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Work Meaning and the *Flexibility Puzzle*

Abstract

We study heterogeneity in the prevalence of and preferences for workplace flexibility and work meaning. We show that, internationally, women and parents value flexibility more but do not work more flexible jobs. The gender dimension of this *flexibility puzzle* is related to differences in meaningful work, which women value higher and sort into, at a significant price corresponding to 20 to 70% less flexibility. The parental dimension is connected to preferences for meaning and flexibility diverging after childbirth. We show through counterfactuals that making meaningful jobs more flexible reduces the gender gap in total compensation by almost a quarter.

JEL-Codes: D910, J160, J310.

Keywords: work meaning, workplace flexibility, gender, inequality, choice experiment.

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1. Introduction

The roles of men and women in the labor market and in the household have converged substantially (Goldin, 2014, 2021). Yet in most developed countries wage gaps persist and women continue to provide a larger share of household work and childcare (Blau and Kahn, 2017; Lundberg and Pollak, 2007). A recent literature studies how these empirical facts relate to gender differences in the demand for workplace flexibility. The argument is that women value workplace flexibility more than men – because it facilitates the combination of market labor and household work – and pay large compensating differentials à la Rosen (1986) when sorting into more flexible jobs. Several studies confirm that women *value* working from home (Maestas et al., 2023; Mas and Pallais, 2017) and having adaptable schedules (Maestas et al., 2023; Wiswall and Zafar, 2018) more than men.[1] But there is little evidence of women *sorting* into jobs with more flexibility (Golden, 2001; Mas and Pallais, 2020).

The first aim of this paper is to document the extent of this *flexibility puzzle*. To this end, we use the Fourth Work Orientations Supplement of the *International Social Survey Programme* (ISSP), a cross-sectional survey conducted in almost forty countries. We additionally collected a dataset in the Netherlands through the *Longitudinal Internet Studies for the Social Sciences* (LISS) panel, a representative sample drawn from the population registry, to which we appended a discrete choice experiment.[2] The discrete choice experiment allows us to elicit the share of wages that men and women are willing to give up for flexible and meaningful work. We find that women valuing workplace flexibility – in the form of having the ability to work from home or to adapt their work schedules – more than men, yet working less flexible jobs, is an international phenomenon. In the Netherlands, women are willing to sacrifice between 7.3% and 9.8% of their wages for more workplace flexibility, men only 4.9% to 6.0%. Yet women are significantly *less* likely than men to either have the option to work from home (23.3% as opposed to 33.6%) or to adapt their schedules (32.8% vs. 41.1%).

The second aim of this paper is to provide an explanation for this seeming contradiction between preferences and labor market outcomes. Related work by Mas and Pallais (2020) argues that women's lower levels of workplace flexibility in the United States could be explained by jobs with more flexibility being less family friendly in other aspects, for example by requiring

[1] There is also a literature documenting women's (preferences for) shorter commuting times than men, see for example Manning (2003) and Le Barbanchon et al. (2021).

[2] See ISSP Research Group (2017) and Scherpenzeel (2018) for more information on these datasets.

excessively long and late working hours. This is an important explanation for the United States, where roughly 22.3% of workers performs long hours, but not for the Netherlands (or Western Europe more generally), where this fraction is only 4.7% (12.0%).[3] We introduce an alternative explanation for the flexibility puzzle that builds on the recent behavioral literature around *work meaning* – defined as the ability to positively impact one's community or society through work.[4]

We find that, in both samples, women have stronger preferences for *and* sort into more meaningful jobs. In the Netherlands, women value work meaning at 6.7 to 9.0% of their wages, men at just 4.5 to 4.8%. At the same time, 47.8% of women report having a highly meaningful job, as opposed to just 32.5% of men. We argue that this is an important piece of the flexibility puzzle, as meaningful jobs are characterized by significantly lower levels of workplace flexibility. In the Netherlands, only 9% of workers report the highest levels of both work meaning and flexibility, and internationally this is just 5%.

We next estimate the compensating differential – in terms of workplace flexibility – for working a highly meaningful job, and document a sizeable trade-off. The price for a highly meaningful job in terms of workplace flexibility is between 19.1 and 71.5%, depending on the sample and the dimension of flexibility. We highlight that interpersonal contact is an important mechanism that explains this negative relation. Related to an argument made by Goldin (2014), we document that more personal contact and less computer use is associated with higher levels of work meaning, while also significantly hindering workplace flexibility.

We also find that mothers value workplace flexibility more than women without children, but do not work more flexible jobs either. We provide an interrelated explanation that builds on the large literature documenting changes in mothers' labor supply after childbirth (see Felfe (2012) and Kleven et al. (2019)). We show that preferences for workplace flexibility and work meaning shift significantly after having children. In the Netherlands, we find that mothers value workplace flexibility higher (9.6-9.8% vs. 7.5-8.5%) and work meaning lower (6.7% vs. 9.0%) than women without children. Yet we again find that labor market outcomes do not reflect these differences. One important explanation is that either the preference shift or the equilibrium labor market constraint is not fully taken into account when individuals make their occupational choices.

The final step of our analysis studies the consequences of reducing the flexibility price to

[3] Where long hours are defined as in Mas and Pallais (2020) as working more than 45 hours per week.

[4] This is a narrow definition of work meaning derived from the feeling of having a pro social impact (often called *mission* or *beneficence*). Work meaning can encompass other dimensions, namely autonomy, relatedness, and competence (see e.g. Cassar and Meier (2018)). However, earlier work by Burbano et al. (2023) has shown that gender differences in preferences for the other dimensions of meaning are small.

meaningful work. We focus on how this reduction affects the gender and motherhood gaps in total compensation – the sum of workers' wages and perceived monetary values of their amenities. We construct several counterfactual scenarios that make meaningful jobs more flexible. This could reduce the gender gap in compensation by up to a quarter but has only a modest effect on the motherhood gap. These interventions are likely to be feasible to some extent, as several recent papers have highlighted the significant unrealized potential for workplace flexibility across a broad range of jobs (see Alipour et al. (2023) and von Gaudecker et al. (2023)).

The remainder of this paper is organized as follows. Section 2 presents the related literature. Section 3 introduces the datasets and discusses the sample selection. Section 4 introduces the theoretical framework and the empirical strategy. We present and discuss our results in section 5. Section 6 concludes.

2. Literature

This paper first of all relates to Mas and Pallais (2020), who study the prevalence of alternative work arrangements in the United States. They document that women are less likely to have the ability to adapt their schedules or to work from home than men (see also the related earlier results in Golden (2001)). To explain these findings, Mas and Pallais (2020) argue that jobs with more flexibility are usually less family friendly in other dimensions, for example, because they often require excessively long and late working hours, thereby deterring women. We highlight an alternative explanation for the flexibility puzzle that centers around different preferences for work meaning and a flexibility price to meaningful work.

We thus also relate to the large literature that studies trade-offs between wages and amenities using the compensating differentials model of Thaler and Rosen (1976) and Rosen (1986). The substantial number of empirical assessments of their model so far provides mixed results (see Lavetti (2023) for a recent overview).[5] On the one hand, this has motivated research into novel identification and estimation strategies – like Bell (2024) – that aim to overcome problems such as bias due to unobserved ability differences. On the other hand, competing frameworks have been introduced in, for example, Hwang et al. (1998), Lang and Majumdar (2004), and Bonhomme and Jolivet (2009). Their search models generate equilibrium wage dispersion that does not necessarily reflect compensating differentials, even when workers and firms differ in

[5] See for example the early work by Brown (1980), Parent (1999), and Viscusi and Aldy (2003).

their preferences for job amenities. A recent contribution by Lavetti and Schmutte (2018) finds some common ground, and highlights that the relation between amenities and wages implied by Rosen (1986)'s compensating differential model can be identified under imperfect competition. We argue that a substantial compensating differential – with the price for a more meaningful job being paid in terms of workplace flexibility – is an important piece of the flexibility puzzle, and we highlight the importance of jointly considering the distribution of wages and several amenities.

Another recent literature has shifted away from estimating equilibrium market prices of amenities, and focuses instead on worker-side preferences. Several recent applications use discrete choice experiments to study preferences for different dimensions of workplace flexibility. For example, Mas and Pallais (2017) elicit the willingness to pay for flexible scheduling, positions that give employers discretion over their employees' schedules, and working from home. They find that the average worker is willing to sacrifice between 8% (for the option to work from home) and 20% (to avoid employer discretion over schedules) of their wages for more workplace flexibility. They also find that women with children are willing to sacrifice a higher fractions of their wages than men. Another example is Wiswall and Zafar (2018), who define a flexible job as one that offers workers the opportunity to switch between part-time and full-time employment. They find that, on average, workers are willing to sacrifice 5% of their wages for more workplace flexibility, and that women are willing to give up more than men. Finally, Maestas et al. (2023) estimate that workers are willing to sacrifice about 9% of their wages to set their own schedule, and 4% of their wages to work from home, and that women are willing to sacrifice a larger fraction than men.

This paper also contributes to the behavioral literature that studies the importance of work meaning. This literature has shown that the majority of workers *globally* care about work meaning (Dur and van Lent, 2019), that reservation wages are lower for meaningful jobs (Burbano, 2016), and that there is strong heterogeneity in preferences for work meaning (Kesternich et al., 2021). An important dimension of preference heterogeneity that has recently received increasing attention is gender differences. Previous work has documented a significant and increasing gender gap in work meaning in the United States (Kaplan and Schulhofer-Wohl, 2018) and internationally (Burbano et al., 2023). There is also some evidence that these differences arise due to differences in preferences. For example, Non et al. (2021) use a sample of students from the Netherlands to show that female students have stronger preferences for work meaning than male students. Related work by Burbano et al. (2020) uses the more representative *International*

Social Survey Programme (ISSP) to show that these preference differences are widespread. While Maestas et al. (2023) find that the average willingness to pay for work meaning is significant at about 3.4 % of monthly wages, they do not document a significant gender difference. Relative to these studies, we focus on the equilibrium relation between work meaning and workplace flexibility, and highlight the importance of interpersonal contact as a mechanism in creating work meaning.

Finally, this paper also relates to the literature on child penalties. Building on the early work by Waldfogel (1997), a recent paper by Felfe (2012) discusses the connection between motherhood and job attributes beyond wages. This paper finds that German mothers adjust their working hours, but not other dimensions of workplace flexibility, when returning to work after childbirth. Later work by Kleven et al. (2019) documents also documents a large impact of children on mothers' hours worked. They estimate that mothers' hours decrease by 20% upon childbirth, and are ten years later still 10% lower than they were before motherhood. Recent work by Burbano et al. (2023) suggests that work meaning is also not a margin of adjustment. They find that the large gender gap in meaningful work in Sweden does not change after parenthood. We add to this literature by documenting *preference* differences between mothers and women without children, and by highlighting an important reason why flexibility does not adjust after motherhood.

3. Data

The empirical analysis relies on two data sources. The first one is collected through the *Longitudinal Internet Studies for the Social Sciences* (LISS) household panel in the Netherlands. The advantage of this dataset is that, in addition to a set of survey questions to study the prevalence of work meaning and workplace flexibility, we appended a discrete choice experiment to elicit workers' preferences. The second dataset is the Fourth Work Supplement of the *International Social Survey Programme* (ISSP) collected in 2015. This data contains information on both the prevalence of and preferences for work meaning and workplace flexibility for a global sample of respondents. The main limitation is that the information on preferences is qualitative in nature, and that the preference data is limited to a single dimension of workplace flexibility.

3.1 The Longitudinal Internet Studies for the Social Sciences (LISS)

The *Longitudinal Internet Studies for the Social Sciences* (LISS) is a household panel dataset from the Netherlands. The sample is selected through random draws from the Dutch population register. Participants receive a fixed set of questions each year, and can participate in additional surveys. We appended such an additional survey in June of 2021, and invited all members of the panel between the ages of 25 and 65 that held a job in the past five years to take part.[6] This resulted in an initial sample of 2,154 individuals who were not retired. We merged our questionnaire with two modules of the LISS survey containing information on demographics and work characteristics, leaving us with 1,910 observations for which no data is missing. After removing observations outside of the 2.5th and 97.5th quantiles of the male and female wage distributions, we are left with our final sample of 1,813 respondents. Table B.2 in Appendix B presents general demographics for our sample.

