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Household decisions and the gender gap in job satisfaction

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Abstract

This paper offers a novel theoretical explanation for the gender gap in job satisfaction, where women typically report higher job satisfaction than men. We argue that rational family decisions can result in divergent job choices for women and men, leading to increased job satisfaction but lower earnings for women, even when their preferences and expectations align with those of men. We develop this explanation within a theoretical model of family household decision-making that considers relative earnings disparities within households. We provide empirical evidence supporting our model's predictions utilizing survey and administrative data from Canada.

KEYWORDS

gender gap, households, job satisfaction

JEL CLASSIFICATION

D13, J16, J28

1 | INTRODUCTION

The stubborn persistence of the gender wage gap despite the remarkable catching-up of women in many aspects of economic and social life remains one of the most important phenomena studied in (labor) economics (e.g., Blau and Kahn, 2017; Cook et al., 2020; Goldin, 2014; Kleven et al., 2023). One approach to explaining remaining gender gaps, reviewed by Bertrand (2011), Azmat and Petrongolo (2014), Blau and Kahn (2017),

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and Lundberg (2023) attributes its underlying causes to intrinsic gender differences in preferences, expectations, personality traits, and norms. An example is the gender gap in labor market expectations (Filippin and Ichino, 2005; Kiessling et al., 2024; Reuben et al., 2017). This hypothesis postulates that women have grown accustomed to worse labor market outcomes and have adapted their expectations accordingly. As a result, employers can make worse offers to women, taking advantage of their lower expectations. Another example is the hypothesis that gender differences exist in job preferences, with women placing relatively less value on pay compared to men while placing relatively more value on non-pay characteristics. This can lead to the sorting of women into jobs with lower pay (Card et al., 2015; Le Barbanchon et al., 2020; Mas and Pallais, 2017). Both the expectations hypothesis and the preference hypothesis suggest that women tend to be more satisfied with their jobs than men, conditional on pay. In fact, such a gender gap in job satisfaction has been frequently observed in the literature (e.g., Bender et al., 2005; Clark, 1997; Estrin et al., 2014; Mason, 1995; Perugini and Vladislavljević, 2019; Sloane and Williams, 2000), which is usually seen as evidence in support of these hypotheses.

In this paper, we present an alternative perspective on the gender gap in job satisfaction. Our explanation departs from the conventional reliance on behavioral gender differences in unobservable expectation formation or on gender differences in preferences. Instead, we argue that rational decision-making in family households results in different job choices for women and men, ultimately leading to greater job satisfaction among women, even when their underlying preferences and expectations are identical to men's. We develop this explanation within a theoretical model of household decision-making and provide empirical evidence in support of the model's predictions utilizing Canadian household data.

We build on the idiosyncrasy model of job choice, as set up by, for example, Card et al. (2018) and Wiswall and Zafar (2018), where jobs possess idiosyncratic non-pay attributes, and workers exhibit idiosyncratic preferences over these characteristics. When making rational job choices, workers weigh both the pay and non-pay aspects of different job offers. We expand upon this framework by taking into account that a majority of workers live in family households, with many being part of dual-earner couples who may opt for joint job choice decisions. Our model encompasses single workers, couples who make job choices cooperatively, and couples whose members make job choices individually without cooperation.

Our model incorporates heterogeneity in relative earning potentials across individuals, allowing for the identification of primary and secondary earners in couple households. The model predicts that, on average, secondary earners in dual-earner couple households are more satisfied with their jobs than the primary earners of those households. This prediction holds for both cooperative and non-cooperative couples. However, the job satisfaction gap between secondary and primary earners is more pronounced among cooperative couples.

The secondary-primary earner job satisfaction gap can be attributed to the lower reliance of the family on the secondary earners' labor earnings, thus diminishing the significance of income as a determining factor for secondary earners' workplace choices. Consider a dual-earner household where the earning potentials of the spouses differ. In such cases, a certain percentage increase in income becomes more crucial when it concerns the spouse with higher earning potential. Consequently, pay differentials between job offers are relatively important in this spouse's job selection process. Conversely, non-pay characteristics become more important in the decision-making process for the other spouse's job selection. As a result, secondary earners are more likely to align their employers' non-pay characteristics with their preferences, leading to better matches between the chosen workplace and job preferences at the expense of lower wages. For primary earners, the reverse holds: families prioritize pay when choosing the workplaces of these members which results in higher pay, yet, a worse alignment of non-pay preferences to employer characteristics. Since family members share income but not the direct utility derived from their jobs, secondary earners tend to experience higher job satisfaction, which we define as the utility differential compared to the alternative scenario of working for the next best firm. Given that, statistically, most women are secondary earners in their households (a factor we consider exogenous in our analysis), our model predicts



higher average levels of job satisfaction among women than men.¹ On the flip side, the mechanism also implies an amplification of pay differences between men and women due to the different emphasis placed on the pay dimension in their respective job choices.

Thus, our model rationalizes the gender gap in job satisfaction, attributing it to the correlation between gender and earner status within one's family, without implying a direct causal effect of gender on job satisfaction when conditioned on earner roles. Our model allows us to derive the following hypotheses regarding the interplay of gender, families, and job satisfaction: First, on average, women express higher satisfaction with a given job than men. Second, there is no job satisfaction gap between women and men when we narrow our focus to households without primary and secondary earners, that is, to singles. Furthermore, the presence of children in the household can play a significant role, as it induces parents to engage in cooperative joint decision-making or strengthen their ability to do so.² This implies that, third, the presence of children should widen the gender gap in job satisfaction. Fourth, in dual-earner couple households where the woman takes on the primary earner role, the model predicts that the average job satisfaction of women will not surpass that of men.

These predictions stand in contrast to alternative explanations for the gender gap in job satisfaction. According to the expectation hypothesis, women maintain lower expectations regarding job attributes due to their anticipation of encountering gender-based discrimination or unequal treatment, which results in them being more easily satisfied given their diminished expectations (Clark, 1997; Perugini and Vladislavljević, 2019). On the contrary, according to the preference hypothesis, women tend to sort into jobs with objectively more favorable non-pay characteristics, leading to higher levels of job satisfaction (Bender et al., 2005; Sloane and Williams, 2000). Unlike our previous predictions, these alternative explanations would apply to all women, regardless of their earner status.

To test our hypotheses, we utilize survey data from Canada. Specifically (Statistics Canada, 2019), we use the 2016 Canadian General Social Survey (GSS), which includes modules on job satisfaction and job quality attributes, provides essential control variables (including non-pay job characteristics not commonly found in household surveys), and offers access to personal and family income data obtained through linkages with survey respondents' administrative tax records. We estimate ordered probit models with job satisfaction as the dependent variable and gender as the primary independent variable. We control for pay, various non-pay job characteristics, and worker demographics, after having employed nearest-neighbor matching techniques to ensure our sample consists of men and women with comparable individual and job characteristics. In doing so, we aim to compare the job satisfaction of observationally identical men and women in observationally identical jobs. This results in a comparison between men and women who share identical individual characteristics but differ in their partner's characteristics and, consequently, their roles as primary or secondary earners in their respective households. In our total sample, we estimate that women are approximately five percentage points more likely to report being satisfied or very satisfied with their job compared to men with similar individual characteristics.³

The results for different subsamples provide support for the model predictions. For example, we observe a gender gap in job satisfaction among married individuals, but no significant gap among singles. Furthermore, the gender gap in job satisfaction is more pronounced among married individuals with children, with the presence

¹It is important to note that the assumption about gender and earner types does not imply assuming that women's earnings potentials are systematically lower than men's. The distribution of relative earnings potentials within couples can instead be a result of the marriage market. As shown by Almås et al. (2020), women tend to marry partners with higher earnings potentials and high-earnings potential women are more likely to remain without a partner.

²Expenditures for children are the classic example of a household public good that is provided inefficiently in non-cooperative households (for recent references see, e.g., Cherchye et al. (2022) and Obara and Ogawa (2023)), implying that the presence of children substantially enlarges the gains from cooperation.

³In their most comparable specification, Perugini and Vladislavljević (2019) report a similar estimate of about four and a half percentage points for European data.

of children being our proxy indicator for a high chance of cooperative decision making between the parents. In contrast, among childless married couples, a higher share of whom might take decisions non-cooperatively, we observe only a weak and mildly significant gender gap in job satisfaction. Finally, we distinguish between couple households with traditional earner roles (where men are the main breadwinners) and those with non-traditional earner roles (where women are the main breadwinners). In line with our theoretical model, we find no systematic gender gap in job satisfaction in couples with non-traditional earner roles. In couples with traditional earner roles, we observe that women's job satisfaction very regularly exceeds that of men, further underscoring the significance of within-household earner roles in influencing job satisfaction.

1.1 | Related literature

Our paper contributes to two interconnected areas of the literature. First, we are among those papers seeking to shed light on the reasons for the persistence of gender disparities in the labor market. Second, we reexamine the question of why women tend to, on average, express higher job satisfaction. We provide fresh insights into the gender gap in job satisfaction by presenting a novel theoretical explanation rooted in rational family decision-making. This explanation diverges from the hypotheses commonly discussed, which center around gender differences in expectations and preferences.

Two predominant approaches exist in the literature concerning the reasons for persistent wage gaps between genders. The first approach, as reviewed by Bertrand (2011), Azmat and Petrongolo (2014), Blau and Kahn (2017), and Lundberg (2023) argues that gender differences in preferences, expectations, and personality traits as well as societal norms contribute to women's career trajectories being less steep. The second approach underscores the role of the family in explaining significant gender disparities in labor market outcomes. Foged (2016), Braun et al. (2021), and Averkamp et al. (2024) show how the rational decisions of households can magnify gender discrepancies in pay, even when differences in most pay-related attributes have become minimal.⁴ Our analysis aligns with the latter approach, providing a rationale for the gender gap in job satisfaction through the lens of rational family household decision-making. Our theoretical mechanism not only provides an explanation for the gender gap in job satisfaction but also amplifies gender disparities in earnings.

