

What Is the Price of Freedom? Estimating Women's Willingness to Pay for Job Schedule Flexibility

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I. Introduction

A world survey conducted by the Thomson Reuters Foundation and the Rockefeller Foundation found that the primary concern of working women in the G20 is their work-life balance. This balance is also a severe preoccupation for

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women in developing countries. Also, women remain the primary caregivers in most countries, which generates higher opportunity costs for their time when looking for work.¹ This may cause them to value flexibility more strongly in terms of time at work, which could, in turn, motivate them to accept lower-status jobs with lower wages (see Kleven, Landais, and Søgaaard 2018). But how much are they willing to sacrifice to obtain this added flexibility? To get credible estimates of their willingness to pay for different forms of flexibility, we elicited revealed preferences in a discrete choice experiment for women in the metropolitan area of Bogotá, Colombia. We find a significant willingness to pay for a flexible schedule within a full-time contract but a much lower desire to trade monthly wages for part-time contracts.

Studying preferences for flexible work arrangements using various flexibility measures is particularly important in developing economies where the gender gap in labor force participation is substantially larger than in countries in the Organization for Economic Cooperation and Development (OECD). In Latin America this gap remains at about 30 percentage points (ECLAC/ILO 2019). Furthermore, developing countries have often established relatively rigid labor laws, which have led to a sizeable informal sector, which reaches 50% in Latin America for nonagricultural employment (ILO 2013). Knowing how much demand there is for flexibility would then influence public policies to reduce such rigidity.

The context of Colombia is well suited for such a study. According to the OECD, the gender participation gap in Colombia stands at 22% in 2019, with women's participation standing at 62%. Additionally, 46% of inactive women quit their previous job because of family responsibilities, and 50% did not look for a job for the same reason. Thus, there is a gap in participation in Colombia that appears linked to the family responsibilities women shoulder.

How does this relate to flexibility? Although we found no information on schedule flexibility in surveys, the 2018 Colombian labor force survey (third quarter) shows that while 17% of female workers work fewer than 40 hours, only 9% of male workers do. According to the same survey, women work shorter time schedules than men. The survey indicates that 62% of women work part-time because it is the only work alternative that meets their needs, while 28% of women respond that it is the only alternative they found. This

¹ According to the Ferrant, Pesando, and Nowacka (2014), in Latin America and the Caribbean, women spend more than twice as much time as men in unpaid care work. This figure is similar to the result in Asia, but it is less than in Africa and more than in Europe and North America, although there is still a substantial gap in those regions.

implies that while part-time employment is not selected only because of one's preference, most women who work part-time do seek it.

Informality rates are extremely high in Colombia and are even higher for women (62%) than for men (53%). The gender gap in part-time employment is significantly lower in the informal sector than in the formal sector, suggesting that women appear to obtain other forms of flexibility when working in the informal sector that allow them to work full-time. When asked why they work as self-employed, 14.3% of women in that group responded that they prefer a more flexible schedule.

According to the same labor force survey, women in part-time jobs earn, on average, US\$236.17 and males earn US\$257.19, compared with US\$326.49 for females and US\$324.75 for males in full-time jobs. Thus, the Colombian wage gap between men and women is primarily due to part-time employment. First, women earn less, since part-time employees earn around 25% less than their full-time counterparts. Second, even though the gender gap in wages for those who work full-time is not statistically significant, women who work part-time earn substantially lower wages than men who work part-time. Also, women work more often in informal sector employment, where wages are significantly lower. Torres (2020) and Herrera-Idárraga, López-Bazo, and Motellón (2015) estimate a monthly and hourly earnings gap of around 42% between the informal sector and the formal sector. While we see a similar wage gap within each sector, women's wages suffer because female employment is concentrated in the informal sector. Overall, this suggests that women's need for flexibility comes at a cost in terms of wage. Our study aims at providing a quantitative estimate of that cost.