Additional Survey Questions. We added two questions on workplace flexibility to the survey. The first question asks respondents about how easily they can adapt their scheduled working hours. The second question asks respondents whether and how often they can work from home. These questions are similar to other questions about workplace flexibility in the literature, such as those in Mas and Pallais (2017), Mas and Pallais (2020), and Maestas et al. (2023).[7] We also asked respondents about work meaning through a question about how often their job allows them to contribute to society.[8] An overview of the questions and possible answers is provided in Table 1. We aggregate all amenity variables into binary indicators, such that respondents with either the highest or second highest amenity levels are coded as having the amenity, and others as not having the amenity. Further information on the complete set of survey questions can be found in Appendix A.1.

Discrete Choice Experiments. We also asked respondents to complete eight discrete choice experiments that are similarly designed to those in Maestas et al. (2023). In each experiment, respondents choose between two jobs. We characterize each job by a number of working hours, a monthly wage, and levels of workplace flexibility and work meaning. Since this does not provide respondents with a complete picture of what the jobs entail, we instruct them that both jobs are

[6] We focus on this group because of their recent experience with trading off amenities and wages.

[7] We compare the measures of flexibility in these studies to our measures in Online Appendix O.B.

[8] Note that our measures of work meaning and all other amenities are self-reported. Since we are interested in how much an individual wants to sacrifice for a job that they personally believe to have valuable amenities, we consider these to be the appropriate measures.

Table 1: Survey Questions on Work Meaning and Workplace Flexibility (LISS)

Questions: Amenity Prevalence	***Answers***
Schedule Adaptability. The following question is about the extent to which you can adapt your working hours schedule. We are interested in the extent to which you can decide when to work, not the number of hours that you work. Please choose the answer that best matches your work arrangement.	– My schedule is set by my company/organization with no possibility for change. – I can choose when to work within limits and have to let my employer know at least one week in advance. – I can choose when to work within limits and can decide about this on very short notice. – I can fully determine my own schedule.
Telecommuting. Do you have the option to work from home? With this we mean that you do not work at your employers' office, but at home. We are not concerned with whether or not you use this option.	– No – Yes, less than one day per week. – Yes, about one day per week. – Yes, more than one day per week.
Work Meaning. How often does your job provide opportunities to have a positive influence on your community or on society?	– Never or almost never. – Sometimes. – Often. – Very often or always.

Notes. Survey questions on work meaning and workplace flexibility appended to the June 2021 wave of the *Longitudinal Internet Studies for the Social Sciences* (LISS) survey conducted in the Netherlands.

identical to their current job in all aspects except for those displayed. This addresses the issue that these jobs may signal different unobserved characteristics.

The hypothetical job offers are constructed to be similar to respondents' current jobs. The baseline job represents respondents' actual job, and the alternative varies in one or two characteristics and the wage offer. We varied wages in the alternative job by multiplying the observed monthly wages by a factor $\theta \sim \mathcal{N}(1, \sigma^2)$. The value of θ is truncated to be between 0.75 and 1.25, and we chose $\sigma^2 = 0.008$ to reflect realistic variation in wages in the Netherlands. Anchoring the hypothetical job offers to respondents' current jobs provides benefits in terms of efficiency (Train and Wilson, 2008) but may lead to a status quo bias (Samuelson and Zeckhauser, 1988). Previous job choice experiments have nonetheless found this choice to be inconsequential, and found no significant differences in settings where the baseline job was also varied (see Maestas et al. (2023)). More detailed information on the experiments and an example experiment that varies telecommuting can be found in Appendix A.2.

3.2 The International Social Survey Programme (ISSP)

The Work Supplement of the *International Social Survey Programme* (ISSP) is collected roughly every ten years. We use the fourth and latest wave collected in 2015, which contains observations from individuals in almost 40 countries.[9] This dataset is uniquely suited to our analysis because it contains information on both the prevalence and the valuation of work meaning and workplace flexibility. We select a similar sample to that in the Netherlands and study individuals between the ages of 25 and 65 in paid employment.[10] From this group of 18,567 individuals, we remove observations with missing demographics, job characteristics, or preferences for job characteristics, leaving us with 13,476 observations. We then remove individuals with wages outside of the 2.5th and 97.5th wage quantiles or years of education outside of the 1st and 99th quantiles by country, and are left with a final sample of 13,077 respondents. Table B.2 in Appendix B contains further information on several demographic variables for this sample.

We use two sets of questions on work meaning and workplace flexibility in the ISSP (see Table 2 for an overview). The first asks respondents about work meaning and workplace flexibility in their current jobs. Similar to the questions we asked in the LISS survey, the ISSP contains questions about respondents' ability to adapt their schedules, how often they can work from home, and work meaning in the form of contributions to society. This set of questions informs us about the worldwide prevalence of these amenities. We again re-code these answers into binary indicators. To obtain comparable fractions between both samples, we code respondents who report "Never" or "Hardly Ever" working from home as not working from home, respondents who report 'I cannot change' as not having an adaptable schedule, and respondents who "Strongly Agree" with having a job that is useful to society as having a meaningful job.

The second set of questions asks respondents about their preferences for workplace flexibility and work meaning. These questions are similar to those on the prevalence, but ask respondents about what they consider to be important in a job. There is unfortunately no question available about the importance of working from home. We again construct binary indicators, and follow Burbano et al. (2023) in coding amenities that a respondent considers "Important" or "Very Important" as "Highly Important", and others as "Not Important".

[9] We retain 35 countries for our analysis with non-missing information on wages, education, and amenities. See Online Appendix B for a detailed list of all the countries and the number of observations for each country.

[10] The LISS and ISSP samples differ slightly, because the ISSP does not question individuals who do not currently work about their previous jobs.This is however only a small group of only 2% of respondents in the LISS – all results remain the same when these individuals are excluded.

Table 2: Survey Questions on Work Meaning and Workplace Flexibility (ISSP)

Questions: Amenity Prevalence	***Answers***
Schedule Adaptability. Which of the following statements best describes how your working hours are decided? (by working hours we mean here the times you start and finish work, and not the total hours you work per week or month).	– I cannot change, fixed time – I can decide within certain limits – I am entirely free to decide
Telecommuting. How often do you work at home during your usual working hours?	– Always – Often – Sometimes – Hardly ever – Never
Work Meaning. For each of these statements about your (main) job, please tick one box to show how much you agree or disagree that it applies to your job. [...] My job is useful to society.	– Strongly Agree – Agree – Neither Agree nor Disagree – Disagree – Strongly Disagree
Questions: Amenity Prefences	***Answers***
Schedule Adaptability. For each of the following, please tick one box to show how important you per- sonally think it is in a job. [...] How important is a job that allows someone to decide their times or days of work?	– Very Important – Important – Neither important nor unimportant – Not important – Not important at all
Work Meaning Adaptability. For each of the following, please tick one box to show how important you per- sonally think it is in a job. [...] How important is a job that is useful to society?	– Very Important – Important – Neither important nor unimportant – Not important – Not important at all

Notes. Survey questions on work meaning and workplac flexibility asked in the Fourth Work Supplement of the *International Social Survey Programme* (ISSP).

4. The Compensating Differentials Model

We briefly recall Rosen (1986)'s model of compensating differentials, extended to workers of heterogeneous productive capacities as in Bell (2024), and discuss the parameters that we estimate. In the model, workers i are characterized by an ability level (η_i) that determines their total compensation. They divide up their total compensation between work meaning (m_i), workplace flexibility (f_i), and wages (w_i). Their division depends on their preferences $(\boldsymbol{\theta}_i)$ and on amenity prices, which are determined in equilibrium. We assume that both preferences and productivity levels are predetermined. Workers' utility functions are then:

$$u_i\left(w_i, m_i, f_i | \boldsymbol{\theta}_i, \eta_i\right). \tag{1}$$

On the demand side of the market, firms j are characterized by different costs $(\boldsymbol{\Omega_j})$ of providing bundles of amenities and wages, but we assume them to be equally productivity. Assuming these costs are also predetermined, we write profits as:

$$\pi_j\left(w_j, m_j, f_j | \boldsymbol{\Omega}_j\right). \tag{2}$$

A competitive equilibrium in this model consists of a matching of workers to firms and an associated compensation bundle of wages, work meaning, and workplace flexibility. Because productive heterogeneity – as measured by worker ability (η_i) – is predetermined, we can determine the equilibrium separately in each sub-market, defined by an ability level. Within each sub-market, the matching is perfectly assortative on amenity bundles, and workers with the highest valuation of a given bundle are matched to firms that have the lowest cost of providing it. The compensation bundles that arise within each match are determined at equilibrium as a function of the model's primitives, the preference distributions $\boldsymbol{\theta}$ and $\boldsymbol{\Omega}$.

An individual worker takes other agents' choices as given, and observes the different combinations of compensation bundles that arise in equilibrium. The gradient of the compensation set informs the worker about how amenities are priced with respect to wages and with respect to one another. This worker's optimization problem can be written as maximizing utility (1) subject to a constraint, the function $\mathcal{M}(w, f, m|\eta)$ that defines the equilibrium relation between wages, work meaning, and workplace flexibility at a given ability level.

4.1 Preferences and the Flexibility Price to Meaningful Work

The Willingness To Pay for Amenities. The first set of model parameters that we want to estimate are worker-side preferences for work meaning and workplace flexibility $(\boldsymbol{\theta})$, and how these differ across demographic groups. To do so, we follow the recent literature that uses stated choice experiments (see Mas and Pallais (2017), Wiswall and Zafar (2018), and Maestas et al. (2023)). The benefits of this approach are twofold. First, we can control for workers' offer sets, because in this experimental setting, we observe the characteristics of both the jobs that were chosen and those that were not. This means that we do not need to worry about different offers due to, for example, heterogeneity in ability (η). Second, we are interested in differences in preferences between demographic groups, which we can present in easily interpretable willingness to pay measures.

We parameterize the utility (1) of working in a type j job as a linear function in the natural logarithm of wages (w) and the vector of amenities (**a**) offered in the job. We additionally control for working hours (**h**) in the form of indicators for short and long part-time work. The valuations of both amenities and working hours are allowed to differ between respondents with and without children (c) through an interaction term. The utility functions are thus:

$$u_{ij} = \nu + \theta_w \log w_{ij} + \mathbb{1}_{\mathbf{h}_{ij}} \boldsymbol{\theta}_h + \mathbf{a}_{ij} \boldsymbol{\theta}_{\boldsymbol{a}} + [\mathbf{a}_{ij} \times c_i] \, \boldsymbol{\theta}_{\boldsymbol{ac}} + \left[\mathbb{1}_{\mathbf{h}_{ij}} \times c_i\right] \boldsymbol{\theta}_{\boldsymbol{hc}} + \epsilon_{ij}. \tag{3}$$

We assume that workers maximize their utility – as modelled through (3) – when choosing their preferred jobs in the discrete choice experiments. The relation between stated choices and utility is nonetheless imperfect, as workers could make errors when choosing their preferred jobs. Following the literature, we model these idiosyncratic factors through an iid Type I Extreme Value distributed error term (ϵ). This allows us to estimate the utility parameters through a logit model using maximum likelihood estimation.

We transform the preference parameters into willingness to pay estimates for each job amenity $a \in \mathbf{a}$. This transformation is derived from the following indifference argument. Consider an individual that is indifferent between not having job amenity $a \in \mathbf{a}$ while earning wage $\bar{w}$ and having amenity a but lowering their wage to $\underline{w} = \bar{w} - \mathrm{WTP}^{a,c}$. Their willingness to pay is the wage differential at this point of indifference:

$$\theta_w \log(\bar{w}) = \theta_a + c_i \theta_{ac} + \theta_w \log[\underline{w}].$$

We can rewrite this equation in terms of the willingness to pay for each job amenity $\mathrm{WTP}^{a,c}$:

$$\mathrm{WTP}^{a,c} = \bar{w}\left[1 - e^{\frac{-\theta_a - c_i\theta_{ac}}{\theta_w}}\right]. \tag{4}$$

The Flexibility Price to Meaningful Work. We are also interested in the equilibrium relation between work meaning and workplace flexibility implied by the $\mathcal{M}(f, m|w, \eta)$ function. This relation cannot be estimated as the reduced-form meaning-flexibility gradient, because workers with varying levels of ability (η) split up their total compensation in different ways, and these ability levels are hard to control for. To the extent that amenities are normal goods, more productive workers will have jobs with more work meaning *and* more flexibility at a given wage.[11] The positive correlation that this implies does not accurately reflect the trade-off that workers face between work meaning and workplace flexibility, as defined by $\mathcal{M}(f, m|w, \eta)$. This ability bias is well-known (see Hwang et al. (1992)) and often cited as an important reason for the 'wrongly signed' compensating differential estimates that are prevalent in empirical work.