Our model aligns with a wealth of evidence indicating that dual-earner households tend to prioritize pay in decisions related to the primary earner's career, typically the man's, while emphasizing non-pay characteristics in the job choices of the secondary earner, typically the woman. For example, Petrongolo and Ronchi (2020) and Le Barbanchon et al. (2020) present evidence that women, more frequently than men, make trade-offs favoring non-pay job attributes like shorter commutes or flexible work schedules over better earnings. In a similar vein, Cortés and Tessada (2011) and Cortés and Pan (2019) highlight families' hesitance toward excessive overtime worked by women. Additionally, Bredemeier (2019) shows that men's quit decisions are more strongly driven by pay differences between firms than women's. Albrecht et al. (2018) observe that men experience greater wage gains when switching employers compared to women, whose transitions between firms seem motivated by job attributes other than pay. Hotz et al. (2018) demonstrate that women tend to transition to more "family-friendly" jobs after becoming mothers. Mas and Pallais (2017) observe that women are more willing to pay for job attitudes that prioritize family-friendliness. Pertold-Gebicka et al. (2016) find that women more frequently shift from private sector jobs with time pressure and long working hours to public sector positions. Amer-Mestre and Charpin (2024) find that women tend to accept lower pay in exchange for lower

⁴In a broader context, considering labor-supply decisions in dual-earner households as interdependent choices of household members have advanced our understanding of consumption insurance against wage shocks (e.g., Autor et al., 2019; Blundell et al., 2016; Wu & Krueger, 2021), the intertemporal elasticity of labor supply (e.g., Bredemeier et al., 2019, 2023), the determinants of female labor supply (e.g., Bick, 2016; Bick & Fuchs-Schündeln, 2017, 2018; Bredemeier & Jüßen, 2013; Guner et al., 2012a, 2012b), unemployment insurance (e.g., Choi & Valladares-Esteban, 2020; Ortigueira & Siassi, 2013), and pension systems (e.g., Groneck & Wallenius, 2020; Nishiyama, 2019).



time requirements, less competition, and higher social contribution. Lochner and Merkl (2023) document that women apply less often for high-pay jobs and more often for jobs that require less flexibility in terms of working times, overhours, and business travel. Card et al. (2015) show that women working less frequently for high-pay firms contributes substantially to the gender wage gap. While this evidence also aligns with the hypothesis of gender differences in preferences, our comparison of dual-earner couples with traditional and non-traditional earner roles suggests that the preference hypothesis alone falls short in explaining these patterns. Instead, our findings support the idea that the varied job choices of couples are influenced by rational decisions reflecting their distinct relative earning potentials.

In the job satisfaction literature, numerous studies have explored gender differences in job satisfaction since Clark (1997) seminal contribution, highlighting the seeming paradox of women's high job satisfaction. While not explicitly designed to test competing explanations, these empirical studies have yielded findings that closely align with our proposed explanation. For example, the gender gap in job satisfaction has been observed to decrease over time (e.g., Pita and Torregrosa, 2021), which, through the lens of our theory, is not surprising given the rise in women's relative earnings, declining fertility, and looser attachments to marriages. Likewise, the job satisfaction gap has been shown to be smaller or even non-existent in specific population subgroups (e.g., Bönnte and Krabel, 2014), for which it is likely that they include relatively few women who are secondary earners in their households. To test the expectations hypothesis, Perugini and Vladislavljević (2019) examined European data and found that the gender gap in job satisfaction narrows among women who grew up in less gender-conservative environments. They interpret this result as support for the expectations hypothesis, suggesting that women from such backgrounds have higher expectations regarding their labor market outcomes. However, it is important to note that these women may also be less likely to take on the traditional secondary earner role in their partnerships. Consequently, their findings align with our perspective on the gender gap in job satisfaction.

A second group of papers within the job satisfaction literature, notably Bender et al. (2005) and Sloane and Williams (2000), have challenged the expectations hypothesis. Instead, they argue that gender differences in job satisfaction arise from women self-selecting into jobs with specific non-pay characteristics. These papers leave this selection unexplained, attributing it to gender differences in preferences. Yet, if the gender gap in job satisfaction resulted solely from women's preferences, it should be present across all women, including singles and those with non-traditional earning roles. Our empirical findings, however, contradict this prediction.

The paper is structured as follows. Section 2 outlines our model for rational job choice, from which we derive testable predictions regarding the role of household decisions in explaining the gender gap in job satisfaction. Section 3 presents our data and the empirical strategy used to test these predictions. Section 4 presents the results of our analysis. Finally, Section 5 concludes.

2 | THEORETICAL MODEL

We expand upon the idiosyncrasy model of job choice, as set up by, for example, Card et al. (2018) and Wiswall and Zafar (2018) by considering family households and the collective choices of its members.⁵ Our model comprises heterogeneous individuals residing in single or couple households, all of whom make job choice decisions within their respective households. Agents in our model differ in their preferences for pay and non-pay job attributes and their income potential across various employers. These disparities in earnings potential arise from observable attributes such as education, match-specific productivity, and unobservable characteristics. Our model will determine the optimal job choices for various individuals and household groups and subsequently

⁵A similar model has been used by Bredemeier (2019) to study gender-specific elasticities of labor supply to individual firms and their impact on firms' wage-posting decision.

calculate job satisfaction, defined as the utility difference between the selected job and a unilateral deviation to the next best job.

We distinguish between two types of couple households based on their decision-making process. In the first group, household members behave cooperatively, achieving Pareto efficient decisions. In the second group, members act non-cooperatively, resulting in potentially Pareto inefficient decisions.

In the cooperative group, decision-making is modeled as the household maximizing a weighted sum of its members' utilities. As a baseline, we abstract from determining the household members' utility weights, treating them as exogenous, implying a stable household target function as in a unitary model of the household (Chiappori and Mazzocco, 2017). In the Web Appendix, Section A.4, we show that this modeling choice can be generalized to a collective approach where the weights are determined endogenously, without substantially affecting our main results. In the non-cooperative group, members maximize their individual utility as a best response to other members' behavior (Nash equilibrium).

We include both types of couples in the same framework by considering non-cooperative behavior as an outside option to the cooperative decision problem. Household members act non-cooperatively when a direct utility gain from cooperative behavior is sufficiently small. This approach allows us, in the empirical part of the paper, to use a key determinant of cooperation gains – namely, the presence of children – as a proxy for cooperative behavior within a couple.

Initially, our model deliberately excludes considerations related to gender. In our framework, households consist of members categorized as either primary earners or secondary earners. The model remains agnostic about the underlying reasons for individuals being secondary earners. Instead, it operates on the premise that, other things being equal, secondary earners earn less due to exogenous (and unobservable) factors, which may be amplified endogenously through household choices.

Subsequently, our analysis introduces gender into the model. It is important to note that, in our model, the only distinction between women and men is that women statistically more frequently occupy the role of secondary earners. We do not explore the causes of this phenomenon, but our analysis starts with this observation, which we assume as an exogenous input into our model. We then study the consequences of this observation for the gender gap in job satisfaction.

2.1 | Model setup and decisions

The model is populated by individuals who live in one-person households (singles) or couple households (consisting of two members). In both single and couple households, individuals make decisions related to their consumption and workplace choices. Partners within a couple may choose to take these decisions jointly. Individuals care about various aspects of a job, not just the wage, and jobs differ in pay and non-pay characteristics.

Each individual i can choose between different employers $j \in J$, which offer individualized wage earnings w_{ij} and provide direct utility e_{ij} to the workers. Workers have idiosyncratic preferences over workplaces, that is, the distribution of the e_{ij} across the various firms j varies among different individuals i .

We will use the following notation for couple households: individual i lives together with individual $-i$ in household I . Within a household, consumption is public and financed by the pooled earnings of both members, that is,

$$c_i = c_{-i} = c_I = w_{ij(i)} + w_{-ij(-i)}, \quad (1)$$

where c denotes consumption and $j(i)$ and $j(-i)$ are the employers chosen by household I for individuals i and $-i$, respectively, and $w_{ij(i)}$ and $w_{-ij(-i)}$ are wage earnings corresponding to these choices. Individual preferences are given by

$$u_i = \log(c_i) + e_{ij(i)} + \Psi_i \mathbf{1}_I,$$

where Ψ is a direct utility enhancement that individuals experience when they live in a cooperative relationship, indicated by $1_I = 1$.

Couple households maximize the total utility of their members

$$V_I = u_i + u_{-i} = 2\log(c_i) + e_{ij(i)} + e_{-ij(-i)} + (\Psi_i + \Psi_{-i})1_I,$$

subject to the budget constraint (1) and participation constraints, which state that members must not be better off in their outside option of non-cooperative behavior in the household,

$$u_i \geq u_i^{nc}, \quad u_{-i} \geq u_{-i}^{nc}. \quad (2)$$

The utility values of the outside options, u_i^{nc} and u_{-i}^{nc} , are given by values of individual maximization of u_i and u_{-i} subject to the joint budget constraint (1) as the best response to one's partner behavior.

For the sake of simplicity in our analysis, we will distinguish between couples for whom Ψ_i and Ψ_{-i} are large enough for (2) to be slack (cooperative couples) and couples for whom $\Psi_i = \Psi_{-i} = 0$ such that their choices align with the non-cooperative equilibrium (non-cooperative couples). Together with singles, who maximize utility $u_i = \log(c_i) + e_{ij(i)}$ subject to $c_i = w_{ij(i)}$, we have three distinct groups of households. We use the index g to distinguish between these groups and indicate cooperative couples by $g = c$, non-cooperative couples by $g = nc$, and singles by $g = s$. The Web Appendix, Section A.1 provides a formal summary of all three groups' decision problems.

2.1.1 | Cooperative couples

The optimal choice of employers by a household I must satisfy that the household would be no better off if one of its members switched to another firm, given the employer of the other member. In formal terms, the optimal employer choices, denoted as $j(i)$ and $j(-i)$, must satisfy

$$u_i|_{j(i)j(-i)} + u_{-i}|_{j(i)j(-i)} \geq u_i|_{j'j(-i)} + u_{-i}|_{j'j(-i)} \quad \forall j' \in J$$

and

$$u_i|_{j(i)j(-i)} + u_{-i}|_{j(i)j(-i)} \geq u_i|_{j(i)j'} + u_{-i}|_{j(i)j'} \quad \forall j' \in J,$$

where $u_i|_{a,b}$ and $u_{-i}|_{a,b}$ denote individuals i 's and $-i$'s utility levels resulting from them working in jobs $a \in J$ and $b \in J$, respectively. By rearranging terms and approximating $\exp(-(e_{ij(i)} - e_{ij'})/2) - 1$ by $-(e_{ij(i)} - e_{ij'})/2$, we can express the optimality condition for member i as

$$\frac{w_{ij(i)} - w_{ij'}}{w_{ij(i)}} \geq \frac{1}{2} \cdot \Omega_{ij(i)j(-i)}^{-1} \cdot (e_{ij'} - e_{ij(i)}), \quad (3)$$

where $\Omega_{ij(i)j(-i)} = \frac{w_{ij(i)}}{w_{ij(i)} + w_{-ij(-i)}}$ is the share worker i contributes to household earnings.