We first set up a novel and incentivized methodology to estimate job applicants' willingness to pay, similar to the method proposed by Kessler, Low, and Sullivan (2019), but for job seekers instead of employers, as they did. We invited women to participate in a session to prepare curriculum vitae (CVs) and recruited almost 1,500 participants. After a short survey about their demographics and labor situation, we asked them to evaluate 10 different trios of job offers: we told participants that these job offers were fake. To incentivize truthful answers, we informed the participants that they would receive actual job offers that matched their preferences during the experiment. We randomly varied the order in which we presented the offers (within a given screen) and the order in which we showed each screen. We also changed the relative hourly wage of the flexible schedule and part-time positions vis-a-vis full-time jobs, thus varying flexibility in schedule and time.

As specified above, and differently than a vignette experiment but in the same spirit as Kessler, Low, and Sullivan (2019), we told participants that we

would use these answers to help pair them with real job offers that matched their interests, thus incentivizing true reporting.² Applicants were then able to prepare their CVs. Then they received a list of job offers, all obtained from a popular job-posting website, that matched the occupation and salary range they had specified in the experiment phase of the activity. We did not assign them more or less flexible job postings depending on their preferences, since we found a limited number of such ads on the website we employed. While this is costlier than producing fake job advertisements and evaluating the number of responses to each of them, our approach gives us much greater statistical power, since the same woman's responses are reported for 10 different choice experiments. It also allowed us to focus on the labor supply side without worrying about the level of demand at the elicited prices. Finally, it involves less lying to subject participants than posting job ads that are not real.

Flexibility can be defined in many ways: work from home, hours worked per week, and the working schedule. For example, Silim and Stirling (2014) define flexible work as the "ability of an employee to effectively reconcile commitments in their work and domestic lives" (2). Our study focuses on two aspects of schedule flexibility: whether applicants have control over their schedule (keeping the total hours worked each week constant) and whether employment was full time or part time. Since we randomly altered the relative wages of standard and flexible contracts, we can compare the weight women placed on wages versus flexibility when selecting which ad they preferred. We do so using a conditional logit estimation and the women's observed choices. We then transform these coefficients into measures of willingness to pay for each of our flexible work arrangements.

Although many women in our sample have limited resources, we find a large (around 15% of the country's monthly minimum wage) and statistically significant willingness to pay for a flexible schedule. This result suggests that women value flexibility in terms of schedule. At the same time, we find that the average woman is willing to sacrifice only 26% of full-time monthly wages to work 50% of a full-time schedule. This magnitude suggests that, on average, the amount they are willing to sacrifice every month, while substantial, is nowhere near the reduction in the number of hours that part-time employment gives them. In other words, their willingness to pay for part-time employment is unlikely to be enough to entice private firms to offer part-time contracts without the existence of subsidies. However, we find substantial variation within the population and document that for a minority of participants, the willingness to pay is much

² Eriksson and Kristensen (2014), e.g., present two job offers to participants and ask them to indicate which package they prefer, and through that, they infer the trade-off between wages and fringe benefits.

higher, suggesting that part-time employment may be an attractive solution for only a minority of low-income women. Finally, combining flexibility and part-time employment was particularly unattractive to the respondents: when the number of working hours is already lower, flexible scheduling provides no added benefit. This result may be because flexible schedules within a part-time contract led participants to worry that their employer could ask for a larger number of hours than agreed on.

Our controlled design lets us verify that our results are robust to several alternative explanations. We can show that individuals were careful in their selection and did not simply click on the ad located in a given place on the screen: our results are similar even once we restrict our analysis to those who answered consistently on repeated screens. Finally, since we also randomly altered the order in which the screens appeared, we can check whether our estimates change according to whether the subject made the selection earlier or later. We find that, if anything, as the selection process advanced, the willingness to pay for flexibility, particularly part-time contracts, increased. These results suggest that neither inattention nor boredom drives our findings; if anything, individuals appear to have learned as they progressed through the experiment.