To address the issue of ability bias, we use an estimator recently proposed by Bell (2024).[12] The approach uses an imprecise proxy for ability (S_i^{η}) to shift workers' total compensation. The equilibrium relation between work meaning and workplace flexibility can be estimated in two steps. The first is to regress amenities and wages on the observed ability proxy. The intuition behind this regression is that it determines the direction in which ability is increasing. The predicted values from this first-stage regression $(\hat{S}_i^{\eta})$ are then introduced as a control variable in a second regression of wages and workplace flexibility on work meaning. The coefficients on the flexibility variables in the second stage regression – the ψ_f below – reflect the equilibrium relation between work meaning and flexibility implied by the function $\mathcal{M}(f, m|w, \eta)$, which we assume to be linear.[13]

To identify the equilibrium relation between work meaning and workplace flexibility, we need the proxy variable to be informative about the *level* of total compensation, while being unrelated to how workers *split up* their compensation. General measures of ability – we will use years of education – that are not manipulated with the aim of sorting into jobs with different combinations of wages and amenities satisfy this assumption. Note that we make the implicit assumption that

[11] See Hamermesh (1999) for an early discussion on the bundling of good amenities.

[12] Related uses of the estimator can be found in Burbano et al. (2023), Folke and Rickne (2022), and Bell et al. (2024).

[13] Note that, in the typical case, one estimates compensating differentials in monetary terms (see Bell (2024). Wages are then the outcome variable in the second stage regression. Yet any other arrangement of wages and amenities in this equation is valid, since these variables all have equivalent interpretations as different forms of compensation.

ability can be captured by a single latent index. We should also note that this approach assumes that we observe the complete offer set of wages and amenities.[14] This is clearly a simplification, since workers take other job characteristics into account (think of, for example, safety or potential career progression). We nonetheless believe that accounting for these additional amenities will not fundamentally change the equilibrium relation between work meaning and flexibility.

The first and second stage regression equations that we estimate are:

$$\text{First stage:} \quad S_i^{\eta} = \phi_m m_i + \phi_f f_i + \boldsymbol{\phi_w} \mathbb{1}_{\mathbf{q_{w_i}}} + \xi_i \tag{5}$$

$$\text{Second stage:} \quad m_i = \psi_f f_i + \boldsymbol{\psi_w} \mathbb{1}_{\mathbf{q_{w_i}}} + \psi_S \hat{S}_i^{\eta} + \epsilon_i, \tag{6}$$

where the main coefficients of interest are those on the workplace flexibility variables ψ_f. We introduce wages into the compensation bundles non-parametrically through wage quintile $(\mathbf{q_{w_i}})$ indicators.[15]

5. Results

This section first discusses heterogeneity in the valuation and the prevalence of work meaning and workplace flexibility by gender and parenthood. We first present the results for the Netherlands (LISS sample), and then study how these compare internationally (ISSP sample). We then estimate the flexibility price to meaningful work, and study the consequences of reducing this trade-off.

5.1 Heterogeneity in the Valuation of Job Amenities

5.1.1 The Netherlands

Differences by Gender. We first consider gender differences in the valuation of job amenities in the Netherlands. Table 3 shows the willingness to pay for workplace flexibility, work meaning,

[14] The estimator is related to the literature on selection corrections (Altonji et al., 2005; Oster, 2019). The first stage regression recovers the direction in which ability is increasing. Because ability is the *only* variable that determines total compensation, the law of one prices implies that we would perfectly predict wages given both amenities and the true unobserved ability index. This is equivalent to the assumptions made in Altonji et al. (2005). In the generalized framework of Oster (2019) this would equate to a selection correction that sets $R_{max} = 1$. A more complete discussion of this connection and how this assumption can be relaxed can be found in Bell (2024) and Bell et al. (2024).

[15] We could alternatively use the logarithm of wages or express wages in standard deviation units as in Bell (2024), but chose for a more flexible control, because both the units and the distribution of wages differ significantly between countries.

and hours of work, separately for men and women. We also compare men and women with and without children in panels A and B. The focus of our discussion will be on differences between men and women *without* children, as patterns are similar when comparing men and women with children. Differences will nonetheless be pointed out.

We find that women are willing to sacrifice a larger fraction of their wages for all amenities and for working fewer hours. Women are willing to sacrifice 8.5% of their wages for a job with high schedule adaptability, as opposed to men at just 5.6%, and 7.5% for the option to work from home, as opposed to men at just 4.9%. Scaled by their average monthly income, the valuations of men and women are closer, since men earn significantly more than women. Differences in the valuation of workplace flexibility between men and women with children follow the same pattern but are even larger. These Willingness to Pay estimates are similar to – but slightly higher than – those found in previous studies. For example, Maestas et al. (2023) find that women are willing to sacrifice 5% of their wages for the option to work from home and men just 3%. We suspect that these differences are be partly driven by the COVID pandemic, which introduced a large number of workers to the benefits of working from home (see Online Appendix O.C), or may simply reflect differences in the work cultures of the Netherlands and the United States.

Second, we find that women value work meaning significantly more than men. Women are willing to sacrifice 9.0% of their wages for a job with high contributions to their community or to society, men only 4.8%. This translates into a significant difference of about 60 euros of monthly income. The differences between men and women with children are slightly smaller, but still statistically significant at conventional levels. This result is consistent with earlier work by Burbano et al. (2023) and Non et al. (2021), who also find that women value work meaning more than men. Furthermore, the amounts reported in Non et al. (2021) show that workers are willing to sacrifice between 170 and 220 euros, which is close to what we find. The estimates are also not far off those in Maestas et al. (2023), who find that work meaning is valued at about 4% of wages – but find no gender difference.

Finally, we also find that both men and women without children demand higher wages to work part-time. This is particularly the case for men, who on average demand a significant 16.7% increase in their wages to compensate for the large reduction in income associated with working fewer hours. Women value the additional out-of-labour time more than men, and demand only a small increase. The group of women with children is even willing to sacrifice a small fraction of their wages (4.1%) to work a long part-time job (32 hours) as opposed to a full-time position.

Table 3: Willingness to Pay for Job Amenities (LISS)

Panel A. *No Children*

	WtP (% wage)		**WtP (€ income)**		
	Men	Women	Men	Women	P-value
Workplace Flexibility					
Schedule Adaptability	**0.056**	**0.085**	**190.157**	**210.875**	0.020
	(0.007)	(0.010)	(22.783)	(24.711)	.
Telecommuting	**0.049**	**0.075**	**168.291**	**184.666**	0.023
	(0.006)	(0.009)	(19.046)	(22.292)	.
Work Meaning	**0.048**	**0.090**	**163.174**	**222.759**	0.000
	(0.006)	(0.009)	(20.003)	(21.262)	.
Part-Time Work					
Long Part-Time (32h)	**-0.051**	-0.013	**-173.883**	-32.040	0.021
	(0.009)	(0.013)	(32.110)	(31.030)	.
Short Part-Time (20h)	**-0.167**	**-0.044**	**-570.392**	**-107.591**	0.000
	(0.016)	(0.015)	(54.045)	(37.061)	.

Panel B. *Children*

	WtP (% wage)		**WtP (€ income)**		
	Men	Women	Men	Women	P-value
Workplace Flexibility					
Schedule Adaptability	**0.060**	**0.096**	**203.885**	**237.959**	0.005
	(0.007)	(0.010)	(23.873)	(25.469)	.
Telecommuting	**0.059**	**0.098**	**200.980**	**241.889**	0.000
	(0.006)	(0.009)	(20.116)	(21.831)	.
Work Meaning	**0.045**	**0.067**	**153.279**	**166.314**	0.049
	(0.006)	(0.009)	(20.491)	(22.518)	.
Part-Time Work					
Long Part-Time (32h)	**-0.077**	**0.041**	**-261.088**	**101.255**	0.000
	(0.010)	(0.013)	(34.540)	(32.711)	.
Short Part-Time (20h)	**-0.195**	**-0.024**	**-665.118**	**-59.591**	0.000
	(0.013)	(0.010)	(45.731)	(25.928)	.
N	13600	15408	13600	15408	.

Notes. Willingness to Pay for work meaning, workplace flexibility, and part-time work. Monetary amounts calculated by multiplying the willingness to pay with the average monthly wage for each demographic group. Estimated coefficients from equation (3) transformed using equation (4). Standard errors in parentheses are clustered by individual and transformed using the delta method. Final column shows results of a t-test for equal WtP (in % wage) by gender. Bold faced estimates are significant at the 95% level.

These results are again similar to those in Maestas et al. (2023), who find that workers are willing to sacrifice only 40% of their earnings to obtain a 50% reduction in working hours. They are

different from the results in Wiswall and Zafar (2018), but they consider part-time work as an *option* that is offered in a full-time position, while our respondents choose between an actual part-time and full-time job.

Differences by Parenthood. We now consider differences between respondents with and without children by comparing panels A and B of the Table 3. We find only small differences between men with and without children. Fathers value workplace flexibility slightly higher, and work meaning slightly lower than men without children, but these differences are not statistically significant. We also see a difference in preferences for short part-time work, as men with children demand a larger compensation to work part-time (19.5%) than men without children (16.7% of wages). The additional costs of children can be an important explanation for this result.

Differences between women with and without children are considerably larger. We find that mothers are willing to sacrifice considerably more wages to obtain either dimension of workplace flexibility. Mothers value the option to adapt their schedules at 9.6% of their wages, as opposed to women without children at 8.5%, and the option to work from home at 9.8% as opposed to women without children at 7.5%. We also find that mothers are willing to sacrifice substantially less money (6.7%) to obtain more work meaning than women without children (9.0% of wages). We believe this to be an intuitive finding, as preferences shift towards the family as opposed to society at large after having children. These differences are statistically significant at conventional levels, except for the difference in scheduling adaptability and short part-time work. Finally, as alluded to earlier, women with children also value part-time work more than women without children. The additional time demanded by children is likely to be an important driver of this result. These findings are also in line with the literature on the motherhood penalty, such as Kleven et al. (2019), who document a large gender gap in hours worked after childbirth.

Robustness. This paragraph contains a brief outline of the robustness checks presented in Online Appendix O.D. We show that the results from the discrete choice model are similar when we change the specification of the utility function or remove subsets of the sample (the inattentive and those making dominated choices). We do find that our coefficients change when we allow for individual preference heterogeneity through a mixed logit model. The main results still hold, but differences between men and women are sometimes no longer significant statistically. Individual-specific preference heterogeneity is particularly important for part-time work, where we find large standard deviations on the coefficients. We also consider a comparison between only full-time workers. We find that the gender aspect of the flexibility puzzle still holds, but

not the motherhood dimension. This is likely due to full-time working women, and particularly mothers, being too selective (particularly in terms of productivity) of a sample in the Netherlands.