Condition (3) compares what worker i could earn at two firms (left-hand side) to the difference in direct utility they would obtain at the two firms (second term on the right-hand side). In order for the current employer, denoted as $j(i)$, to retain the worker and prevent him or her from switching to another firm, j' , that would provide a higher level of direct utility, the employer needs to offer a sufficiently better wage. However, the extent of this wage difference hinges on the worker's contribution to household income, Ω . The higher the share of household income contributed by member i (large Ω), the less difference in direct utility is weighted in the household's choice of this member's employer. Reversely, regarding members who contribute little to household income (small Ω), the difference in direct utility between employers are heavily important for

household decisions. As a result, secondary earners ($\Omega < 1/2$) tend to obtain more direct utility from their workplaces than primary earners ($\Omega > 1/2$).

2.1.2 | Non-cooperative couples

The optimality conditions for non-cooperative couples look similar. However, in this context, job choices must ensure that each individual is better off with their chosen employer than with the available alternatives, given the employer choice of their partner (Nash equilibrium). This equilibrium must fulfill

$$u_i \Big|_{j(i),j(-i)} \geq u_i \Big|_{j',j(-i)} \quad \forall j' \in J$$

and

$$u_{-i} \Big|_{j(i),j(-i)} \geq u_{-i} \Big|_{j(i),j'} \quad \forall j' \in J.$$

Applying analogous steps as above, we obtain

$$\frac{w_{ij(i)} - w_{ij'}}{w_{ij(i)}} \geq \Omega_{ij(i),j(-i)}^{-1} \cdot (e_{ij'} - e_{ij(i)}). \quad (4)$$

Workers in non-cooperative couples perform a similar assessment of a job's advantages and drawbacks, but they consistently assign greater importance to non-pay characteristics compared to an equivalent cooperative household. In cooperative decision making, the household makes its members internalize the positive impact of a better-paying job on the respective partner while this is not achieved in non-cooperative couples. This implies that the tendency to prioritize aligning secondary earners with their individual preferences, while selecting relatively high-paying jobs for primary earners, is also present in non-cooperative couples. However, this tendency is more pronounced in cooperative couples, while in non-cooperative couples, it occurs to a lesser extent.

2.1.3 | Singles

A single's job choice must fulfill that the agent is better off at this than at any other firm: $u_i \Big|_{j(i)} \geq u_i \Big|_{j'} \quad \forall j' \in J$. This implies

$$\frac{w_{ij(i)} - w_{ij'}}{w_{ij(i)}} \geq e_{ij'} - e_{ij(i)}, \quad (5)$$

which is equal to the condition for non-cooperative couples in the limiting case $\Omega \rightarrow 1$ (the partner's income converges to zero).

2.2 | Deriving closed-form results in a simplified model

We now assume some additional structure that simplifies the model and allows us to derive a closed-form solution. First, wage earnings in a worker-firm match are determined as the sum of three components,

$$\log(w_{ij}) = \log(\alpha_i) + \log(\theta_i) + \log(\gamma_{ij}), \quad (6)$$

where α_i is a measurable skill level, such as education, θ_i denotes an unobservable individual-specific earnings component, and γ_{ij} is an unobservable match-specific productivity component.

For simplicity, we discretize θ_i and γ_{ij} which can both take on either low values normalized to one or high values denoted by $\theta > 1$ and $\gamma > 1$. To simplify our analysis further, we assume perfect assortative mating by measurable skills, that is, $\alpha_i = \alpha_{-i}$ for all individuals in couples, and we focus on couples in which $\theta_i \neq \theta_{-i}$. The latter choice allows for comparative advantages within the couple and ensures a clear identification of primary and secondary earners.⁶ The parameter θ is a stand-in for a broad range of underlying causes of within-household earnings heterogeneity that are challenging to observe, such as the ability and comparative advantage in home production relative to market work. Our main concern is not the specific reasons behind an individual being designated as a secondary earner but the consequences of this designation for employer choices and job satisfaction. Additionally, the size of θ is not a critical factor; it does not need to be large; even a small value suffices as long as its log-transformed value remains greater than zero.

Matches with $\gamma_{ij} = \gamma$ constitute good worker-firm matches in terms of productivity, as opposed to those with $\gamma_{ij} = 1$.⁷ Worker-firm matches also differ in how well worker and firm align in non-pay terms. If the firm's characteristics align well with a worker's preferences, the worker receives a utility boost, $e_{ij} = e_i^{\text{high}} = \eta_i > 0$. If they do not align well, the utility boost is given by e_i^{low} , which, without loss of generality, we set to $e_i^{\text{low}} = -e_i^{\text{high}} = -\eta_i$. As e is an additive taste shifter, all that matters is the difference between its realizations and not their level (which is nothing but an additive transformation of the utility function). The parameter η_i reflects the utility weight for alignment between a job's non-pay characteristics and individual i 's preferences. We assume that this utility weight is equal within the household, $\eta_{-i} = \eta_i = \eta_i$. The distribution of η_i is identical across all three household types and is described by the distribution function $f(\eta)$ and the cumulative distribution function $F(\eta)$. This assumption ensures that outcomes are not influenced by specific groups attributing different values to non-pay job characteristics due to exogenous factors.⁸

To narrow our focus to non-trivial decisions, we specifically examine worker choices between two distinct job types: i) a job that aligns well with productivity but is a suboptimal match regarding non-pay characteristics, and ii) a job that exhibits the opposite pattern, where non-pay characteristics are a good match, but productivity is lower. In other words, we consider the scenario where $\gamma_{ij} = \gamma \Leftrightarrow e_{ij} = -\eta_i$ and $\gamma_{ij} = 1 \Leftrightarrow e_{ij} = \eta_i$.

Therefore, we have, for each individual i , two distinct match quality vectors, namely $(\gamma, -\eta_i)$ and $(1, \eta_i)$, and it is thus sufficient to restrict the set of firms J to having two elements, firms A and B. All probabilities are set to 0.5 ensuring that for every worker that aligns well with firm A, there is an otherwise identical worker that aligns well with firm B. This also ensures that both firms are on average perceived equally well in terms of non-pay characteristics and have the same average productivity level. These assumptions are in place to maintain comparability between the model analysis and our empirical investigation, in which we control for pay and non-pay characteristics, hence comparing men and women who are identical in these dimensions. In the model, primary and secondary earners have the same employer distribution, ensuring that both have equivalent distributions of pay and non-pay characteristics. In this way, our analysis goes beyond the notion that women tend to sort toward employers with lower productivity in general (our model does not even include firm-specific productivity components). Instead, it relies on the idea that secondary earners, who are statistically predominantly women, tend to work for employers with whom they individually have a less favorable

⁶Potentially, household choices could lead to the earnings of the individual with the lower θ_i exceeding those of the partner. Yet, this does not occur in equilibrium, see below.

⁷While the skill parameter α_i has no direct impact on decisions due to the assumption of log utility and perfect assortative mating, it enables interpreting the results of empirical job satisfaction regressions through the lens of our model. In these regressions, income often serves as a control variable, allowing comparisons between two workers with the same earnings but differences in other characteristics. Such comparisons are also possible in our model due to the skill parameter α . For example, when men are of the high- θ_i type more often than women, this can be offset by selecting a sample of men (women) with relatively low (high) values of α_i .

⁸In contrast, the preference hypothesis argues that gender differences in preferences regarding the importance of non-pay characteristics, represented by η_i in our model, could explain the gender gap in satisfaction.

productivity match. This distinction is essential because income is typically controlled for in job satisfaction regressions. Consequently, gender-related results cannot be explained by sorting into firms with lower overall pay levels alone.⁹

2.2.1 | Job choices

This framework enables the determination of closed-form threshold values for a worker's valuation of non-pay job characteristics, η_i . This threshold indicates the boundary below which worker i works in a favorable productivity match and above which they participate in a favorable non-pay match. The threshold depends on the worker's household type and, potentially, the unobservable earnings component, θ_i . We define $\underline{\eta}_g$ as the threshold for a low- θ_i worker living in household type g , and $\bar{\eta}_g$ as the corresponding threshold for a high- θ_i worker within household type g .

For cooperative couples, applying Condition (3) to the structure outlined above, yields the thresholds for job choices of the secondary earner (a low- θ_i type) and the primary earner (a high- θ_i type) as $\underline{\eta}_c = \log(\theta\gamma + \gamma) - \log(\theta\gamma + 1)$ and $\bar{\eta}_c = \log(\theta\gamma + 1) - \log(\theta + 1)$, respectively. Note that $\bar{\eta}_c > \underline{\eta}_c$. Consequently, three distinct scenarios arise: couples opting for good productivity matches for both members (when $\eta_i < \underline{\eta}_c$), couples selecting good non-pay matches for both members (when $\eta_i > \bar{\eta}_c$), and couples choosing a good productivity match for the primary earner and a good non-pay match for the secondary earner (when η_i falls between the two thresholds). This specific option will be of particular interest in our analysis.¹⁰

For non-cooperative couples, applying the equilibrium Condition (4) results in the following thresholds: $\underline{\eta}_{nc} = (\log(\theta\gamma + \gamma) - \log(\theta\gamma + 1)) / 2$ and $\bar{\eta}_{nc} = (\log(\theta\gamma + 1) - \log(\theta + 1)) / 2$. Notice that the threshold values in the non-cooperative case are each half as large as those in the cooperative case. Consequently, members of non-cooperative couples are more inclined to opt for favorable non-pay matches. This inclination arises because they do not fully internalize the advantages of their wages for their respective partners.

Condition (5) simplifies the determination of choices for singles. Independent of both α_i and θ_i , a single i chooses a favorable productivity match when $\eta_i < \underline{\eta}_s = \bar{\eta}_s = \log(\gamma / 2)$ and opts for a favorable non-pay match when η_i exceeds this threshold. It is noteworthy that among singles, job choices, and consequently, job satisfaction do not depend on the parameter θ . Consequently, two groups differing in the distribution of this parameter, while being identical in all other aspects, will exhibit no difference in their average job satisfaction.