We next explore our two main hypotheses regarding why participants value flexibility. The first hypothesis suggests that women value flexibility because they face time demands related to family tasks. We use several characteristics to proxy for these time demands and find that the need for flexibility is not correlated with willingness to pay for flexible schedules but is correlated with that for part-time employment. On the other hand, we use proxies for affordability and find that willingness to pay for flexible work arrangements is highest for those with more resources. The opposite is true for part-time employment. Finally, we see a significantly greater willingness to pay for all types of flexibility among women who reported that a flexible schedule was an important criterion when selecting employment relative to those who did not. This result suggests substantial differences in how different types of women value flexibility.

Our paper contributes to an extensive literature that shows that women are particularly limited in their labor market participation because of their important role in raising children and performing household tasks. For example, many studies show that increased child care provision could increase female labor force participation and employment in diverse contexts. Positive impacts were documented by Baker, Gruber, and Milligan (2008) in Canada. In Latin America, similar results were obtained by Berlinski, Galiani, and Manacorda (2008) in Argentina; Martínez and Perticará (2017) in Chile; Cardona-Sosa

et al. (2015) in Medellín (Colombia); Barros et al. (2011) in Rio de Janeiro (Brazil); and Hojman and López Bóo (2019) in Nicaragua. Our study suggests that policy alternatives that only allow a better combination of work and household duties, like part-time employment subsidies, are unlikely to have such large impacts. It also highlights that factors other than household duties influence job seekers' desire for flexible work schedules.

Other literature argues that women are happier working fewer hours. The empirical evidence mainly comes from European countries, where women seem to have higher levels of job satisfaction when they have part-time jobs. Very few women who work part-time would like to change their schedules (Booth and Van Ours 2008, 2013). Blau and Ferber (1991) analyzed the career plans and earnings expectations of women and men about to graduate from a US business school and found that women were more concerned than men about flexible hours, pleasant work environments, and comfort. They also find that women plan to work fewer years than men over their lifetimes and about five times more years in part-time schedules than men. Del Boca (2002) asserts that the low levels of female labor participation in Italy are related to the absence of part-time work. In Latin America, Bentancor and Robano (2014) show that Chilean women are willing to pay a cost to obtain this kind of flexibility. Our results do not match these mostly European patterns. Our focus on women with less access to social protection may explain the lower willingness to pay that we observe in Colombia compared with Europe. Our findings also appear to be aligned with the evidence presented by Montero and Rau (2015), who show that there is no evidence in Chile that women in part-time employment are happier than those in full-time jobs. This evidence may suggest that part-time work in developing countries may be less by choice than by obligation.

Four existing studies have estimated willingness to pay similar to ours. Wiswall and Zafar (2017) conducted a hypothetical choice experiment at a large, private US university. They analyze the estimated stated preferences of men and women for different job attributes and find that women, on average, have a higher willingness to pay for jobs with more work flexibility and job stability, while men prefer jobs with higher earnings growth. Mas and Pallais (2017) estimated the willingness to pay for alternative work arrangements in a sample of applicants to a national call center in the United States. Unlike us, they find that individuals on average were not willing to forego any salary to be able to choose their schedule or the number of hours worked, mainly because most applicants prefer a full-time job (40 hours a week). However, they also find that a fraction of applicants have a considerable willingness to pay. Also, applicants do not like working overtime and do not like alternatives in which the employer has the discretion to set the schedule. However, the study finds that

applicants are willing to pay 8% of their salary to access a “working from home” schedule, a smaller amount than our estimate for a flexible schedule. Their results may differ from ours in part because they focused on call center employment, in which schedules may already involve nights and weekends. In the same line, Maestas et al. (2018) use evidence from a series of stated-preference experiments in the United States to estimate workers’ willingness to pay for different job attributes and then validate them with actual job choices. They find that individuals are willing to forego 9% of their earnings for the possibility of setting one’s schedule.