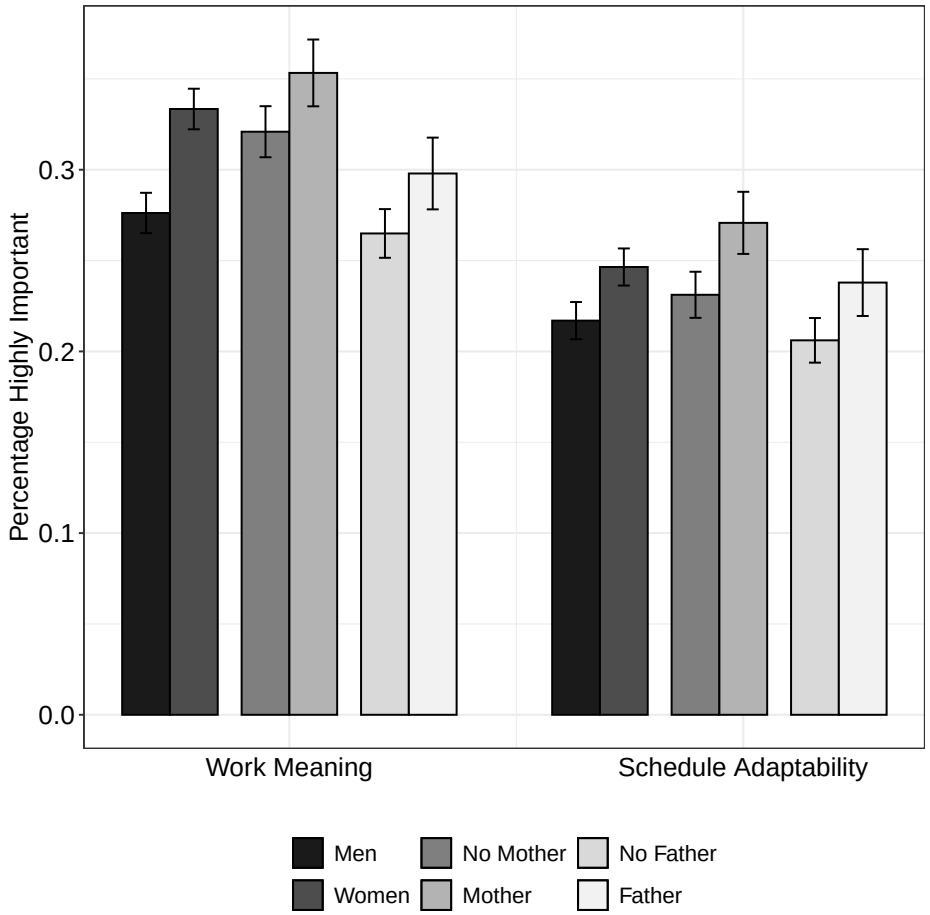
5.1.2 International Comparison

Differences by Gender. The qualitative nature of the questions in the ISSP does not allow for a direct comparison with the results obtained from the LISS. For this reason, we limit the discussion to general differences and similarities in the observed patterns. We first look at gender differences in preferences for job amenities in Figure 1. We find that women consider workplace flexibility to be more important than men, as 24.6% of women highly value schedule adaptability, as opposed to 21.7% of men. As noted in Section 3.2 the ISSP unfortunately does not have a question on preferences for working from home. We also find that women globally have stronger preferences for work meaning than men, as 33.3% of women highly value contributing to society as opposed to 27.6% of men. These differences are all statistically significant. The observed patterns are furthermore closely in line with those in the Willingness to Pay estimates for the Netherlands.

Differences by Parenthood. We now consider differences between women with and without children. Similar to the result presented for the Netherlands, we find that mothers value workplace flexibility more than women without children, as 27.1% of mothers highly value schedule adaptability as opposed to 23.1% of women without children. Different from the Netherlands, we do not find that women with children value work meaning lower than women without children. In fact, 35.3% of mothers find work meaning important as opposed to just 32.1% of women without children. Comparing fathers to men without children yields the same patterns as comparing mothers to women without children.

Summary – Preference Differences. We find two common trends in both samples. First, women find both workplace flexibility and work meaning more important than men. Second, parents find workplace flexibility more important than individuals without children. One difference between both samples is that, in the Netherlands, parents care less about work meaning than individuals without children, while we find the opposite in the international sample. We have no conclusive explanation for this difference. One explanation is that parents in the Netherlands are culturally quite different from the international average. Another is that is may be due to differences in how the questions are asked. In the Netherlands, respondents' Willingness to Pay for a job with

Figure 1: Preferences for Job Amenities (ISSP)



Notes. Heterogeneity in preferences for work meaning and schedule adaptability in the *International Social Survey Programme* (ISSP) sample. Expressed as the percentage of individuals that consider the amenity to be "Highly Important" – as defined in Section 3.2.

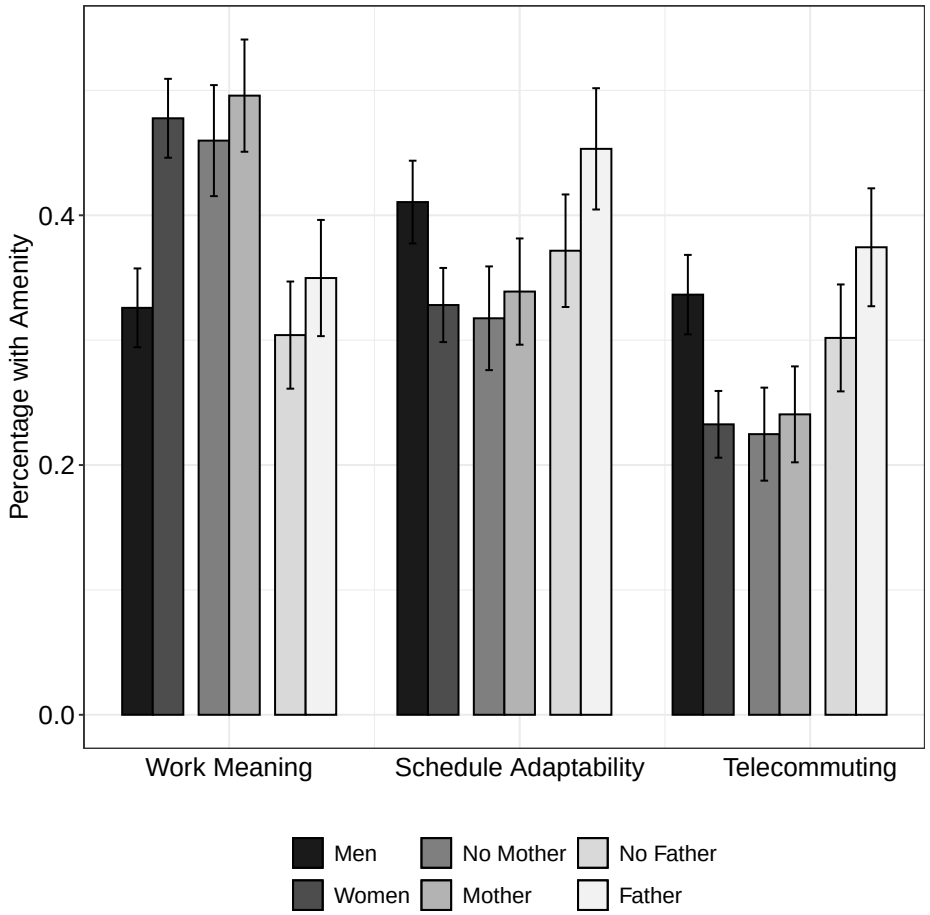
high "contributions to society or your community" is elicited, while the international question only asks about the broader society. Thus, if it is mainly preferences for contributing to one's *local* community decreasing around childbirth, differences in the questions could explain the observed patterns.

5.2 Heterogeneity in the Prevalence of Job Amenities

5.2.1 The Netherlands

Differences by Gender. We now consider heterogeneity in the prevalence of job amenities. Figure 2 again shows differences between men and women in the Netherlands. We find that

Figure 2: Heterogeneity in Job Amenities (LISS)



Notes. Heterogeneity in the average levels of work meaning, schedule adaptability, and telecommuting in the *Longitudinal Internet Studies for the Social Sciences* (LISS) sample from the Netherlands. Expressed as the percentage of individuals that report having the amenity in their current (or last) job – as defined in Section 3.1.

women have less workplace flexibility than men, as 32.8% of women as opposed to 41.1% of men have the option to adapt their schedules, and 23.3% of women as opposed to 33.6% of men have the option to work from home. Further, women have higher levels of work meaning, since 47.8% of women reports having high work meaning as opposed to 32.5% of men. These differences are all statistically significant and amount to roughly a quarter of a standard deviation in workplace flexibility and work meaning (see Table B.2).

These results are puzzling because we documented in section 5.1 that women have stronger preferences for workplace flexibility than men. The empirical fact that these preference differences are not reflected in labor market outcomes is what we refer to as the *flexibility puzzle*. This result is nonetheless well in line with earlier work, which has shown that women value workplace

flexibility higher than men (see for example Mas and Pallais (2017), Wiswall and Zafar (2018), and Maestas et al. (2023)) but do not work more flexible jobs (Golden, 2001; Mas and Pallais, 2020).

Differences by Parenthood. Figure 2 also highlights differences between individuals with and without children. We first consider differences between fathers and men without children. We find that fathers have higher levels of workplace flexibility, since 45.3% of fathers as opposed to 37.2% of men without children have the option to adapt their schedules, and 37.4% of fathers as opposed to 30.2% of men without children can work from home. These differences are nonetheless not that significant statistically. Differences in work meaning are negligible. These results are in line with fathers having slightly higher preferences for workplace flexibility than men without children.

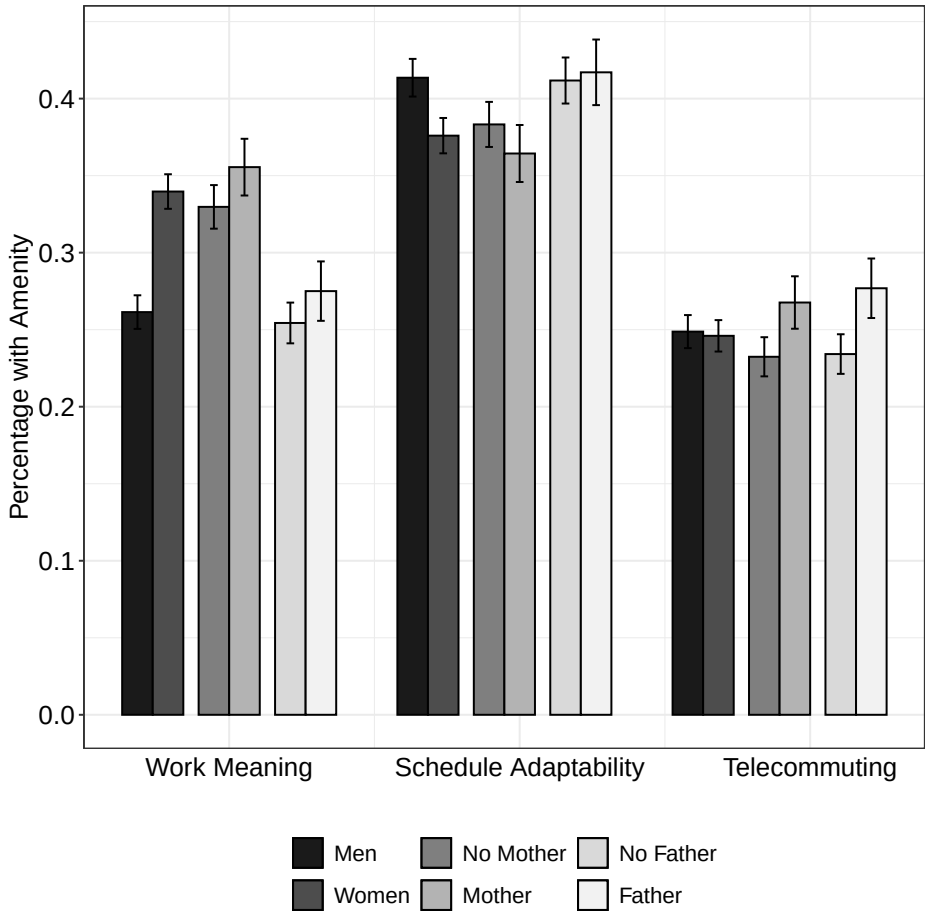
Next, we consider differences between women with and without children. Surprisingly, differences are small for all amenities. We find that women without children report slightly higher levels of work meaning and slightly lower levels of workplace flexibility, but these differences are not statistically significant and are smaller quantitatively. This result is related to that of Burbano et al. (2023), who find that the gender gap in work meaning does not change around childbirth. This reveals another dimension to the flexibility puzzle. While mothers value workplace flexibility significantly higher than women without children, they do not seem to work more flexible jobs.

5.2.2 International Comparison

Differences by Gender. We now look at how the results from our sample in the Netherlands hold up internationally. First, we again consider the differences by gender in Figure 3. We find that women internationally have slightly less workplace flexibility than men, as 41.4% of men as opposed to 37.5% of women have the ability to adapt their schedules, and 24.9% of men as opposed to 24.6% of women have the option to work from home. We also document that women have significantly higher levels of work meaning, as 34.0% of women as opposed to 26.1% of men work meaningful jobs. The differences are nonetheless smaller quantitatively, and account for roughly 10% of a standard deviation of schedule adaptability and work meaning (see Table B.2). These patterns suggest that the flexibility puzzle is an international phenomenon, as we also documented opposite-signed preferences in section 5.1.