2.3 | Amplification of pay differences

Before turning to job satisfaction, we briefly outline the implications of the employer choices on pay differences in our model. Our model aligns with the notion that family decisions amplify earnings differences between household members because families assign different weights to the pay and non-pay characteristics of a job when selecting workplaces for their members.

For any binary variable x , we define the difference operator Δ_x such that $\Delta_x(z_i)$ is the difference between the average of a variable z among agents with the low realization of x and the average of z among agents with the high realization of x . In our model, the gap in mean logarithmic earnings between individuals of the high- θ_i type (primary earners in couples) and individuals of the low- θ_i type (secondary earners in couples) is given by

⁹This does not mean that our analysis contradicts this form of sorting. In fact, it can be rationalized by very similar considerations that we choose not to explore at this stage to maintain consistency with the empirical job satisfaction regressions.

¹⁰In theory, households could also decide to choose a good non-pay match for the primary earner and a good productivity match for the secondary earner. However, this alternative is strictly dominated by the third choice, as it involves sacrificing income without any corresponding gain in total non-pay utility.

$$\Delta_{\theta}(\log(w_{ij(i)})) = -(\log(\theta) + \Delta_{\theta}(\log(\gamma_{ij(i)}))), \quad (7)$$

which follows from (6). This earnings gap has two components. First, there are exogenous earnings differences represented by the term $\log(\theta)$. Second, these exogenous differences are magnified as primary earners, by endogenous family choices, more frequently find themselves in good-productivity job matches, thereby realizing the associated earnings premium γ more often, that is $\Delta_{\theta}(\log(\gamma_{ij(i)})) > 0$.

Let σ_c and σ_{nc} represent the shares of cooperative and non-cooperative couples in the population, respectively. The economy-wide earnings gap can then be calculated as

$$\Delta_{\theta}(\log(w_{ij(i)})) = -\log(\theta) - \log(\gamma) \cdot \left[\sigma_c \left(F(\bar{\eta}) - F\left(\frac{\eta}{2}\right) \right) + \sigma_{nc} \left(F\left(\frac{\bar{\eta}}{2}\right) - F\left(\frac{\eta}{2}\right) \right) \right]. \quad (8)$$

For a detailed derivation, see the Web Appendix, Section A.2. The amplification of pay differences between primary and secondary earners is proportional to the prevalence of couples that opt for a high-productivity match for the primary earner and a strong non-pay match for the secondary earner. This prevalence is indicated by $F(\bar{\eta}) - F\left(\frac{\eta}{2}\right)$ for cooperative couples and $F\left(\frac{\bar{\eta}}{2}\right) - F\left(\frac{\eta}{2}\right)$ for non-cooperative couples.

2.4 | Job satisfaction

We define job satisfaction as the utility difference between the equilibrium and a unilateral deviation to the next best job and denote it by y (see, e.g., Hamermesh (1977, 2001) for a similar definition of job satisfaction). For a worker in a couple, job satisfaction is given by

$$y_i = u_{ij(i)} - u_{i,-j(i)} = \log(w_{ij(i)} + w_{-ij(-i)}) - \log(w_{i,-j(i)} + w_{-ij(-i)}) + e_{ij(i)} - e_{i,-j(i)}.$$

Herein, $-j(i)$ denote the job worker i does not work in, that is, their next best option. For not too large pay differences between firms, given by γ , job satisfaction can be expressed as

$$y_i \approx \underbrace{\frac{w_{ij(i)} - w_{i,-j(i)}}{w_{ij(i)}}}_{\text{pay gap to alternative job}} \times \underbrace{\Omega_{ij(i)j(-i)}}_{\text{contribution to household earnings}} + \underbrace{2e_{ij(i)}}_{\text{non-pay gap to alternative job}}. \quad (9)$$

Job satisfaction has two components. First, there is a pay component, which equals the earnings gap between the chosen and the alternative employer, $\frac{w_{ij(i)} - w_{i,-j(i)}}{w_{ij(i)}}$, weighted by the worker's contribution to household earnings, $\Omega_{ij(i)j(-i)}$. In other words, other things being equal, primary earners' job satisfaction depends more strongly on the pay dimension of their jobs. Second, there is a non-pay component, which measures the utility difference between working for the two firms in the non-pay dimension and equals $2e_{ij(i)}$ in the simplified model version.¹¹ For a single household, job satisfaction calculates equivalently, with zero partner wage, that is, $\Omega = 1$. Due to the setup of the simplified model, exactly one component is always positive while the other is negative. This reflects the trade-off for the worker, where they either sacrifice some pay for more appealing non-pay characteristics or vice versa.

Specifically, job satisfaction is given by

$$y_i = \begin{cases} \log(\gamma) \cdot \Omega_i - 2\eta_i, & \gamma_{ij(i)} = \gamma \\ -\log(\gamma) \cdot \Omega_i + 2\eta_i, & \gamma_{ij(i)} = 1 \end{cases} \quad (10)$$

¹¹To obtain this final term, we use that non-pay match quality in the not chosen job $-j(i)$ is always the negative of match quality in the chosen job $j(i)$, that is, $e_{i,-j(i)} = -e_{ij(i)}$ independent of whether $e_{ij(i)} = \eta_i$ or $e_{ij(i)} = -\eta_i$ (see Section 2.2 for further details).

The first line shows job satisfaction for workers who opt for a good productivity match ($\gamma_{ij(i)} = \gamma$). These workers appreciate their chosen job primarily for its pay, which is $\log(\gamma)$ higher than in the alternative job. The extent to which they value this benefit depends on their contribution to household earnings, Ω . However, there is a trade-off, as the alternative job would better align with the worker's non-pay preferences, causing dissatisfaction with the chosen job. The strength of this effect varies based on the utility weight given to non-pay characteristics of the worker, represented by η_i . Note that these workers tend to have lower valuations of non-pay job characteristics. As a result, the positive pay component typically outweighs the negative impact of non-pay considerations, although this balance diminishes as η_i approaches the threshold for choosing the favorable non-pay match.

For workers opting for a favorable non-pay match (applying the second line in Equation (10)), dissatisfaction arises from receiving $\log(\gamma)$ less than the alternative job. This downside is weighed by their contribution to household earnings, Ω . However, on the positive side, these workers benefit from an alignment of their job with their non-pay preferences, an advantage that becomes increasingly important as η_i rises. Since these workers have rather high valuations of non-pay characteristics, this advantage tends to be the primary determinant of job satisfaction within this group, particularly as η_i increases.

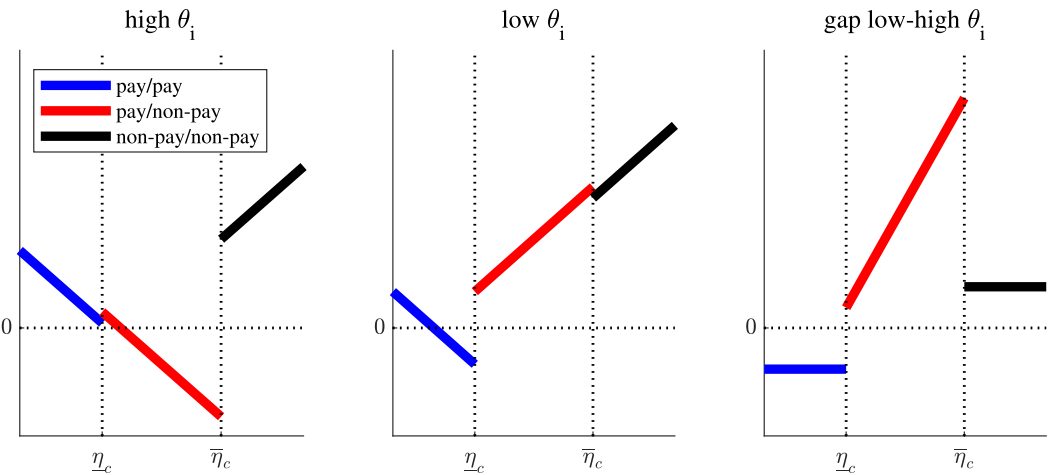
Figure 1 provides a graphical synthesis of job satisfaction among various worker types and illustrates the job satisfaction gap. On the horizontal axes, we plot the valuation of non-pay characteristics, η_i . The first column refers to individuals with high θ_i ($\theta_i = \theta$) and the second to individuals with low θ_i ($\theta_i = 1$). The first row of the figure shows the results for cooperative couples, the second row for non-cooperative couples, and the last row for singles. Line colors correspond to the job choices made by the respective households. In the left and middle columns, Equation (10) is visually depicted, highlighting how job satisfaction depends on three exogenous determinants: (i) the classification of individual i as either a high- θ_i type (primary earner in a couple) or a low- θ_i type (secondary earner in a couple), (ii) the household type in which individual i resides ($g(i)$), and (iii) the utility weight on non-pay job characteristics η_i . The right column of Figure 1 illustrates the gap in job satisfaction between otherwise identical low- θ_i and high- θ_i individuals, formally expressed as

$$y_{\theta_i=1} - y_{\theta_i=\theta} = \begin{cases} \log(\gamma) \cdot (\Omega_{\theta_i=1} - \Omega_{\theta_i=\theta}), & \eta_i < \underline{\eta}_{g(i)} \\ -\log(\gamma) + 4\eta_i, & \underline{\eta}_{g(i)} < \eta_i < \bar{\eta}_{g(i)} \\ -\log(\gamma) \cdot (\Omega_{\theta_i=1} - \Omega_{\theta_i=\theta}), & \eta_i > \bar{\eta}_{g(i)} \end{cases} \quad (11)$$

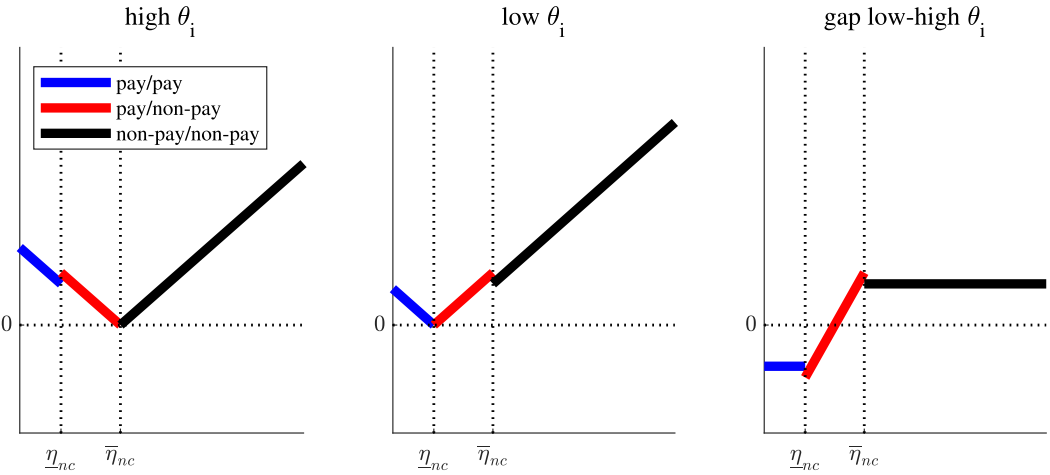
We begin with singles, where the parameter θ has no impact on either job choices ($\underline{\eta}_s = \bar{\eta}_s = \log(\gamma/2)$) or the contribution to household earnings ($\Omega = 1$). Consequently, there exists no job satisfaction gap between workers differing in θ_i among singles.