In a recent paper, He, Neumark, and Weng (2019) explore compensating differentials for job flexibility using a field experiment conducted on a Chinese job board. They generated random variation in ads that differ in time and workplace flexibility. They also vary the salary and collect other information on job seekers’ willingness to trade off pay and job flexibility in the specific jobs they apply for. They find strong evidence that workers value job flexibility, especially regarding the place of work, similar to Bloom et al. (2014). However, their job applicants are IT workers in China, who may have a higher demand for flexibility than the average worker.

Table 1 summarizes estimates reported in the literature. As we can see from the table, our study’s main contribution is to present the first evidence from a developing country looking at participants with lower levels of education. Our estimate of around 18% is in the upper range estimated in this literature, even for studies that have estimated separate willingness to pay for men and women. Only the study of IT workers in China obtained larger estimates, but they did not offer exact wages, so they cannot transform their estimates into a percentage change. This comparison hints that the demand for flexibility might be particularly robust for women in developing countries, even among low-skill workers.

TABLE 1
SUMMARY OF EXISTING ESTIMATES OF WILLINGNESS TO PAY FOR FLEXIBILITY

Study	Location	Skill Level/Occupations	Gender	Estimates
Wiswall and Zafar 2017	US	University graduates	Both	7.3% for women and 1.1% for men
Mas and Pallais 2017	US	Call center employees	Both	0 for men and women for flexible schedule or hours, but 12.9% for women and 7.3% for men to work from home
Maestas et al. 2018	US	Full population	Both	9%; same for women and men
He, Neumark, and Weng 2019	China	IT workers	Both	No formal estimate available separately for men and women; married women show largest willingness to pay at 5,000–10,000 CNY

Our paper is organized as follows: the next section details the experimental setup, while section III presents the data and empirical methods employed. We then present our results, and the final section concludes.

II. Experimental Setup

We conducted a discrete choice experiment to estimate preferences for flexible contracts among women from Bogotá. We presented nearly 1,500 participants a series of job offers with varied working schedules. We varied the total number of hours worked per week (part time or full time) and the schedule (flexible or not flexible). Our experimental design allows us to observe revealed (rather than declared) preferences regarding working schedules. This approach permitted us to be truthful to participants about the fictitious character of the job advertisements while maintaining incentives for them to truthfully reveal their preferences.

A. Workshop Context

The experiment took place in a CV construction workshop that we developed to mimic the job search environment in which participants were making decisions. We invited women to participate in the workshops across 12 localities in Bogotá. The workshops were held in various local government offices, such as the House of Equality of Opportunities in the Women's Secretary Office, the Institute for the Protection of Children and Youth, and Community Development Centers from the Department of Social Integration. The experimental sessions took place from June 2018 to February 2019. Women were recruited through our own advertisements and those of the government agencies listed above.

An experimenter read the informed consent to each participant as she arrived at the workshop site, explaining the purpose, steps, duration, risks, and benefits of participating. After the participant agreed to and signed the consent, another experimenter gathered her information using an online questionnaire that collected demographic characteristics, occupation status, and preferences regarding employment characteristics.³ The questionnaire was administered on tablets and cell phones.

The workshop then continued in a room where computers were available for all participants. The experimenter first explained the difference between a flexible schedule and part-time employment. Real examples were given to help women understand the differences between each type of flexibility. Participants

³ The questionnaire is available at <https://docs.google.com/forms/d/e/1FAIpQLScU3pZa00g4GXH3sPs9M4diOriORcinw37yz0oDJmsRO5FzRQ/viewform>.

were then asked to select a type of occupation and the desired wage range. On the basis of this information, they were presented with 10 screens in which three job advertisements per screen were offered. They were informed that these advertisements were fictitious but that the information they provided in their selection would later be used to display real advertisements that best matched their preferences, reversing the methodology of Kessler, Low, and Sullivan (2019) for job seekers. Below, we describe exactly how we conducted the experiment.