Differences by Parenthood. We now consider differences by parenthood in Figure 3. We only discuss differences between women with and without children – the patterns for men are similar.

Figure 3: Heterogeneity in Job Amenities (ISSP)



Notes. Heterogeneity in the average levels of work meaning, schedule adaptability, and telecommuting in the *International Social Survey Programme* (ISSP) sample. Expressed as the percentage of individuals that have the amenity as defined in Section 3.2.

We find that differences are small and statistically not significant. Mothers have slightly lower levels of scheduling adaptability (38.3% vs. 36.4%) than women without children and work from home slightly more often (26.8% vs. 23.2%). Mothers also work slightly more meaningful jobs.

Summary – Level Differences. We again find several common trends in the both samples. Women have lower levels of flexibility but higher work meaning than men. This is puzzling, as preferences would have suggested the opposite. We also find that mothers have less (or the same) levels of flexibility than women without children, despite their stronger preferences for more flexibility. For fathers we do not find this result, as in both samples they have slightly more flexibility than men without children. The flexibility puzzle thus holds only partly by parenthood.

5.3 The *Flexibility Puzzle*

This section introduces two interrelated explanations for the *flexibility puzzle*. Recent work by Mas and Pallais (2020) argues that jobs with high levels of workplace flexibility often have other undesirable characteristics, such as long working hours, which deter women. While this is an important explanation for the United States, it is unlikely to be of much significance for the Netherlands, where long-hour jobs are not that common. Less than 5% of the workers in our sample from the Netherlands works more than 45 hours per week, as opposed to almost 25% in the American Time Use Survey (ATUS) sample of Mas and Pallais (2020). We instead argue that women's high levels of work meaning, and the relation between meaningful and flexible employment, are an important explanation for the flexibility puzzle.

5.3.1 The Meaning-Flexibility Trade-Off

We first discuss the trade-off between work meaning and workplace flexibility. Before presenting our estimates for the flexibility price to meaningful work, we want to highlight the results in Table 4. We show that jobs with high work meaning are relatively common, since 30 to 40% of respondents reports working a meaningful job. Yet jobs with both high work meaning *and* high levels of workplace flexibility are not. For example, in the Netherlands, only 9% of respondents hold a job with the highest levels of workplace flexibility and work meaning. Internationally, this reduces to just 5%. This is surprising, as good job amenities tend to come more bundled (see e.g. Hamermesh (1999)).

Table 4: Joint Frequencies – Work Meaning and Workplace Flexibility

Panel A. *The Netherlands (LISS)*

	Mean	× Telecommuting	× Schedule Adaptability	× Both
High Meaning	0.41	0.12	0.16	0.09

Panel B. *International Sample (ISSP)*

	Mean	× Telecommuting	× Schedule Adaptability	× Both
High Meaning	0.31	0.09	0.12	0.05

Notes. The fraction of workers in the Netherlands (LISS) and internationally (ISSP) that indicates having a job with high levels of work meaning *and* the ability to telecommute, the ability to adapt their schedules, or the ability to do both.

Table 5 highlights the results from several regressions of the workplace flexibility variables on work meaning, for both the Dutch (Panel A) and the international (Panel B) sample. The first column ('Base') shows the coefficients from a simple regression without controls in the Netherlands and with only country fixed effects in the international sample. We find a small, but mainly positive, relation between work meaning and workplace flexibility. We argue that these results mainly reflect the bundling of good amenities, as more productive workers obtain better jobs in all dimensions.

Table 5: The Flexibility Price to Meaningful Work

Panel A. *The Netherlands (LISS)*

	Base	Productivity Controls	Bell Proxy
Telecommuting	0.005	-0.020	-0.191
Conf. Int.	(-0.052 , 0.063)	(-0.078 , 0.037)	(-0.408 , 0.017)
Schedule Adaptability	0.056	0.039	**-0.715**
Conf. Int.	(0.003 , 0.110)	(-0.015 , 0.093)	(-0.965 , -0.506)
Partial F			161.366

Panel B. *International Sample (ISSP)*

	Base	Productivity Controls	Bell Proxy
Telecommuting	**0.064**	**0.053**	**-0.662**
Conf. Int.	(0.045 , 0.083)	(0.035 , 0.072)	(-0.813 , -0.528)
Schedule Adaptability	-0.017	**-0.033**	**-0.653**
Conf. Int.	(-0.033 , 0.000)	(-0.049 , -0.016)	(-0.787 , -0.533)
Partial F			355.577

Notes. Coefficients from regressions of workplace flexibility, measured by schedule adaptability and telecommuting, on work meaning. The 'Base' specification contains no control variables in the Netherlands (LISS sample) and only country fixed effects internationally (ISSP sample). The 'Productivity Controls' specification adds years of education as a control variable. The 'Bell Proxy' specification presents the second stage estimates of the method introduced in Bell (2024) as presented in section 4.1. Confidence intervals (95%) are shown below the estimates, and are derived from T-tests ('Base' and 'Productivity Controls') and Anderson-Rubin tests ('Bell Proxy') as discussed in Andrews et al. (2019) and Bell (2024). Bold faced estimates are indicate that the confidence bounds do not contain zero. Partial F-Statistics from the first stage regressions are presented in the final row of each panel. The full set of first stage estimates can be found in Appendix C.

We then introduce a control for workers' productivity in the form of years of education in the 'Productivity Controls' column. This moves the coefficients towards the negative direction in all cases. Results are more mixed now, as we find both negative and positive relations between work meaning and workplace flexibility, which are in some cases significant. Yet, earlier work has

shown that imperfect productivity controls are not sufficient to correct ability bias in estimates of compensating differentials (Bell, 2024; Lavetti, 2023).

The final set of estimates in the 'Bell Proxy' column introduce the predicted offer set controls using the estimator introduced by Bell (2024) discussed in section 4.1.[16] We find that for both dimensions of workplace flexibility, coefficients are negative and generally statistically significant. The point estimates for the schedule adaptability price to meaningful work are similar in both samples, at 65.3% (ISSP) and 71.5% (LISS). The cost in terms of telecommuting is substantially smaller in the Netherlands at 19.1% than it is internationally at 66.2%. One explanation for this difference is that the Netherlands is a relatively advanced economy, where better infrastructure can offset some of the costs associated with working from home.

We should also highlight that our confidence bounds are relatively wide – particularly in the Netherlands. This is partly because these bounds are obtained by inverting Anderson-Rubin tests, as suggested in Bell (2024) and Andrews et al. (2019). These bounds are robust to weak identification, but are generally wider than bounds based on t-statistics.[17] The other reason is that our instrument is a bit weaker in the Netherlands than in the International sample because years of education are better measured in the latter (a Partial F statistic of 161.4 as opposed to 355.6).

Mechanism. We now look into what we believe to be an important mechanism that can explain the negative relation between work meaning and workplace flexibility. To this end, we asked our respondents two additional questions. The first asks about how much personal contact with clients and colleagues their job requires. The second asks about how much time (in %) respondents spend working on a computer. We again re-code these variables into binary indicators for more than the median amount.

Table 6 shows how the responses to the two additional questions are correlated with our measures of work meaning and workplace flexibility. We first consider correlations with the question about contact with clients and colleagues. We see that high levels of contact correlate negatively with workplace flexibility, as the correlation with schedule adaptability is -0.23 and with telecommuting -0.25. We also find a positive correlation with work meaning of 0.11. Next, we consider how intensity of computer use relates to work-meaning and workplace flexibility.

[16] We discuss our choice of years of education as a proxy in section 4.1. The ISSP sample contains a direct measure of years of education, in LISS this is constructed using a detailed 'highest degree obtained' variable.

[17] For example, Andrews et al. (2019) find that they are on average 56.5% longer, with the difference decreasing in the strength of the instrument.

Table 6: The relation between work meaning, workplace flexibility, and contact

	High Contact	High Computer	High Meaning	Schedule Adaptability	Telecommuting
High Contact	1.00	**-0.30**	**0.11**	**-0.23**	**-0.25**
High Computer	**-0.30**	1.00	**-0.09**	**0.25**	**0.37**
High Meaning	**0.11**	**-0.09**	1.00	0.06	0.03
Schedule Adaptability	**-0.23**	**0.25**	0.06	1.00	**0.49**
Telecommuting	**-0.25**	**0.37**	0.03	**0.49**	1.00

Notes. Pairwise correlations between amenities and mechanisms in the Netherlands (LISS sample). Bold faced correlations are significant at the 95% level (Bonferroni-Adjusted).

Here, we find the opposite relation, as often using the computer is correlated with higher levels of schedule adaptability and telecommuting, with correlations of 0.25 and 0.37 respectively. We also document a negative relation between computer use and work meaning, with a correlation of -0.09. We should note that correlations with work meaning are smaller than with workplace flexibility. One explanation for this result is that work meaning is a broader concept that captures many other factors unrelated to personal contact. To summarize, we believe that interpersonal contact is an important dimension of work meaning, while at the same time hindering more workplace flexibility.

Implications. The presence of children seems to shift preferences away from work meaning and towards workplace flexibility. The problem is that many important life-cycle choices that cannot easily be changed, such as one's occupation or sector of employment, have already been made by this point. Figure D.2 shows that about half of the women in our sample work in the healthcare or education sectors, which are highly meaningful but also highly inflexible sectors. Women who want to continue working in healthcare or education after having children thus will likely have a difficult time finding jobs with high levels of workplace flexibility. This may be an important reason why so many women sort into part-time employment instead.

5.3.2 Lowering the Meaning-Flexibility Trade-Off

We now perform a simple counterfactual analysis to study what would happen to the gender and motherhood gaps in compensation with a reduced meaning-flexibility trade-off. The first step in this analysis consists of computing individuals' perceived total compensation:

$$\log \mathrm{TC}_i = \log \left(W_i + \mathbf{WTP}_g^{a,c} \times \mathbf{a}_i \right). \tag{7}$$

The perceived total compensation of an individual thus comprises of the sum of their observed wages and amenities, scaled by how this 'type' of individual – determined by gender and parenthood – values the amenity (as in Maestas et al. (2023)). We also construct three counterfactual measures of total compensation to simulate the effects of a reduced meaning-flexibility trade-off. The first and second counterfactual measures ($\tilde{\mathrm{TC}}_{sa'}$ and $\tilde{\mathrm{TC}}_{tc'}$) elevate the schedule adaptability and telecommuting possibilities of individuals with a meaningful job. Since these are all measured through binary indicators, we simply give those individuals in a meaningful job who did not have the ability to adapt their schedules or to work from home the option to do so. Thus, these counterfactuals simply change the amenity component – $\mathbf{a}_i$ in equation 7 – but leave all other parameters unchanged. The third counterfactual ($\tilde{\mathrm{TC}}_{mw'}$) elevates the work meaning of individuals in a *flexible* job, defined as one in which they can either work from home or adapt their schedules.

While this is a simple analysis, we believe that such changes could be feasible. Recent work by Alipour et al. (2023) and von Gaudecker et al. (2023) highlights that there is still ample room for improvements in workplace flexibility, also in highly meaningful jobs. For example, Alipour et al. (2023) estimate that in the "Human Health and Social Work Activities" sector, currently 21% of employees work from home, while 27% percent do not but have the potential to do so. On the other hand, there is also a substantial body of work that studies how jobs can be made more meaningful, see the discussion in Cassar and Meier (2018). There are some important limitations of this analysis. First of all, it abstracts from equilibrium effects. When a substantial fraction of jobs changes in terms of their amenities, prices of work meaning and workplace flexibility are likely to adjust, which will also affect equilibrium sorting patterns. Second, the counterfactuals change the amenity distribution across occupations to a large extent. Yet, since our focus is on how men and women are differently impacted in these scenario's, we believe them to be a useful descriptive exercise.