Among couples, such gaps do exist. In couples where both partners work in good productivity matches $\eta_i < \underline{\eta}_{g(i)}$, they experience equal dissatisfaction due to the mismatch of their jobs with their non-pay preferences.

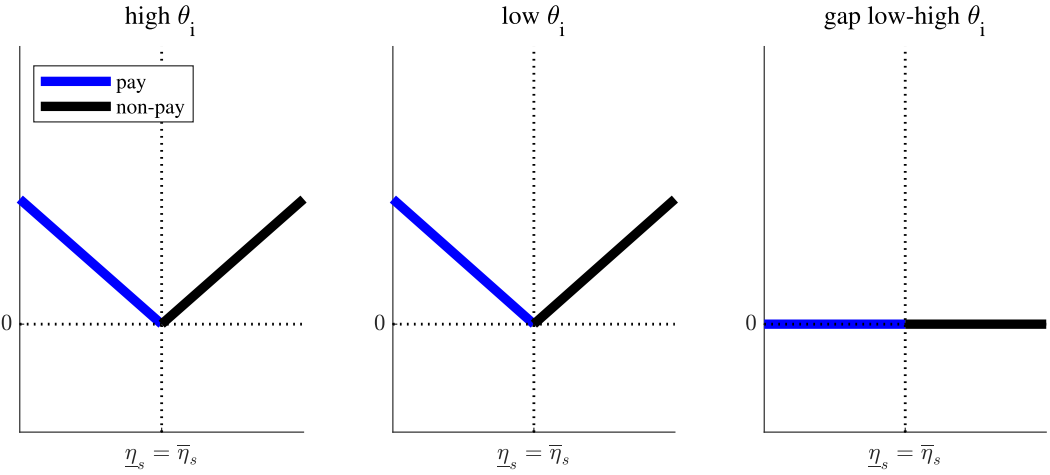
FIGURE 1 Job satisfaction in different types of households. Figure displays job satisfaction and the job satisfaction gap in (a) cooperative couples, (b) non-cooperative couples, and (c) single households across varying levels of the valuation of non-pay characteristics η_i . The first column represents job satisfaction for individuals with high θ_i values (primary earners in a couple); the second column illustrates job satisfaction for individuals with low θ_i values (secondary earners in a couple); the third column shows the job satisfaction gap between individuals with high and low θ_i values. Line colors correspond to the job choices made by the respective households. In couples, the job choice for the primary earner is given first, that is, “pay/non-pay” indicates couples where the primary earner is in a high-pay match, and the secondary earner is in a good non-pay match.



(a) Cooperative couples



(b) Non-cooperative couples



(c) Singles

However, they appreciate the relative pay advantage of their chosen jobs compared to alternatives. The primary earner, with a higher earnings contribution Ω , values this advantage more, resulting in higher job satisfaction for primary earners. Formally, $y_{\theta_i=1} < y_{\theta_i=\theta}$ holds because $\Omega_{\theta_i=1} < \Omega_{\theta_i=\theta}$.

In couples where both partners choose favorable non-pay matches ($\eta_i > \bar{\eta}_{g(i)}$), the determinants of job satisfaction are reversed. Both partners equally appreciate the non-pay characteristics of their jobs but are dissatisfied with the lower pay relative to the alternative jobs. Once again, pay is valued more by primary earners with larger earnings contributions Ω . Since, in this group, pay is a disadvantage of the chosen job relative to the alternative, secondary earners are more satisfied with their jobs. Formally, $y_{\theta_i=1} > y_{\theta_i=\theta}$ holds because $\Omega_{\theta_i=1} < \Omega_{\theta_i=\theta}$.

Finally, in couples where the secondary earner opts for a good non-pay match and the primary earner chooses a favorable productivity match ($\eta_{-g(i)} < \eta_i < \bar{\eta}_{g(i)}$), their relative levels of job satisfaction hinge on their valuation of non-pay job characteristics. As this valuation increases, secondary earners become more satisfied, while primary earners become less satisfied with their respective jobs. In couples that value non-pay characteristics sufficiently strongly, this results in an expanding job satisfaction gap between secondary and primary earners, with the former being more satisfied. Among cooperative couples, this combination of jobs is chosen by households with greater valuations of non-pay characteristics compared to non-cooperative couples ($\eta_c > \eta_{nc}$ and $\bar{\eta}_c > \bar{\eta}_{nc}$). Consequently, the job satisfaction gap arising from choosing a good productivity match for the primary earner and a good non-pay match for the secondary earner is larger among cooperative couples than among non-cooperative couples.

Integrating over job satisfaction as given by Equation (10), accounting for group-specific threshold values η_{-g} and $\bar{\eta}_g$, the average gap in job satisfaction between low- θ_i and high- θ_i workers in a given household type $g = c, nc, s$ can be calculated as

$$\Delta_{\theta}^g(y_i) = \log \gamma \cdot \left[\Delta_{\theta}^g(\% \bar{\Omega}_i) \cdot \left(1 - F(\bar{\eta}_g) - F(\eta_{-g}) \right) + F(\bar{\eta}_g) - F(\eta_{-g}) \right] + 4 \cdot \int_{\eta_{-g}}^{\bar{\eta}_g} \eta df(\eta), \quad (12)$$

where superscript g denotes the operator Δ_{θ} being applied only to members of group g , and $\tilde{\Omega}$ represents a worker's contribution to household income in the case where the partner (if present) makes the same job choice (it is 1 for singles and $(\theta_i - \theta_{-i}) / (\theta_i + \theta_{-i})$ for workers in couples).

In Equation (12), the first part of the sum represents the gap in workers' satisfaction with their pay in their current jobs. This gap is influenced by the frequency of households making different choice combinations, represented by the cumulative densities of η at respective threshold values. Additionally, it is affected by the strength of the impact of pay on job satisfaction, determined by earnings contributions $\tilde{\Omega}$. The second part, involving the integral, represents the gap in workers' satisfaction with non-pay aspects of their jobs. It is driven by the couple households that make distinct job choices for primary and secondary earners, reflected by the red lines in Figure 1.

Applying the respective values for earnings contributions $\tilde{\Omega}$ and thresholds η_{-g} and $\bar{\eta}_g$, Equation (12) can be used to determine and compare job satisfaction gaps in the different types of households. The following proposition summarizes the results of this exercise.

Proposition 1. There exists a threshold value \underline{F} such that, if (but not only)

$$1 - F(\eta) > \underline{F}, \quad (13)$$

i.e., if there is a sufficient mass of cooperative households where at least one member works in a good non-pay match, the following statements are true:

- i. In both non-cooperative and cooperative couples, secondary earners exhibit higher job satisfaction on average compared to primary earners, $\Delta_{\theta}^c(y_i) > 0$, $\Delta_{\theta}^{nc}(y_i) > 0$.
- ii. The job satisfaction gap between secondary and primary earners is more pronounced in cooperative couples than in non-cooperative couples, $\Delta_{\theta}^c(y_i) > \Delta_{\theta}^{nc}(y_i) > 0$.
- iii. No job satisfaction gap exists between singles with different unobservable wage components, $\Delta_{\theta}^s(y_i) = 0$.

Proof: See the Web Appendix, Section A.3.

It is important to note that we can refine the model's alignment with the empirical analysis through a sample matching exercise, which we will perform later in our empirical analysis. In particular, for every worker 1 of the high- θ_i type, select as match a worker 2 of the low- θ_i type for whom $\alpha_2 = \alpha_1 \cdot \theta \cdot \gamma_{1j(1)} / \gamma_{2j(2)}$. This is tantamount to dropping the high- θ_i workers with the highest skill levels α and the low- θ_i workers with the lowest α values from the sample, ensuring a common support for the distribution of individual worker's characteristics. Since decisions are independent of α , Proposition 1 applies to the matched samples as well.

2.4.1 | Incorporating gender

We now incorporate gender into our analysis. Let men and women differ in only one dimension: the prevalence of men as the primary earners in couples. In our model, this distinction arises from assuming gender differences in the frequency of the different realizations for the unobservable wage component, θ_i . Specifically, we assume that the high realization, $\theta_i = \theta$, is more frequent among men than women. It is important to clarify that this assumption is not tantamount to assuming systematically lower earnings potentials of women. Within-couple relative earnings potentials are as much a result of the marriage market as of the distribution of individual earnings potentials. Empirically, Almås et al. (2020) provide evidence for hypergamy – the tendency of women to marry men with higher earnings potentials. The study also shows that women with the highest potentials remain unmarried at disproportionally high rates. Hypergamy contributes to the prevalence of male primary earners, even in the absence of gender differences in the distributions of earnings potentials.

While the model features endogenous amplification of gender differences in pay, see (8), we use it to derive testable implications regarding job satisfaction by gender. Specifically, from Proposition 1, we can derive the following hypotheses concerning a comparison between the average job satisfaction of women and men under the conditions specified in Equation (13):

- H1.** *On average, women exhibit higher job satisfaction.*
- H2.** *When considering single individuals, the job satisfaction gap between women and men vanishes, while it intensifies in a sample restricted to married individuals.*
- H3.** *Restricting the samples of married individuals in a way that increases the share of individuals living in non-cooperative couples weakens the job satisfaction gap between women and men while the opposite restriction strengthens it.*
- H4.** *Restricting the samples in a way that weakens the initial distribution of primary earner status across groups weakens the job satisfaction gap between women and men while the opposite restriction strengthens it.*

In the subsequent section, we will empirically evaluate these four hypotheses using data from Canada.