After they completed the exercise, the workshop continued as a CV construction class via a web page designed for this experiment. The web page gathered information about participants' education, labor market experience, and objectives and formatted it into a professional-looking CV. All of this was mediated by the experimenter, who had received training in producing CVs for this labor market. Once the CV was completed, real job offers posted on one of Bogotá's main search engines (<https://www.empleo.com/>) that matched the occupation and wage range requested by the participant were shown on the screen. The experimenters helped identify the best alternatives according to the women's preferences and skills and sent all of the information about the application process to their email addresses. While we originally planned to use the preferences regarding flexibility indicated by the participant to show either more or fewer part-time employment options, we were unable to do so given the very small number of real job postings that involved some degree of flexibility.

The last two stages of the workshop were designed to increase participation and provide compensation for the attendees. The experimenter devoted most of each session to helping individuals fill out the CV form in our web application. At the end of the workshop, each participant received a printed copy and a digital version of her completed CV, a voucher for public transportation worth US\$5, and flyers with information about job searches and women's protection programs from different district offices.

B. Experimental Details

The experiment started with a guided conversation with participants. After asking women about their understanding of flexibility, the experimenter defined and provided examples of job flexibility in terms of working schedule and the total number of hours worked per week. Table 2 describes what the experimenter included about labor market flexibility.

The experimenter then provided some specific examples. For a salesperson in a shop, a full-time, not flexible schedule would involve working Monday to Saturday from 8 a.m. to 5 p.m., but a part-time, not flexible schedule would

TABLE 2
INFORMATION PROVIDED BY THE EXPERIMENTER ABOUT TYPES OF SCHEDULE FLEXIBILITY

	Description
Schedule:	
Flexible	1. Schedule is agreed on with the employer (time of entry and exit) 2. Employee can work more hours on one day and reduce the number of hours worked on another day of the week 3. Employee can choose the schedule as long as the required number of total hours are worked
Not flexible	1. Schedule of entry and exit is fixed and determined by the employer 2. Employer establishes a fixed number of hours that must be worked each day
Total hours worked:	
Full time	Employee has to work 40 hours a week, every day from Monday to Friday
Part time	Employee has to work 20 hours a week (i.e., in the morning or afternoon only or 2 or 3 days a week)

involve working Monday to Saturday from 8 a.m. to noon or from 2 p.m. to 6 p.m. A full-time, flexible schedule might allow the employee to work from 10 a.m. to 7 p.m. or to work intensively for 4 days a week. Finally, a part-time, flexible schedule was described as working 2 or 3 days a week, selecting which day every week, or working only mornings or afternoons, alternating each week.

The experimenter then instructed participants to continue to the choice experiment, making it clear that the job postings were fictitious. The experimenter also indicated to participants that their choices would be used to select real job postings that match their preferences at the end of the session.⁴

Participants had to choose the sector (labor market activities) and their expected salary range (US\$260–US\$327, US\$327–US\$408, and US\$408–US\$507).⁵ The first salary range is close to the minimum wage, and the other two ranges are within reach for individuals with nonprofessional education. The reference wage for all postings will be the upper limit of that range (w), and the random variation in the wages will be a fraction (δ) of that wage, namely, δw .

Participants were then exposed to 10 screens, each of which had three fictitious job postings that differed in terms of schedule flexibility and salary. Each posting refers to a job within the participant's sector and occupation

⁴ One could be afraid that incentivizing choices in this way would lead participants to avoid types of jobs where they may think the offer is limited, thus biasing our estimates. However, we see this as not very likely, since women picked, on average, high ranges of wages, which would have limited their search even more than issues related to flexibility.

