizations risk alienating dual-breadwinner or secondary-breadwinner employees if such a practice were discovered, likely exposing the organization to higher turnover costs.

Our results also suggest that disclosure of breadwinner role may have implications for employee outcomes. In the spirit of Phillips, Rothbard, and Dumas (2009), which theorized how disclosure of personal information has implications for workplace outcomes, our findings suggest that employees' decision to disclose their breadwinning role to their supervisor may have either beneficial or detrimental effects on career outcomes depending on the employee's breadwinning role and gender.

When considering our findings, it is important to note that our research is not without limitations. First, despite the fact that we have organizational records on pay, our measure of pay is from one year and is a composite of salary and bonus pay. Research that separately evaluates breadwinner role differences for salary and incentive pay would be useful to understanding how differences in pay may emerge.

Second, our sample is from a particular setting, namely a highly educated, highly paid sample of managerial and professional employees from the corporate headquarters of a single organization. As such, we cannot assess to what extent features of the sample, the organization, or the surrounding labor market environment influence the pay premium. For instance, a different pattern of

findings may emerge in organizations in which the performance assessment process is also prone to biases; namely, differences in performance by breadwinner role may emerge as well as differences in pay.

Third, we cannot directly measure the extent to which the proposed mechanisms—stereotypes—are driving pay differences. It is possible that pay differences by breadwinner role are due to some unmeasured aspect of the employee influencing pay decisions, rather than differential stereotypes of employees based on breadwinner role. In particular, while unlikely, it is possible that the included measures of performance and advancement potential are incomplete and that unmeasured productivity differences across breadwinner roles are driving the effect. Another possibility is that pay differences may stem from differences in negotiation behavior across employees by breadwinner role. While we cannot rule out this possibility, this alternative explanation is less plausible given that we find the same pattern of results when job level instead of pay is used as the dependent variable, which is less readily negotiated.

Finally, we can only identify the association between breadwinner role and performance and pay outcomes; a causal effect cannot be determined. It is possible that employees who are paid more are more likely to report themselves as primary breadwinners. At the same time, information on contribution to household income, housework, and career interruptions point to distinct household arrangements by breadwinner role, rather than simply differences in one's current pay affecting employee self-reports.

The findings from this study lead to several additional avenues for future research. First, how do breadwinner roles within the household emerge? Across breadwinner groups we see high levels of human capital investment in the form of educational degree as well as similarities in work attitudes, like career aspirations and commitment. Further, our data show that self-reported breadwinner role is not one-to-one with relative earnings within the household (i.e., there is overlap in the employee's contribution to household income across breadwinner groups, Appendix Figure 1). Understanding how breadwinner roles are constructed and how fluid they are represents a fruitful avenue for future work.

Second, future work is needed to understand how managers form attributions about the employee's breadwinner role. Prior work has shown evidence of misalignment between manager attributions and employee reports on the reasons for using flexible work practices (Leslie et al. 2012) as well as inaccurate assessments of work and family attitudes of junior faculty by their senior colleagues (King 2008). This type of misalignment may also occur for breadwinner role. For instance, the asymmetric findings on the relationship between breadwinner role and pay by gender could be driven in part by a propensity of

managers to view men with career-oriented partners as dual-breadwinner employees rather than secondary-breadwinner employees.

Finally, future work should advance understanding of the mechanisms explaining the pay premium for primary-breadwinner employees. While existing theories on the role of stereotypes point to perceptions of need (Deutsch 1975; Leventhal 1976) and commitment (i.e., the ideal worker norm; Acker 1990; Williams 2000; Reid 2015) as likely mechanisms generating the premium, measures of evaluator stereotypes of employees would allow for direct tests.

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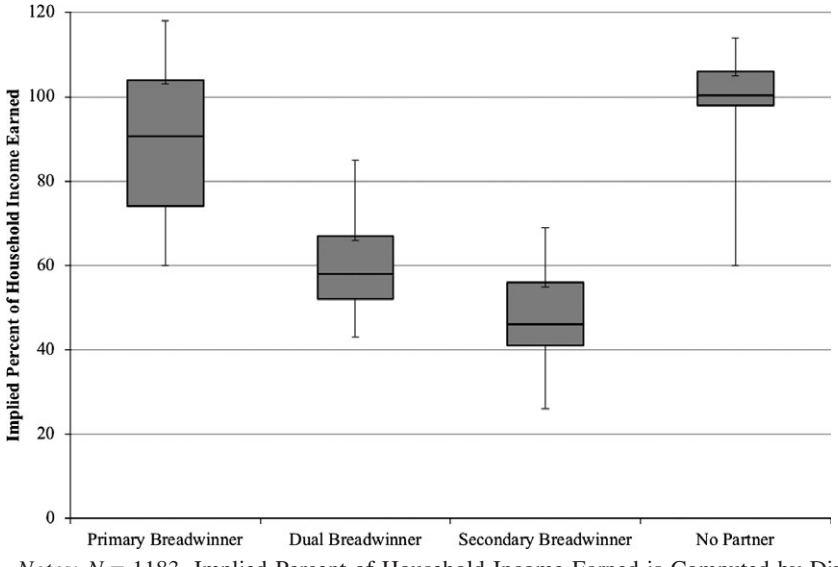
APPENDIX

FIGURE A1

IMPLIED PERCENT CONTRIBUTION TO HOUSEHOLD INCOME BY BREADWINNER ROLE



Notes: $N = 1183$. Implied Percent of Household Income Earned is Computed by Dividing Pay in 2009, Taken from Administrative Records, by Self-Reported Household Income from Survey (Missing for 194 Employees in our Sample). This Plot shows the Median (Horizontal line), Interquartile Range (gray box), and the fifth and Ninety-fifth Percentiles (Brackets).