3 | DATA AND EMPIRICAL APPROACH

In this section, we explain the data used and outline the empirical strategy applied to test the hypotheses we have derived from our theoretical analysis.

3.1 | Data

We utilize data from the 2016 Canadian General Social Survey (GSS) conducted by Statistics Canada during GSS cycle 30 (Statistics Canada, 2019). This particular GSS cycle stands out due to its inclusion of new modules focused on job satisfaction and job quality attributes. Our primary dependent variable is job satisfaction, derived from responses to the question, "In general, how satisfied are you with your current job?" Next to this question about overall satisfaction with one's job, the survey includes inquiries about workers' contentment with specific aspects of their jobs, which we consider in additional estimations. Next to the usual socio-demographic information (such as age, education, and health status), the GSS also provides essential control variables for our job satisfaction analysis, notably information about non-pay job characteristics, a feature not commonly found in household surveys.

The 2016 GSS offers another valuable feature for our analysis—access to personal and family income data obtained through linkages with survey respondents' tax records. This linked income data source is known for its superior quality compared to income data collected directly through survey questions (Statistics Canada, 2019). The linked data includes the personal income of the respondent and, importantly for our analysis, the income of the respondent's family members. This is an improvement introduced in the 2016 GSS because past waves captured only income of the household, which may include non-family members living in the same household with whom the respondent does not pool income.

3.2 | Empirical model

Given that the responses to the job satisfaction question are presented in five ordinal Likert scale categories—"very dissatisfied," "dissatisfied," "neither satisfied nor dissatisfied," "satisfied," and "very satisfied"—our empirical analysis employs ordered probit regressions. To streamline our analysis, we aggregate the job satisfaction responses into three main categories: "very dissatisfied/dissatisfied," "neither satisfied nor dissatisfied," and "satisfied/very satisfied."¹²

The empirical model postulates the existence of an underlying latent variable, denoted as y_i , which quantifies workers' job satisfaction, defined in our theoretical model as the improvement relative to the relevant alternative, namely, the next best job. Respondents' answers to the job satisfaction question depend on whether their job satisfaction falls above or below certain thresholds μ ,

$$JS_i = \begin{cases} \text{(very) dissatisfied} & y_i < \mu_1 \\ \text{neither/nor} & \mu_1 < y_i < \mu_2 \\ \text{(very) satisfied} & y_i > \mu_2 \end{cases} \quad (14)$$

¹²This approach combats issues of having too few observations for certain categories in the original Likert scale responses and is the strategy commonly applied in the literature (see, e.g., Hamermesh & Biddle, 1994).

The latent variable y_i , in turn, follows

$$y_i = \beta_0 + \beta_1 \text{female}_i + X_i' \beta_X + \beta_2 \lambda_i + \epsilon_i, \quad (15)$$

where *female* is a gender dummy, taking on a value of 1 if the individual is a woman. The vector X_i contains a set of control variables, and λ_i is the inverse Mills ratio from a Heckman (1979) selection correction model accounting for potential effects of selection into (dependent) employment.¹³ The parameters β_0 , β_1 , and β_2 as well as the vector β_X are to be estimated and ϵ_i is an error term.

The control variables represented in vector X include personal income, characteristics of the job (weekly working hours, overtime hours, occupation, sector, firm size, work benefits, work autonomy, teamwork environment, and location), and individual characteristics (age, education, health status, and other socio-demographic variables). Further details on the control variables and their measurement can be found in Table A.1 in the Web Appendix, Section B.

We employ maximum likelihood techniques to estimate the model specified in Equations (14) and (15). In all estimations, we use survey sampling weights. The estimation process yields various parameters, with our primary interest centered on β_1 . This parameter quantifies the gender gap in average underlying job satisfaction, controlling for the influence of the specified controls. To provide a meaningful interpretation of β_1 , we express it as the differential probability between women and men of reporting satisfaction or very high satisfaction with their jobs.

In an additional evaluation, we also use the information about the individual's contentment with specific aspects of their job, specifically, the perception of doing useful work, the sense of accomplishment with work, feeling motivated to perform by the organization of work within the firm, and having a sense of belonging in the firm. Through the lens of our model, these aspects can be interpreted as components of the non-pay job utility, e . Our model has gender-specific implications for these non-pay job utilities: secondary earners, predominantly women, are more likely to work in jobs that align well with their non-pay preferences, leading to higher non-pay utility e for this group. To test this prediction, we construct an aggregated index of non-pay job utility as the first principal component of the aforementioned variables. This aggregated index of non-pay job utility serves as the dependent variable in OLS regressions, with the same right-hand-side variables as in Equation (15).

3.3 | Sample and subsamples

We consider employees between 25 and 65 years of age, resulting in a sample of 7362 individuals for whom we observe all relevant variables. In this sample, 52% of individuals are female, while 48% are male.

Subsequently, we created a matched sample by restricting our analysis to women and men with common support of the gender-specific distributions of covariates (similar to, e.g., Perugini and Vladislavjević, 2019), with differences in means addressed using control variables. Specifically, we apply the nearest-neighbor matching technique (Abadie et al., 2004), which matches men and women with comparable propensity scores conditional on observable covariates, for which we use occupation and industry group, income group, age group, educational level, job permanence, and working hours. After applying sample matching, 5555 observations (constituting 75% of the original sample) have matches of the opposite sex and are included in the further analysis.¹⁴ The final matched sample comprises 55.6% women and 44.4% men.

¹³Selection correction is potentially necessary as respondents report job satisfaction exclusively in (dependent) employment. The selection variables in our correction model include the presence of parents or in-laws, visible minority status, religious identity, family income, detailed marital status variables (widowed, separated, divorced, single, married), education level of the spouse, and the presence of young children. In accordance with previous literature (e.g., Clark, 1997), we also interact the selection variables with gender.

¹⁴At 25% unmatched observations, our matching result are not very different from Perugini and Vladislavjević (2019). Of the unmatched observations, most could not be matched by occupation.

TABLE 1 Main sample descriptives (matched sample).

	Female		Male	
	Mean	SD	Mean	SD
Job satisfaction				
Satisfied or very satisfied with job	0.872	0.334	0.831	0.375
Neither satisfied nor dissatisfied	0.073	0.260	0.100	0.300
Dissatisfied or very dissatisfied	0.055	0.227	0.069	0.253
Annual income				
<Can\$ 50,000	0.534	0.499	0.419	0.493
Can\$ 50,000–74,999	0.254	0.435	0.251	0.433
Can\$ 75,000–99,999	0.141	0.348	0.155	0.362
≥Can\$100,000	0.070	0.256	0.175	0.380
Further job characteristics				
Work benefits index	1.80	2.78	1.85	2.79
Work autonomy index	1.98	0.86	2.06	0.85
Work team environment index	2.55	1.29	2.61	1.31
Career advancement opportunities	0.50	0.50	0.54	0.50
Risk of job loss (1 = Yes)	0.07	0.26	0.10	0.30
Sample split indicators				
Married or common-law partnership (clp)	0.691	0.462	0.717	0.450
Married or clp with children	0.456	0.498	0.471	0.499
Traditional earner roles	0.453	0.498	0.478	0.500
N	3087		2468	

Three of the hypotheses derived from our theoretical model involve sample splits. For the first two of these splits, we use information readily available in the GSS: marital status and presence of children in the household. When splitting the sample by marital status, we include common-law partnerships in the married sample.¹⁵

We further split the sample based on men's and women's relative earnings within their respective households. While the GSS provides data on family income linked to respondents' tax returns, we lack information on the exact earnings of the partner. To create subgroups that differ in the respective frequencies of households where women are secondary earners, we proceed as follows. We create a first group that includes male respondents whose income is more than 50% of family income and female respondents whose income is <50% of family income. We label this group workers living in households with "traditional earner roles." Reversely, we collect male respondents whose income is <50% of family income and female respondents whose income is more than 50% of family income in a group we label workers living in households with "non-traditional earner roles." It is important to note that this distinction is strongly, yet not perfectly, related to respondents' roles as primary and secondary earners. This discrepancy arises because income includes both earned and unearned income, while earner roles are based on relative earnings alone. As a consequence, we very likely assign some male primary earners to the non-traditional group and some female primary earners to the traditional group, which leads to a bias in our results compared to the groups composed of genuine male and female primary earners. Due to this issue, we use alternative indicators for household earner roles.

¹⁵Similar to previous studies, the analysis does not look at within-couple differences in job satisfaction as the job satisfaction responses are for one spouse. The gender comparison is across the sample of married individuals.

TABLE 2 The gender gap in job satisfaction.

	Full sample			
	(1)	(2)	(3)	(4)
Female	0.051*** (0.013)	0.051*** (0.013)	0.053*** (0.013)	0.051*** (0.013)
Industry controls		✓		✓
Occupation controls			✓	✓
Job and individual characteristics	✓	✓	✓	✓
N	5555	5555	5555	5555

Note: Conditional gender gap in the probability of being satisfied or very satisfied with one's job. Marginal effects from ordered probit. Dependent variable = 1 if dissatisfied or very dissatisfied with job, 2 if neutral, 3 if satisfied or very satisfied. Matched sample based on nearest-neighbor matching of male and female workers by income, work hours, contract type, firm size, education, industry, and occupation groups. All specifications include inverse Mills ratio from the sample selection correction model. Standard errors, estimated using bootstrap weights provided by Statistics Canada, are shown in parentheses. *** $p < 0.005$, ** $p < 0.01$, * $p < 0.05$. See Table A.2 in the Web Appendix for additional model output.

3.4 | Sample descriptives

Table 1 shows selected sample descriptives for the matched sample. The table shows that women are more likely to report being satisfied with a job compared to men. In contrast, men are more likely to be neutral or dissatisfied. This observation is striking given that men have higher incomes (i.e., more probability mass in the higher income categories) and more often report having jobs with characteristics such as work autonomy or team environments that are generally perceived as likable. Men also receive more benefits and have greater career advancement opportunities, while being more often at the risk of losing their jobs.¹⁶ In summary, the descriptive findings support the notion of women reporting higher job satisfaction even though their jobs do not appear superior to those of men in various aspects.