⁵ In Colombian pesos, this corresponded to 800,000–1,000,000 COP, 1,000,001–1,250,000 COP, and 1,250,001–1,550,000 COP. The labor market activities that we included in the experiment were administrative and finance, archival, sales and telemarketing, education, repairing and installations, logistics and distribution, maintenance, marketing, processes and operations, health services, receptionist services, secretary services, customer service, cleaning and surveillance, and technology services (systems).

of choice. The ads contained the name and general description of the position, as well as the schedule and salary. They were all said to be from a downtown firm, so the location was kept fixed. The postings did not include any other information regarding the firm or the type or duration of the contract. Figure 1 presents one of the screens with the job offers that was shown to women in the experiment.

The baseline job posting was always conceived as full-time employment earning w per month and part-time employment earning $w/2$, irrespective of the flexibility. Three screens compared ads for full-time/not flexible, full-time/flexible, and part-time/not flexible jobs, varying the wage of the full-time, flexible employment but keeping the other two alternatives at the same rate. Three screens compared the same three options but this time altering the wage of the part-time posting while keeping it fixed for the two full-time jobs. Finally, three additional screens asked participants to choose from ads for full-time/not flexible, part-time/not flexible, and part-time/flexible jobs, altering the relative wage of the last option while keeping the first two fixed. The wages were varied according to a set of four δ_1 to δ_4 ; the first three were uniformly employed in all other sets of three screens, while the fourth was used only for the first set of comparisons (see table 3 for an example). Participants were also able to select "I am not interested in any offer" if they did not find any of the offers listed attractive.

We randomized by individual the order that each of the three offers within each screen was displayed and the order of appearance of all 10 screens by week. This allows us to check for inattention in the way the answers were provided. In addition, we changed the values of δ for every week, ranging from 0% to 20% over the course of the experiment.

III. Empirical Methodology and Data

Our experimental design allows us to determine women's preferences between different levels of scheduling flexibility for jobs offered at different salaries. In other words, this approach allows us to measure the willingness to pay (or sacrifice) in terms of salary for a more flexible job alternative.

A. Empirical Methodology

Our data set consists of a panel of 30 job postings for each individual. For each posting, we have information about the salary that was offered, whether the employment was part time or full time, whether it was flexible, the screen on which it appeared, and its position on the screen. We also know whether the posting was preferred.

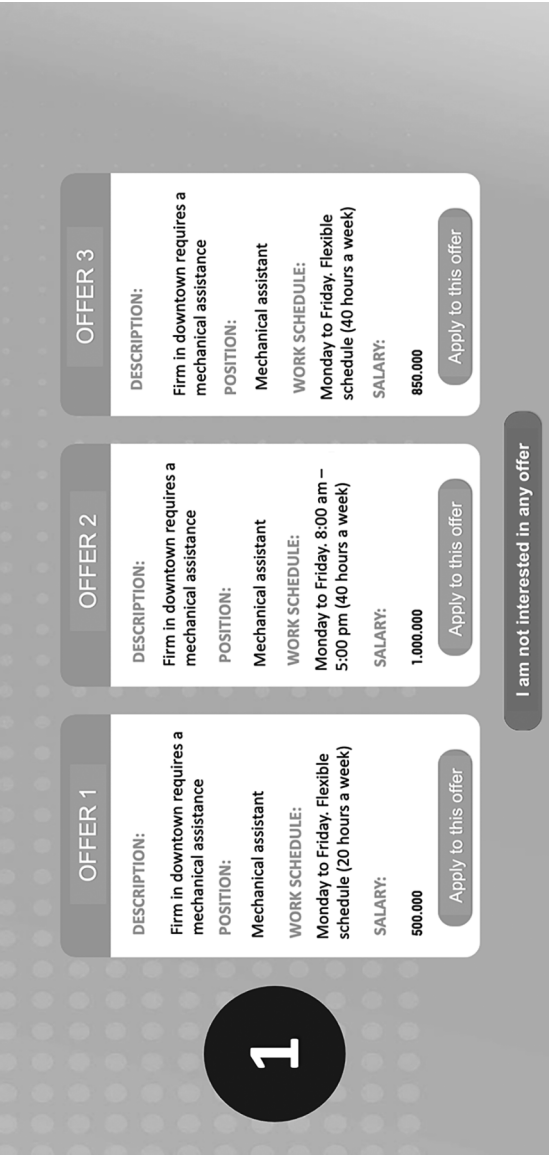


Figure 1. Sample of a screen with job offers presented to women in the experiment. A color version of this figure is available online.