Equality in Compensation. We now compare the gender and motherhood gaps in the different observed and counterfactual measures of total compensation. Since we construct total compensation based on the Willingness to Pay measures, we only present the estimates for the LISS sample. Table 7 shows the results from regressions of gender, parenthood, and an interaction between both on the different compensation measures. The first column shows that the gender gap in wages in the Netherlands is about 9.9%. This number is comparable to recent estimates by Statistics Netherlands (van der Vliet et al., 2022), which finds a wage gap of 6% in

Table 7: Wage Penalties by Gender and Motherhood

	Observed	TC	$\tilde{\text{TC}}_{sa'}$	$\tilde{\text{TC}}_{tc'}$	$\tilde{\text{TC}}_{mw'}$
Woman	**-0.099**	**-0.068**	**-0.053**	**-0.053**	**-0.064**
	(0.025)	(0.026)	(0.026)	(0.026)	(0.026)
Children	**0.127**	**0.140**	**0.142**	**0.143**	**0.142**
	(0.025)	(0.027)	(0.027)	(0.027)	(0.027)
Women × Children	**-0.105**	**-0.115**	**-0.113**	**-0.109**	**-0.121**
	(0.035)	(0.037)	(0.038)	(0.038)	(0.038)
Constant	**2.978**	**3.026**	**3.034**	**3.034**	**3.038**
	(0.018)	(0.019)	(0.019)	(0.019)	(0.019)
Observations	1813	1813	1813	1813	1813

Notes. Coefficients from regressions of demographic variables (gender and parenthood) on compensation measures in the Netherlands (LISS sample). Compensation measures defined in Section 5.3.2. Standard errors in parentheses. Bold faced estimates are significant at the 95% level.

the public and 19% in the private sector. We find that mothers' wages are another 10.5% lower than those of men without children. This is offset by the positive effect of children in general at 12.7%.

We first compare the base levels to the gaps in total compensation, found in the second column of Table 7. The gender gap in total compensation is about 3 p.p. smaller, while the difference between mothers and men without children remains essentially the same. The almost unchanged (and even slightly larger) motherhood penalty is partly explained by mothers valuing work meaning – the only amenity of which women have more – lower than women without children. We then compare the observed values with the counterfactual measures of total compensation that increase the workplace flexibility of workers in high-meaning jobs ($\tilde{\text{TC}}_{sa'}$ and $\tilde{\text{TC}}_{tc'}$). We find that both counterfactuals have essentially the same effect. In both cases, the only change is that the gender gap in total compensation lowers another 1.5 p.p.

Finally, we consider the counterfactual scenario in which flexible jobs are made more meaningful ($\tilde{\text{TC}}_{mw'}$). We see that the gender gap in total compensation is only slightly smaller (0.4 p.p.) than the gender gap in total compensation. We also find that women with children are worse off now. This is again because they do not value work meaning as highly. Increasing work meaning in jobs with more flexibility thus does not seem to be an effective policy when the aim is to increase equality in compensation by gender or parenthood.

6. Conclusion

This paper contributes to the vast literature on gender inequality in the labor market. In line with previous work, we find that both workplace flexibility and work meaning are highly valued amenities. We also find that women value workplace flexibility higher than men, but that these preferences are not reflected in labor market outcomes. We argue that a negative relation between work meaning and workplace flexibility explains this result. While our main sample comes from the Netherlands, we document the same patterns in a global survey on working conditions, and we show that our results are robust to the selection of the sample, functional form, and model.

We highlight that interpersonal interaction is an important mechanism that underlies the negative relation between work meaning and workplace flexibility. Greater amounts of interpersonal interaction are correlated with higher levels of meaning, but hinder the degree of workplace flexibility. In the next step, we study the consequences of weakening this relation. We find that the way in which the correlation is weakened – by making meaningful jobs more flexible, or by making flexible jobs more meaningful – has different implications. This should be an important consideration for policy-makers. We identify two interesting directions for future work. The first is to further explore women's sorting into meaningful jobs by looking at sorting within sectors or even within firms. The second is to better understand the life-cycle aspect of sorting on amenities using a dynamic framework. Sorting early on into jobs with high levels of work meaning – for example by becoming a nurse – should restrict a worker's choices in terms of workplace flexibility later on.

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Appendix To

Work Meaning and the *Flexbility Puzzle*

Thimo De Schouwer Iris Kesternich

A. Survey Design

This Appendix provides further information about the questionnaire we appended to the *Longitudinal Internet Studies for the Social Sciences* (LISS) panel.[18] We first provide an overview of the questions used in our analysis and then discuss the discrete choice experiments.

A.1 Survey Questions

The survey starts by questioning respondents about their current employment status. This allows us to make a distinction between employed respondents, who are asked about the attributes of their current job, and unemployed respondents, who are asked about their last job. An overview of the questions we used (translated to English and presented as asked to employed people) can be found in Table A.1.

A.2 Discrete Choice Experiment

Hours. The work values we show for the baseline job are constructed by classifying respondents into one of three categories corresponding to a limited part-time (20 hours), longer part-time (32 hours) or full-time (38 hours) position. Respondents are classified as working *full-time* when they report working 38 or more, as *short part-time* when they report less than 30 hours, and as *long part-time* when their response is in-between these cut-offs.

Workplace Flexibility. We construct the schedule adaptability values shown in the baseline job in the discrete choice experiments by directly translating responses from the survey question preceding the experiments. The baseline telecommuting values are constructed by re-coding respondents' answers into a binary indicator. Respondents that reported not having the ability to telecommute were assigned a baseline job without telecommuting, all other respondents were assigned a baseline with telecommuting.

[18] A complete codebook can be found in the replication files and at https://www.dataarchive.lissdata.nl/. Further information about the *International Social Survey Programme* (ISSP) data can be found at issp.org.

Table A.1: List of Survey Questions (LISS)

Questions	***Answers***
Hours of Work. How many hours per week do you work on average in your current job? If you have multiple jobs, please consider the job most important to you. Whether or not extra hours are paid is irrelevant.	– Integer: 1 – 168.
Schedule Adaptability. The following question is about the extent to which you could adapt your working hours schedule before the coronacrisis. This question asks about the extent to which you can decide when to work, not the number of hours that you work. Please choose the answer that compares best to your work arrangement.	– My schedule was set by my company/organization with no possibility for change. – I could choose when to work within limits, and I have to let my employer know at least one week in advance. – I could choose when to work within limits, and I can decide about it on very short notice. – I could fully determine my own schedule. – I did not work before the coronacrisis.
Telecommuting. Did you have the option to work from home before the coronacrisis? With this we mean that you did not work at your employers' office, but at home. We are not concerned with whether or not you use this option.	– No. – Yes, less than one day per week. – Yes, about one day per week. – Yes, more than one day per week. – I did not work before the coronacrisis.
Work Meaning. How often does your job offer you an opportunity to have a positive influence on your community or on society?	– Never or almost never. – Sometimes. – Often. – Very often or always.
Wages. What was your average gross monthly wage in 2020 in the job about which you also answered the preceding questions? Please respond in integers, so without dots or comma's.	– Integer. – I do not know. – I do not want to disclose this information.
Wage ranges (asked only if wage not disclosed). In what range was the average gross monthly wage in 2020 situated in the job about which you also asked the preceding questions?.	– Less than 650 euro – 650-1.300 euro. – 1.300-2.000 euro. – 2.000-3.000 euro. – 3.000-4.000 euro. – 4.000-6.000 euro. – 6.000 euro or more.
Personal Contact. How much personal contact with clients and colleagues does your job require?	– No contact is needed. – Little contact is needed (less than one day per week). – Contact is sometimes needed (about one day per week). – Contact is often needed (more than one day per week). – Contact is needed all the time.
Computer. How much time (in %) do you spend on an average work day working from a computer?	– Integer: 0-100.

Notes. Survey questions appended to the June 2021 wave of the LISS survey. A complete codebook can be found at https://www.dataarchive.lissdata.nl/.

Work Meaning. We also construct the baseline values for work meaning by re-coding respondents' answers to our survey question. Those respondents that reported "Never or almost never" or "Sometimes" having the ability to positively contribute to society got assigned a baseline job without work meaning – the others got assigned a baseline job with work meaning.

Wages. We construct monthly gross wages for the baseline job by combining questions about wages and weekly hours. We first scale weekly hours into monthly values and use these to calculate hourly wages. We then multiply these hourly wages by the hypothethical number of weekly hours shown in the experiment (20, 32 or 38). Wages for the alternative job are calculated by varying the baseline values through a multiplication with a parameter $\theta \sim \mathcal{N}(1, \sigma^2)$. We remove extreme draws by truncating this parameter to be between 0.75 and 1.25. We chose $\sigma^2 = 0.008$ to reflect realistic wage offers in the Netherlands. A stylized example of a discrete choice experiment on telecommuting can be seen in Figure A.1.

The Covid Pandemic. The responses to our questions about telecommuting and schedule adaptability at the time of the survey were significantly impacted by the global pandemic (more on this in Online Appendix O.C). We asked respondents about both their pre- and post pandemic levels of workplace flexibility. Based on the significant differences we found in a pre-test and uncertainty about how long-lasting the pandemic levels would be, we decided to use pre-pandemic levels of job attributes to construct the hypothetical job positions.

Figure A.1: Hypothetical Job Choice Experiment

Imagine applying for a new job and having to choose between the following two positions. Please assume that both positions are equal in all aspects except for those highlighted below. Please indicate which job you would prefer.

	Job A	*Job B*
Weekly working hours	38	38
Possibility to change work schedule	No Possibilities	No Possibilities
Possibility to telecommute	**Yes**	**No**
Positive impact on society or community	Regularly	Regularly
Monthly gross wage (in €)	**€1,300**	**€1,400**
Preferred Job	☐	☐

B. Sample Descriptives

We now provide descriptive statistics for the samples we use from the *Longitudinal Internet Studies for the Social Sciences* (LISS) and the *International Social Survey Programme* (ISSP). Table B.2 shows that men and women are relatively comparable in terms of their age, family status, and education. Panel A shows that men are slightly older and higher educated, but differences are small. These values are furthermore generally in line with the Dutch population.[19] Panel B shows a similar set of demographics for the ISSP sample. These statistics are all weighted using sample weights provided in the ISSP. We find only small differences in most demographics. These are nonetheless statistically significant in several cases because of the large sample size. We do not however expect these differences to drive our results.

[19] A detailed comparison to demographics calculated by Statistics Netherlands was provided by CentER data and can be found in the replication files ('PanelCompositionLISS.pdf').

Table B.2: Sample Demographics

Panel A. The LISS

	Total	Men	Women	P-value
Observations				
Number of obs.	1813	849	962	.
Age				
Mean	46.51	47.32	45.79	0.00
Std dev	11.39	11.56	11.56	.
Family				
Married (%)	0.53	0.55	0.52	0.29
Children (%)	0.49	0.48	0.50	0.43
Education				
Years of Schooling (mean)	15.82	15.70	15.93	0.07
Years of Schooling (std dev)	2.57	2.40	2.40	.
Amenities				
Schedule Adaptability (mean)	0.37	0.41	0.33	0.00
Schedule Adaptability (std dev)	0.48	0.47	0.47	.
Telecommuting (mean)	0.28	0.34	0.23	0.00
Telecommuting (std dev)	0.45	0.42	0.42	.
Meaning (mean)	0.41	0.33	0.48	0.00
Meaning (std dev)	0.49	0.50	0.50	.

Panel B. The ISSP

	Total	Men	Women	P-value
Observations				
Number of obs.	13077	6232	6845	.
Age				
Mean	42.54	42.69	43.30	0.00
Std dev	10.63	10.81	10.55	.
Family				
Married (%)	0.55	0.56	0.53	0.00
Children (%)	0.36	0.33	0.38	0.00
Education				
Years of Schooling (mean)	1.93	1.85	1.99	0.00
Years of Schooling (std dev)	0.66	0.67	0.65	.
Amenities				
Schedule Adaptability (mean)	0.39	0.42	0.38	0.00
Schedule Adaptability (std dev)	0.49	0.49	0.49	.
Telecommuting (mean)	0.25	0.25	0.25	0.38
Telecommuting (std dev)	0.43	0.44	0.43	.
Meaning (mean)	0.30	0.26	0.34	0.00
Meaning (std dev)	0.46	0.44	0.47	.

Notes. Sample demographics for the LISS and ISSP samples. The final column shows the p-values for a t-test of equal means by gender.

C. Bell Estimator

This Appendix presents the first-stage results of the Bell (2024) estimator. We use years of education as an outcome variable (see section 5.3). This regression does not have a structural interpretation, but as noted in Bell (2024), if wages, work meaning, and workplace flexibility are all forms of compensation that a worker enjoys, the coefficients should be positive. This is indeed what we find – as documented in Table C.3. We also find, as expected, that values are generally increasing in wage deciles.