The bottom part of Table 1 shows the percentages of workers in the various subsamples that we will create for our sample splits. Approximately 70% of workers in our sample are married, and about two-thirds of those that are married have children. For every married worker in a non-traditional earner role, there are about two in a traditional earner role. Given the imperfect nature of using the latter indicator as a proxy for the primary earner's gender in a household, it is beneficial to compare the occurrence frequency of various roles in our data with the frequency of earner roles based on gender in the Canadian Income Survey (CIS) (Income Statistics Division, 2017). The CIS provides detailed earnings information for household members but does not include job satisfaction data. In the 2016 CIS, 72% of male married workers had earnings higher than their wives, while 63% of married female workers earned less than their husband. On average, these numbers are comparable to workers in traditional earner households in our dataset.

4 | EMPIRICAL RESULTS

Table 2 shows the gender gap in job satisfaction (conditional on controls) from estimating the empirical job satisfaction model (14), (15) on our full sample. Columns (1) to (4) exhibit variations in the selection of control

¹⁶Note that, in our theoretical model, the notion of a "better" job regarding non-pay characteristics does not exist. Instead, the model is about aligning workers' preferences to the job's non-pay characteristics. In our empirical analysis, we control for these non-pay job dimensions to ensure consistency with the model's underlying assumption of men and women having the same job characteristics on average.

TABLE 3 Marital status and the gender gap in job satisfaction.

	Single workers				Married workers			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Female	0.017 (0.026)	0.019 (0.025)	0.016 (0.027)	0.014 (0.026)	0.063*** (0.016)	0.061*** (0.016)	0.067*** (0.016)	0.065*** (0.016)
Industry controls		✓		✓		✓		✓
Occupation controls			✓	✓			✓	✓
Job and individual characteristics	✓	✓	✓	✓	✓	✓	✓	✓
N	1984	1984	1984	1984	3571	3571	3571	3571

Note: Conditional gender gap in the probability of being satisfied or very satisfied with one's job. Marginal effects from ordered probit. Dependent variable = 1 if dissatisfied or very dissatisfied with job, 2 if neutral, 3 if satisfied or very satisfied. The married sample includes married individuals and common-law partners. The single sample is all else. Matched sample based on nearest-neighbor matching of male and female workers by income, work hours, contract type, firm size, education, industry, and occupation groups. All specifications include inverse Mills ratio from the sample selection correction model. Standard errors, estimated using bootstrap weights provided by Statistics Canada, are shown in parentheses. *** $p < 0.005$, ** $p < 0.01$, * $p < 0.05$. See Table A.3 in the Web Appendix for additional model output.

variables used in the estimation, with Column (4) representing our preferred specification that includes the full set of control variables.¹⁷ The table shows the estimates for the additional probability with which women report the highest job satisfaction category (satisfied or very satisfied), conditional on the controls. Standard errors, estimated using bootstrap weights provided by Statistics Canada, are reported in parentheses, and stars indicate significance at the 5%, 1%, and 0.5% levels, respectively. As can be seen, the probability of a woman being satisfied or very satisfied with her job is approximately five percentage points higher compared to an observationally equivalent man with an observationally equivalent job.

In our theoretical model, secondary earners in couples are more likely to exhibit greater job satisfaction than primary earners. Consequently, the model predicts that groups of individuals with a higher proportion of secondary earners will have higher job satisfaction compared to groups dominated by primary earners (H1). The empirical finding of higher job satisfaction among women aligns with this hypothesis when considering that, within our sample, most women are secondary earners in dual-earner households.

4.1 | Marital status

Through the lens of our model, the gender gap in job satisfaction is the result of job choices in couple households while there is no gender gap in the job satisfaction of single workers (H2). To assess the validity of this model prediction, we perform a sample division into single workers and married workers. The outcomes of this analysis are summarized in Table 3, with Columns (1) to (4) presenting the conditional gender gap in job satisfaction for single workers, while Columns (5) to (8) illustrate the results for married workers.

¹⁷Given that the literature identifies the prevalence of gender differences in industry/occupational choice, an empirical consideration is to explore whether the inclusion of industry and occupational controls could be masking the main effects being estimated for the gender analysis. We do this by estimating alternative models which omit industry and/or occupational controls. However, it is important to bear in mind that the exclusion of these controls could result in model misspecification. Therefore, the preferred model specification would incorporate all relevant control variables available in the data.

TABLE 4 Children and the gender gap in job satisfaction.

	Married without children				Married with children			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Female	0.033 (0.022)	0.035 (0.022)	0.039 (0.023)	0.039 (0.023)	0.088*** (0.022)	0.085*** (0.022)	0.093*** (0.023)	0.090*** (0.023)
Industry controls		✓		✓		✓		✓
Occupation controls			✓	✓			✓	✓
Job and individual characteristics	✓	✓	✓	✓	✓	✓	✓	✓
N	1522	1522	1522	1522	2049	2049	2049	2049

Note: Conditional gender gap in the probability of being satisfied or very satisfied with one's job. Marginal effects from ordered probit. Dependent variable = 1 if dissatisfied or very dissatisfied with job, 2 if neutral, 3 if satisfied or very satisfied. Workers with children sample are individuals with children in the household. No children sample is all else. Matched sample based on nearest-neighbor matching of male and female workers by income, work hours, firm size, education, industry, and occupation groups. All specifications include inverse Mills ratio from the sample selection correction model. Standard errors, estimated using bootstrap weights provided by Statistics Canada, are shown in parentheses. *** $p < 0.005$, ** $p < 0.01$, * $p < 0.05$. See Table A.4 in the web Appendix for additional model output.

In columns (1) to (4), the estimates, while positive, are small and statistically insignificant. In essence, this suggests that, among single workers, there is no discernible disparity in job satisfaction between men and women, in line with our theoretical model's predictions. In contrast, there is evidence for significant gender differences in job satisfaction among married workers, which is also consistent with our model's predictions. Looking at our preferred specification shown in Column 8, we can see that, holding constant the characteristics of workers and jobs, the likelihood of being satisfied or very satisfied with one's job is approximately 6.5 percentage points higher for women than for men. Furthermore, this pattern persists across alternative model specifications, indicating that the probability of experiencing job satisfaction, or even high job satisfaction, is consistently over six percentage points greater among married women than their male counterparts.

4.2 | Children

According to our theoretical model, the gender gap in job satisfaction should be stronger for couples who engage in cooperative joint decision-making, compared to couples that, while pooling their resources, maximize their individual utility functions; in other words, behave non-cooperatively (H3). We test these model predictions by splitting the sample of married workers into those without children and those with children living in the household. The presence of children serves as a proxy for the benefits of cooperation within the household (parameter Ψ in our theoretical model is supposed to be higher for parents reflecting their mutual interest in their children's well-being). The literature generally considers expenditures for children as a family public good, which is provided inefficiently in households where members behave non-cooperatively (see, e.g., Cherchye et al. (2022) and Obara and Ogawa (2023)), implying that cooperation gains are substantial in couples with children. In other words, we expect, through the lens of our model, a much more pronounced gender gap in job satisfaction among married couples with children than among married couples without children.

Table 4 substantiates these model predictions through our estimation results. A direct comparison of our preferred econometric specification, as presented in Columns (4) and (8), reveals the following insights: For workers in couples without children, being female is associated with a 4 percentage point higher likelihood of job satisfaction. In contrast, for workers in couples with children, being female corresponds to a substantially stronger 9

TABLE 5 Household earner roles and the gender gap in job satisfaction.

	Married, non-traditional earners				Married, traditional earners			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Female	0.052 (0.031)	0.049 (0.032)	0.050 (0.031)	0.049 (0.032)	0.058*** (0.020)	0.054** (0.020)	0.055** (0.020)	0.054** (0.020)
Industry controls		✓		✓		✓		✓
Occupation controls			✓	✓			✓	✓
Job and individual characteristics	✓	✓	✓	✓	✓	✓	✓	✓
N	1150	1150	1150	1150	2140	2140	2140	2140

Note: Conditional gender gap in the probability of being satisfied or very satisfied with one's job. Marginal effects from ordered probit. Dependent variable = 1 if dissatisfied or very dissatisfied with job, 2 if neutral, 3 if satisfied or very satisfied. Non-traditional earner sample includes women (men) with greater than (less than) 50% share of household income. Traditional earners are whereby the husband earns a higher share of household income. Non-traditional earners are whereby the wife earns a higher share of household income. Matched sample based on nearest-neighbor matching of male and female workers by income, work hours, contract type, firm size, education, industry, and occupation groups. All specifications include inverse Mills ratio from the sample selection correction model. Standard errors, estimated using bootstrap weights provided by Statistics Canada, are shown in parentheses. *** $p < 0.005$, ** $p < 0.01$, * $p < 0.05$. See Table A.5 in the Web Appendix for additional model output.

percentage point increase in the probability of job satisfaction. Furthermore, among individuals in couples without children, not only do we observe a smaller gender gap, but it is also less significant statistically. Both quantitatively as well as with regard to statistical significance, comparing couples without children to parent couples yields similar insights across the various model specifications.

4.3 | Earner roles

Viewed through the lens of our theoretical model, we expect a higher level of job satisfaction for the secondary earner within a household. This model prediction naturally translates into a gender gap in job satisfaction, primarily because, on average, women assume the role of the secondary earner in couples. However, we do not expect women to be significantly more satisfied with their jobs than men when looking at couples in which women serve as the primary earners within their households. To bring these predictions to the data, we partition our sample of married individuals into two distinct categories: couples with traditional earner roles, where most men are primary earners and most women are secondary earners, and those in which women contribute a larger share of household income, non-traditional earner couples. Although this is an imperfect test of our model's predictions given the imperfect relation between earner status and household type (see Section 3), we view the distinction between non-traditional and traditional earner couples as helpful in shedding light on the gender gap in job satisfaction among primary earners and among secondary earners. Under the model prediction, we should expect the gender gap to be substantially clearer in the traditional earner couples. The corresponding estimation results are presented in Table 5.

As we can see, the estimation results tend to support our model predictions. Within non-traditional earner couples, there is no discernible gender difference in job satisfaction, as demonstrated by the weak levels of significance of the female coefficients in Columns (1) to (4). In contrast, among traditional earner couples, significant gender differences in job satisfaction are evident.

However, it is worth noting that our data allows for constructing only a relatively imprecise measure of relative household income. As discussed previously, this measure is prone to overestimating (underestimating) the

TABLE 6 Alternative proxies for household earner roles.

	Division of household chores		Education differences		Education and occupation	
	Non-trad.	Trad.	Non-trad.	Trad.	Non-trad.	Trad.
Female	0.047 (0.027)	0.069*** (0.020)	0.065 (0.036)	0.074*** (0.021)	0.058 (0.050)	0.102*** (0.031)
Industry controls	✓	✓	✓	✓	✓	✓
Occupation controls	✓	✓	✓	✓	✓	✓
Job and individual characteristics	✓	✓	✓	✓	✓	✓
N	1035	2536	1226	1937	1194	1969

Note: Conditional gender gap in the probability of being satisfied or very satisfied with one's job. Marginal effects from ordered probit. Dependent variable = 1 if dissatisfied or very dissatisfied with job, 2 if neutral, 3 if satisfied or very satisfied. Matched sample based on nearest-neighbor matching of male and female workers by income, work hours, contract type, firm size, education, industry, and occupation groups. All specifications include inverse Mills ratio from the sample selection correction model. Standard errors, estimated using bootstrap weights provided by Statistics Canada, are shown in parentheses. *** $p < 0.005$, ** $p < 0.01$, * $p < 0.05$. See Table A.6 in the Web Appendix for additional model output.

prevalence of non-traditional (traditional) earner couples. This implication suggests that our estimate of the gender gap in job satisfaction within our non-traditional earner sample is likely upward-biased. At the same time, it is downward-biased for the traditional earner sample.

Given the imperfect nature of the income information used to differentiate between households with traditional earner roles and those with non-traditional roles, as previously discussed, we conduct various checks by utilizing alternative proxies for household earner roles. The corresponding results are presented in Table 6.

First, we use information on the division of household chores as reported in the GSS. Specifically, the GSS asks for the participation of both spouses in six categories of household chores.¹⁸ We classify a household as traditional if the wife is involved in more categories than the husband, and as non-traditional if the husband is engaged in at least as many categories as the wife. As shown in the first two columns of Table 6, the conditional gender gap in job satisfaction is more pronounced and statistically significant among members of traditional households, aligning with our hypotheses.

Subsequently, we use relative education as a proxy for household earner roles, considering education as a key determinant of individuals' earnings potential. We classify a household as traditional if the husband possesses a superior or equivalent education to the wife. Conversely, households where the wife holds a higher education level are designated as non-traditional. In line with our hypotheses, we observe the job satisfaction gap between women and men to be larger and more significant in traditional households compared to non-traditional; see the third and fourth columns of Table 6.

For an alternative proxy reflecting household earner roles, we extend our consideration to occupation choices, acknowledging the gender-based selection into distinct fields of study and subsequent occupations with varying earnings profiles. Despite women's advancements in formal education, they remain underrepresented in high-paying professional occupations, such as banking or law. Leveraging the 2016 Canadian Labour Force Survey (LFS) (Statistics Canada, 2023), which employs the National Occupation Classification (NOC) akin to the GSS, we identify high-paying occupations as those with average and median weekly earnings exceeding CAN\$1000. Enhancing the education-based proxy, we now stipulate that for a household to be classified as non-traditional,

¹⁸These are meal preparation and clean-up, general housework (such as cleaning and laundry), childcare activities at home, taking kids to activities, grocery shopping, and planning/organizing of the household's social activities.

a woman must have a higher education level than her husband and work in a high-paying occupation. A parallel criterion is applied to men.

The last two columns in [Table 6](#) demonstrate that this proxy based on education and occupation yields the most distinct pattern in the job satisfaction gap between men and women: it is nearly twice as large and substantially more significant in traditional households compared to non-traditional households.

When interpreted literally, our model posits that the coefficient on gender should reverse its sign when transitioning from a sample of households with male primary earners to one with female primary earners. Given that the model is gender-neutral and that the key factor is the individual's earner role within the household, we would expect, all else being equal, that households with female primary earners would exhibit an opposite gender gap in job satisfaction compared to those with male primary earners. However, while the coefficients on gender do diminish in magnitude and lose statistical significance, the expected sign reversal is not observed. A few thoughts are in order to put this finding into perspective.

First, the insignificant gender coefficient implies that there is a substantial probability mass within the range of negative gender job satisfaction gaps in non-traditional households, which include a higher proportion of female primary earners. Second, our model does not predict that all secondary earners are more satisfied with their jobs than their partners. In fact, secondary earners in low- η households are expected to be less satisfied than their partners, as illustrated in [Figure 1](#). It is possible that traditional and non-traditional households differ in the distribution of η , with non-traditional households more often placing greater emphasis on the pay dimension of a job. This could explain the absence of opposite signs in [Tables 5](#) and [6](#). Third, our model intentionally abstracts from gender, except for its correlation with earner status. While this simplification is meant to keep the model straightforward and to clearly outline our hypothesis, we do not dismiss gender-based explanations, such as the preference hypothesis, as entirely without merit. Incorporating additional gender differences – such as a stronger preference for non-pay job attributes among women – would weaken the model predictions: the predicted coefficient on the female for the non-traditional group would reflect both the negative earner role effect and the positive preference effect. Consequently, the sign of this coefficient would be ambiguous, but it would likely be smaller than in the traditional group, where both effects are positive. Fourth, our model also abstracts from the specific characteristics of households with female (potential) primary earners, as documented by Bertrand et al. (2015), which are related to gender identity norms. It is, therefore, possible that our model less accurately describes the behavior of the non-traditional households identified in [Tables 5](#) and [6](#) compared to households with a more traditional division of earner roles.

4.4 | Non-pay job utility index

In a final exercise, we broaden our analysis by examining information on individuals' perspectives on the sense of meaningful work, accomplishment, motivation, and sense of belonging they receive from their job. We construct a measure of non-pay job utility as the first principal component of these four variables to estimate a job satisfaction index constructed from these alternative measures. The results of linear regressions with this index as the dependent variable are shown in [Table 7](#). To streamline the presentation, we concentrate on our preferred specification, which incorporates all control variables.

The results derived from the non-pay job utility index as the dependent variable exhibit a broad alignment with our initial findings. Specifically, we observe that there are no discernible gender differences in the index among single workers (refer to the "Single" column), while there are such differences among married workers (refer to the "Married" column).

Among married workers, we find evidence of gender differences in non-pay job utility for both workers with and without children. As in the main analysis, the female coefficient is, however, larger and more significant among workers with children. The analysis of household earner roles is also consistent with our initial findings. We find

TABLE 7 Gender gap in non-pay job utility index.

	Marital status		Children		Earner roles	
	Single	Married	Married without children	Married with children	Non-trad.	Trad.
Female	0.071 (0.100)	0.261*** (0.068)	0.241* (0.095)	0.298*** (0.092)	0.176 (0.123)	0.236** (0.092)
Industry controls	✓	✓	✓	✓	✓	✓
Occupation controls	✓	✓	✓	✓	✓	✓
Job and individual characteristics	✓	✓	✓	✓	✓	✓
N	1974	3562	1519	2043	1140	2140

Note: Coefficients from OLS estimation. Dependent variable is non-pay job utility index, constructed from four workers' reported contentment with their job in four non-pay dimensions (belonging, useful work, motivation, and work accomplishment) using the first component of a principal component analysis. Matched sample based on nearest-neighbor matching of male and female workers by income, work hours, contract type, firm size, education, industry, and occupation groups. The married sample includes married individuals and common-law partners. The single sample is all else. Workers with children sample are individuals with children in the household. No children sample is all else. Traditional earners are whereby the husband earns a higher share of household income. Non-traditional earners are whereby the wife earns a higher share of household income. Standard errors, estimated using bootstrap weights provided by Statistics Canada, are shown in parentheses. *** $p < 0.005$, ** $p < 0.01$, * $p < 0.05$. See Table A.7 in the Web Appendix for additional model output.

no significant gender differences in non-pay job utility among individuals from non-traditional earner households. Among traditional earners, we find that being female is associated with a significant and larger increase in the index.

5 | CONCLUSION

This paper has provided a novel theoretical explanation for the gender gap in job satisfaction that we develop in a model of family household decision-making. Our model deviates from standard explanations as it does not rely on gender differences in preferences or expectations. Instead, it highlights the role of family households in making job choices based on pay and non-pay characteristics. Our model features within-household heterogeneity in relative earnings potentials, identifying primary and secondary earners. We show that primary earners prioritize pay in their job choices, while secondary earners focus on non-pay job attributes. Consequently, secondary earners align their job choices more closely with their preferences, resulting in higher job satisfaction despite lower wages. In contrast, primary earners prioritize pay, leading to higher earnings but poorer alignment with their preferred non-pay characteristics. Since family members share income but not job utility, secondary earners experience higher job satisfaction. At the same time, this mechanism amplifies earnings differences between primary and secondary earners.

Given that most women are secondary earners, our model predicts that women tend to report higher job satisfaction than men, even when earning less. This explanation hinges on the correlation between gender and earner status within families. As a result, we do not expect to observe a gender gap in single households or anticipate a substantial gender gap when women are the primary earners in households. The model's mechanism is particularly pronounced when families make cooperative decisions, leading to a less substantial gender gap in job satisfaction in non-cooperative households. Empirical testing of these model predictions using Canadian household data supports our explanation.

Our study provides a fresh perspective on the enduring gender gap in job satisfaction, aligning with the family view of gender disparities in the labor market that emphasizes the role of household decision-making in explaining

labor market outcomes. This literature argues that gender disparities in the labor market cannot be solely attributed to differences in gender-based preferences, expectations, or societal norms. Our paper extends a similar argument to the gender gap in job satisfaction, a phenomenon conventionally attributed to gender differences in expectations and preferences, which are not considered in our model.

It is worth emphasizing that our findings do not exclude the possibility that societal norms, gender roles, stereotypes, or biases play a role in gender disparities in labor market outcomes. These elements may account for women predominantly assuming secondary earner roles within couples, which, in our model's terminology, relates to the within-household earnings heterogeneity factor θ_i . However, our model illustrates how household decisions can magnify even minor discrepancies in earnings potentials within the family. For instance, if a family perceives lower earning potential for women due to discrimination, they face incentives to prioritize pay when selecting the husband's workplace and non-pay characteristics for the wife. As demonstrated, these choices explain why women's job satisfaction exceeds men's. However, they also lead to more substantial earnings disparities within the household. Policymakers aiming to reduce gender-based earnings disparities could leverage the amplification mechanism. Implementing policy measures that enhance women's earning potential may induce families to prioritize pay more strongly in the household job choice decision for women.

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

Data S1

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