Table C.3: First-Stage Results of Bell (2024) Estimator

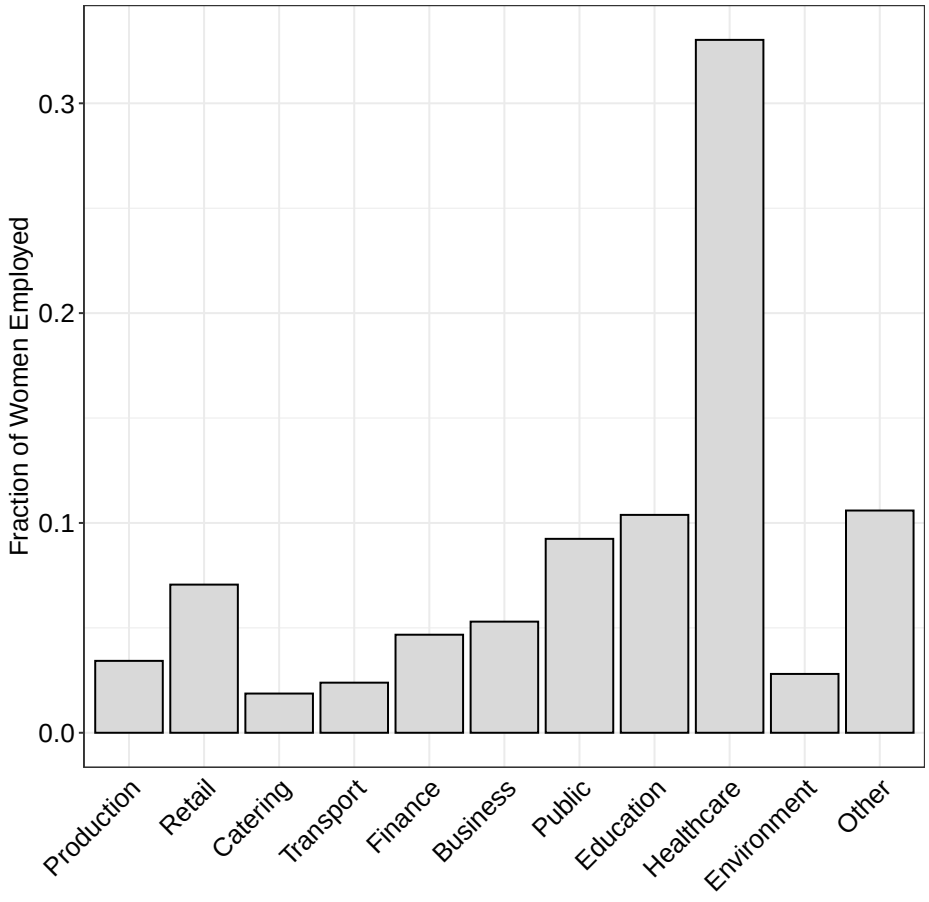
	International Sample (ISSP)	*the Netherlands (LISS)*
Meaning	**1.148**	**2.855**
	(0.063)	(0.225)
Schedule Adaptability	**0.749**	**2.042**
	(0.063)	(0.273)
Telecommuting	**0.760**	0.544
	(0.070)	(0.302)
Wage Deciles		
2nd Decile	**2.170**	**13.113**
	(0.123)	(0.374)
3rd Decile	**2.445**	**13.828**
	(0.122)	(0.373)
4th Decile	**2.739**	**13.841**
	(0.121)	(0.308)
5th Decile	**2.957**	**13.613**
	(0.121)	(0.468)
6th Decile	**3.133**	**13.984**
	(0.122)	(0.403)
7th Decile	**3.639**	**14.163**
	(0.122)	(0.368)
8th Decile	**3.913**	**14.025**
	(0.123)	(0.420)
9th Decile	**4.355**	**14.000**
	(0.123)	(0.391)
10th Decile	**4.794**	**14.464**
	(0.126)	(0.446)
Country FE	Yes	NA
Observations	13077	1811
R^2	0.946	0.910

Notes. Results from the first stage of the Bell (2024) estimator shown in equation (5). Bold faced estimates are significant at the 95% level.

D. Employment by Gender

This figure shows the distribution of female employment over sectors.

Figure D.2: Female Employment by Sector (LISS)



Notes. Distribution of female employment over different sectors in the Netherlands (LISS). Observations with missing sectors and sectors with the smallest employment share (agriculture, mining, and construction) omitted. The figure retains 90.76% of female employment.

For Online Publication

Online Appendix To

Work Meaning and the *Flexbility Puzzle*

Thimo De Schouwer Iris Kesternich

O.A. The *International Social Survey Programme* Sample

Table O.A.1: Sample Demographics: Countries in ISSP

Country	Frequency
AT	325
AU	98
BE	774
CH	479
CL	228
CN	301
CZ	421
DE	649
EE	403
ES	466
FI	432
FR	397
GB	615
GE	272
HR	275
HU	267
IL	397
IN	103
IS	305
JP	68
LT	251
LV	345
MX	221
NO	578
NZ	81
PH	244
PL	430
RU	375
SE	424
SI	277
SK	286
SR	329
TW	730
US	598
VE	219
ZA	414
Total	13,077

Notes. Number of observations by country in the ISSP. Country prefixes in ISO Code.

O.B. Measuring Workplace Flexibility

As pointed out in Goldin (2014), workplace flexibility is a complicated and multidimensional concept. The definitions that have been used in the literature are thus somewhat divergent. Most studies typically consider some form of scheduling adaptability and / or the option to work from home. We briefly compare our measures to those used in Mas and Pallais (2017), Mas and Pallais (2020) and Maestas et al. (2023).

Telecommuting. We ask respondents how often they have the *option* to work from home (see Table 1). This question is similar to those in Mas and Pallais (2017) and Maestas et al. (2023), who also measure *options* to work from home using a binary indicator. In Mas and Pallais (2020), working from home is measured through two questions about *take-up*. The first is from the General Social Survey (GSS), and asks whether the respondents work from home often. The second is from the Understanding America Survey (UAS), and asks whether individuals have a formal work-from-home arrangement. While these questions are different in asking about take-up instead of opportunity, they lead to similar fractions of workers in work-from-home arrangements.

Schedule Adaptability. To capture schedule adaptability, we ask respondents whether they can determine their own schedule, or whether their schedule is set by their employer (see again Table 1). This question is close to that in Maestas et al. (2023), who ask about how work arrangements are set, ranging from schedules being entirely decided on by the employer to employees having full discretion. The two variables in Mas and Pallais (2017) capture very similar concepts. One variable measures whether workers are able to make their own schedule, another captures employer-side discretion over hours, by describing a position where hours may vary from week to week and employees are given their schedule a week in advance. The measures discussed in Mas and Pallais (2020) similarly capture both sides of schedule adaptability. They use a direct question about whether employees consider their job to have a flexible schedule from the GSS, which captures employee-side discretion. They also use a question on having an irregular, on-call, or split shift schedule (also from the GSS), and a question about knowing one's schedule two weeks or less ahead of time (from the UAS), capturing employer-side discretion.

Note that the concept of *alternative work arrangements* in Mas and Pallais (2020) is broader than schedule flexibility. They also study questions about the type of contract and self-employment (in the GSS) and whether employees are salaried (in the UAS). However, when referring to the flexibility puzzle, they also only mention schedule and location flexibility.

O.C. The COVID Pandemic and Workplace Flexibility

This Appendix highlights differences in workplace flexibility before and during the COVID pandemic. Based on a similar exercise using a test sample, we chose to show the pre-pandemic values as respondents' baseline amenities in the discrete choice experiment.

Table O.C.1: Workplace Flexibility and the COVID Pandemic

	Schedule Adaptability	Telecommuting
Before Pandemic	0.37	0.28
After Pandemic	0.39	0.45

Notes. This table shows the average levels of schedule adaptability and telecommuting options in the Netherlands (LISS sample) before and during the COVID-19 pandemic.

The differences in schedule adaptability and telecommuting are summarized in Table O.C.1. We find that the fraction of respondents with the ability to adapt their schedules increased only slightly from 0.37 to 0.39. On the other hand, we see a large increase in telecommuting around the global pandemic. Before the pandemic only 28% of respondents report working a job with the ability to telecommute, during the pandemic this percentage fraction increased to 45%. Since at the time of the survey it was unclear how long lasting these changes would be, we decided to base respondents' baseline jobs on the pre-pandemic numbers in the discrete choice experiment.

O.D. Discrete Choice Model: Full Results and Robustness

This Appendix shows robustness of the willingness to pay estimates presented in Table 3 of section 5.1.1. We first show the full set of pre-transformation parameter estimates for our main specification (Table O.D.2). Then we show that results are robust to changes in the model specification (Table O.D.3), the sample (Table O.D.4), and to allowing for individual heterogeneity in the valuation (Tables O.D.5 and O.D.6).

O.D.1 Main Specification: Pre-Transformation Results

Table O.D.2: Discrete Choice Model (Main Specification)

	Men	Women
Workplace Flexibility		
Schedule Adaptability	**0.725**	**0.693**
	(0.091)	(0.083)
Telecommuting	**0.639**	**0.603**
	(0.075)	(0.074)
Work Meaning	**0.619**	**0.734**
	(0.077)	(0.071)
Part-Time Work		
Long Part-Time	**-0.628**	-0.100
	(0.115)	(0.096)
Short Part-Time	**-1.953**	-0.331*
	(0.188)	(0.112)
Wages(log)	**12.618**	**7.760**
	(0.571)	(0.383)
Parenthood Interaction		
Workplace Flexibility		
Child × Schedule Adaptability	0.054	0.094
	(0.127)	(0.117)
Child × Telecommute	0.128	0.197
	(0.107)	(0.101)
Work Meaning		
Child × Work Meaning	-0.038	-0.193
	(0.108)	(0.101)
Part-Time Work		
Child × Long PT	-0.304	**0.425**
	(0.164)	(0.144)
Child × Short PT	**-0.297**	0.146
	(0.143)	(0.080)
Constant	**-0.788**	**-0.970**
	(0.044)	(0.040)
Observations	13600	15408

Notes. Utility function estimates from equation (3). Standard errors in parentheses are clustered by individual. Bold faced estimates are significant at the 95% level.

O.D.2 Alternative Specification I: No Interactions

The first robustness check consists of simplifying the specification of the utility function by omitting the interactions terms between amenities and parenthood. Table O.D.3 shows that excluding the interactions yields comparable differences between men and women, and leads to the same “Flexibility Puzzle".

Table O.D.3: Willingness to pay (no interaction terms)

	Men	Women
Workplace Flexibility		
Schedule Adaptability	**0.058**	**0.091**
	(0.005)	(0.008)
Telecommuting	**0.054**	**0.087**
	(0.004)	(0.007)
Work Meaning	**0.047**	**0.079**
	(0.004)	(0.007)
Part-Time Work		
Long Part-Time (32h)	**-0.063**	0.013
	(0.007)	(0.009)
Short Part-Time (20h)	**-0.192**	**-0.027**
	(0.013)	(0.010)
N	13600	15408

Notes. Willingness to Pay for job amenities and part-time work. Utility function as in equation (3) but without interactions. Estimates transformed using equation (4). Standard errors in parentheses are clustered by individual and transformed using the delta method. Bold faced estimates are significant at the 95% level.

O.D.3 Alternative Specification II: No Dominated Choices or Speeders

The next robustness check considers what happens if we were to remove inattentive individuals. We define them as individuals that either (i) speeded through the survey (completion time of less than 3 minutes), or (ii) chose dominated job options (jobs with worse amenities *and* lower wages). Results can be seen in Table O.D.4. Again, these results are very similar to the ones presented in our main specification in Table 3. We see that the willingness to pay for all amenities increases slightly, which is to be expected with the removal of dominated choices, but that all patterns remain the same.

Table O.D.4: Willingness to Pay (cleaner sample)

Panel A. No Children

	WtP (% wage)		**WtP (€ income)**	
	Men	Women	Men	Women
Workplace Flexibility				
Schedule Adaptability	**0.067**	**0.098**	**223.617**	**250.528**
	(0.007)	(0.011)	(24.752)	(28.605)
Telecommuting	**0.065**	**0.096**	**218.813**	**246.066**
	(0.007)	(0.010)	(21.989)	(25.935)
Work Meaning	**0.066**	**0.110**	**221.018**	**283.281**
	(0.007)	(0.009)	(22.643)	(24.170)
Part-Time Work				
Long Part-Time (32h)	**-0.055**	-0.018	**-182.696**	-45.082
	(0.011)	(0.014)	(36.826)	(36.414)
Short Part-Time (20h)	**-0.177**	**-0.060**	**-593.652**	**-153.566**
	(0.019)	(0.017)	(64.706)	(44.693)

Panel B. Children

	WtP (% wage)		**WtP (€ income**	
	Men	Women	Men	Women
Workplace Flexibility				
Schedule Adaptability	**0.074**	**0.106**	**247.204**	**272.787**
	(0.008)	(0.012)	(26.158)	(29.623)
Telecommuting	**0.075**	**0.111**	**251.758**	**283.796**
	(0.007)	(0.011)	(23.106)	(27.200)
Work Meaning	**0.060**	**0.094**	**201.868**	**240.377**
	(0.007)	(0.010)	(22.406)	(26.444)
Part-Time Work				
Long Part-Time (32h)	**-0.075**	**0.034**	**-252.774**	**86.986**
	(0.012)	(0.015)	(40.292)	(38.096)
Short Part-Time (20h)	**-0.207**	**-0.032**	**-692.586**	**-83.137**
	(0.016)	(0.012)	(54.716)	(31.408)
N	10576	11280	10576	11280

Notes. Willingness to Pay for job amenities and part-time work. Utility function as in equation (3) but with a cleaner sample that removes speeders and dominated choices. Estimates transformed using equation (4). Standard errors in parentheses are clustered by individual and transformed using the delta method. Bold faced estimates are significant at the 95% level.

O.D.4 Alternative Specification III: Random Coefficient Model

We now allow for preference heterogeneity by using a mixed logit model. Looking at the coefficient estimates and standard deviations in Table O.D.5, we see that preference heterogeneity is important for all amenities. The Willingness to Pay point estimates are presented in Table O.D.6 and are generally comparable to those in our main model. We find that women still value all forms of workplace flexibility higher than men, but differences are a bit smaller – particularly for telecommuting – and not always significant statistically. We also still find that women with children value workplace flexibility more and work meaning less than women without children. One important difference is that men demand an even larger wage increase when working part-time than in our main specification. An important reason for this result is that idiosyncratic differences in the valuation of part-time work are particularly large, as captured by the standard deviations on the part-time coefficients being multiples of those on the other variables.

Table O.D.5: Discrete Choice Model (Mixed Logit)

	Men	Women
Mean Valuation		
Workplace Flexibility		
Schedule Adaptability	**0.796**	**0.816**
	(0.145)	(0.137)
Telecommuting	**0.938**	**0.827**
	(0.137)	(0.139)
Work Meaning	**0.571**	**1.273**
	(0.128)	(0.130)
Part-Time Work		
Long Part-Time (32h)	**-1.409**	-0.364
	(0.269)	(0.240)
Short Part-Time (20h)	**-7.340**	**-3.050**
	(1.444)	(0.593)
Wages(log)	**19.824**	**16.570**
	(1.081)	(0.854)
Parenthood Interaction		
Workplace Flexibility		
Child × Schedule Freedom	0.241	**0.382**
	(0.202)	(0.180)
Child × Telecommute	0.213	0.306
	(0.180)	(0.186)
Work Meaning		
Child × Meaning	0.134	-0.154
	(0.174)	(0.170)
Part-Time Work		
Child × Long PT	**-1.022**	**1.320**
	(0.394)	(0.365)
Child × Short PT	-0.835	**0.986**
	(0.694)	(0.359)
Standard Deviation		
Workplace Flexibility		
Schedule Adaptability	**1.332**	**1.505**
	(0.238)	(0.186)
Telecommuting	**1.784**	**2.031**
	(0.163)	(0.149)
Work Meaning	**1.555**	**1.654**
	(0.147)	(0.124)
Part-Time Work		
Long Part-Time (32h)	**2.729**	**2.810**
	(0.371)	(0.302)
Short Part-Time (20h)	**6.018**	**8.597**
	(0.854)	(0.908)
Observations	13600	15408

Notes. Utility function estimates from equation (3). Coefficients allowed to vary according to normal distribution. Standard errors clustered by individual. Bold faced estimates are significant at the 95% level.

Table O.D.6: Willingness to Pay (Mixed Logit)

Panel A. No Children

	Men	Women
Workplace Flexibility		
Schedule Adaptability	**0.039**	**0.048**
	(0.007)	(0.007)
Telecommuting	**0.046**	**0.049**
	(0.006)	(0.008)
Work Meaning	**0.028**	**0.074**
	(0.006)	(0.007)
Part-Time Work		
Long Part-Time	**-0.074**	-0.022
	(0.014)	(0.015)
Short Part-Time	**-0.448**	**-0.202**
	(0.108)	(0.041)

Panel B. Children

	Men	Women
Workplace Flexibility		
Schedule Adaptability	**0.051**	**0.070**
	(0.007)	(0.008)
Telecommuting	**0.056**	**0.066**
	(0.006)	(0.008)
Work Meaning	**0.035**	**0.065**
	(0.006)	(0.007)
Part-Time Work		
Long Part-Time	**-0.130**	**0.056**
	(0.016)	(0.015)
Short Part-Time	**-0.510**	**-0.133**
	(0.092)	(0.043)
N	13600	15408

Notes. Willingness to Pay for job amenities and part-time work. Utility function as in equation (3) estimated with mixed logit. Coefficients allowed to vary according to normal distribution. Estimates transformed using equation (4). Standard errors in parentheses are clustered by individual and transformed using the delta method. Bold faced estimates are significant at the 95% level.

O.E. Full-Time Workers

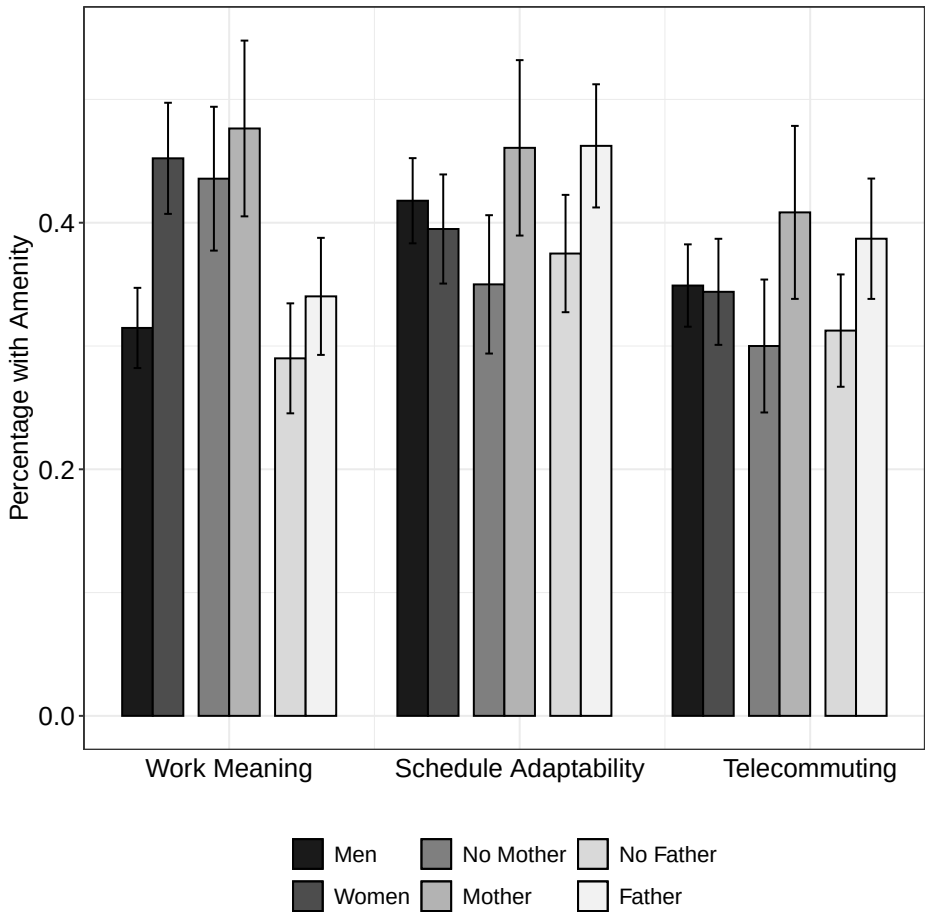
The Netherlands is characterized by a large fraction of part-time workers, particularly among women. We thus remove the group of short part-time workers (those that work less than 32 hours per week) from the sample. We decided to remove only short part-time workers, because this allows us to retain a sizable fraction (40 to 50%) of women, both with and without children. Removing also the group of women that works long part-time positions (32 to 38) makes the sample too selective, as only 13% of women with children works these hours in the Netherlands. See also Albrecht et al. (2004) for earlier work on the significance of selection into full-time employment of women in the Netherlands

We first consider the average levels of work meaning and workplace flexibility in the sample of full-time workers in Figure O.E.1. We find that overall the patterns are all the same as those in Figure 2 in the main text. The most important difference is that we find smaller gaps in workplace flexibility between both men and women and between mothers and non-mothers. Whereas in our main sample we find that men had significantly more workplace flexibility, in the more selective sample of full-time workers their levels are close to each-other. We also find that mothers have somewhat more workplace flexibility than women without children. There are two explanations for this result. On the one hand, full-time working women are a selective sample in the Netherlands, with levels of productivity that are likely to be higher than those for women working part-time, allowing them to buy more flexibility. On the other hand, part-time work and workplace flexibility are likely to be substitutes, both allowing more time with the family.

When we look at preferences in Table O.E.7, we still find that women value workplace flexibility more than men, but only the difference in the valuation of telecommuting is significant statistically. This means that the flexibility puzzle still holds, as women value flexibility higher, but obtain slightly lower or the same levels of flexibility than men. We also still find women valuing work meaning higher, and mothers valuing workplace flexibility higher, but work meaning lower, than women without children. However, they also work jobs that are slightly more flexible, so the parenthood dimension to the flexibility puzzle does not hold in the selective sample.

O.E.1 Prevalence

Figure O.E.1: Heterogeneity in Job Amenities (LISS)



Notes. Heterogeneity in the average levels of work meaning, schedule adaptability, and telecommuting in the LISS subsample of full-time workers. Expressed as the percentage of individuals that have the amenity as defined in Section 3.1.

O.E.2 Valuation

Table O.E.7: Willingness to Pay (full-time)

Panel A. No Children

	WtP (% wage)		**WtP (€ income)**	
	Men	Women	Men	Women
Workplace Flexibility				
Schedule Adaptability	**0.051**	**0.057**	**177.480**	**171.054**
	(0.007)	(0.010)	(23.126)	(30.341)
Telecommuting	**0.046**	**0.066**	**159.686**	**196.521**
	(0.006)	(0.009)	(19.433)	(26.837)
Work Meaning	**0.046**	**0.065**	**158.761**	**194.504**
	(0.006)	(0.008)	(20.299)	(24.469)
Part-Time Work				
Long Part-Time (32h)	**-0.053**	**-0.030**	**-186.138**	**-90.855**
	(0.010)	(0.012)	(33.107)	(37.246)
Short Part-Time (20h)	**-0.200**	**-0.222**	**-696.734**	**-663.345**
	(0.018)	(0.029)	(61.223)	(86.175)

Panel B. Children

	WtP (% wage)		**WtP (€ income)**	
	Men	Women	Men	Women
Workplace Flexibility				
Schedule Adaptability	**0.058**	**0.063**	**202.061**	**187.718**
	(0.007)	(0.012)	(23.646)	(37.043)
Telecommuting	**0.060**	**0.082**	**207.327**	**245.453**
	(0.006)	(0.010)	(20.056)	(30.852)
Work Meaning	**0.040**	**0.060**	**139.848**	**178.924**
	(0.006)	(0.010)	(20.317)	(29.780)
Part-Time Work				
Long Part-Time (32h)	**-0.077**	0.009	**-269.132**	27.912
	(0.010)	(0.013)	(34.649)	(40.160)
Short Part-Time (20h)	**-0.234**	**-0.189**	**813.241**	**-564.750**
	(0.015)	(0.019)	(52.133)	(57.691)
N	12560	7536	12560	7536

Notes. Willingness to Pay for job amenities and part-time work. Utility function as in equation (3) on full-time sample. Estimates transformed using equation (4). Standard errors in parentheses are clustered by individual and transformed using the delta method. Bold faced estimates are significant at the 95% level.