TABLE 3
EXAMPLE OF CHOICE EXPERIMENT REPORTED IN THE SCREENS

	Job Ad 1	Job Ad 2	Job Ad 3
Screen 1:			
Time	Full	Full	Part
Schedule	Not flexible	Flexible	Not flexible
Salary (COP)	1,000,000	1,000,000	500,000
Screen 2:			
Time	Full	Full	Part
Schedule	Not flexible	Flexible	Not flexible
Salary (COP)	1,000,000	940,000	500,000
Screen 3:			
Time	Full	Full	Part
Schedule	Not flexible	Flexible	Not flexible
Salary (COP)	1,000,000	880,000	500,000
Screen 4:			
Time	Full	Full	Part
Schedule	Not flexible	Flexible	Not flexible
Salary (COP)	1,000,000	1,000,000	500,000
Screen 5:			
Time	Full	Full	Part
Schedule	Not flexible	Flexible	Not flexible
Salary (COP)	1,000,000	1,000,000	470,000
Screen 6:			
Time	Full	Full	Part
Schedule	Not flexible	Flexible	Not flexible
Salary (COP)	1,000,000	1,000,000	440,000
Screen 7:			
Time	Part	Part	Full
Schedule	Not flexible	Flexible	Not flexible
Salary (COP)	500,000	500,000	1,000,000
Screen 8:			
Time	Part	Part	Full
Schedule	Not flexible	Flexible	Not flexible
Salary (COP)	500,000	470,000	1,000,000
Screen 9:			
Time	Part	Part	Full
Schedule	Not flexible	Flexible	Not flexible
Salary (COP)	500,000	440,000	1,000,000
Screen 10:			
Time	Full	Full	Part
Schedule	Not flexible	Flexible	Not flexible
Salary (COP)	1,000,000	1,000,000	500,000

Note. Boldface text indicates the entry that was altered.

Our underlying model is that the utility woman i receives from job j that was presented in screen s is given by

$$U_{ijs} = \alpha_0 + \alpha_1 X_j - \alpha_2 W_j + \mu_{is} + \varepsilon_{ijs}, \quad (1)$$

where X_j measures the amenities of job j (which include flexibility and time requirements), W_j represents the wage of the job, μ_{is} represents elements that

are constant about woman i and screen s , and ε_{ijs} represents a screen-job-specific utility shock. This is assumed to be *iid*.⁶ A job j would be selected if $U_{ijs} > U_{iks}$ for all other k jobs available on the same screen.

The term Y_{ijs} is a dummy indicating that option j was selected by woman i in screen s . The estimation we can perform is

$$\Pr(Y_{ijs} = 1) = \Pr(\text{Max}(U_{i1s}, U_{i2s}, U_{i3s}) = U_{ijs}). \quad (2)$$

It can then be shown that if ε_{ijs} has an extreme value type I distribution,

$$\Pr(Y_{ijs} = 1) = \frac{\exp(\alpha_0 + \alpha_1 X_{js} - \alpha_2 W_{js} + \mu_{is})}{\sum_{k=1}^3 \exp(\alpha_0 + \alpha_1 X_{ks} - \alpha_2 W_{ks} + \mu_{is})}. \quad (3)$$

We estimate the parameters α using a conditional logit model. We allow the errors to be correlated within screen-by-woman cells.

This procedure excludes all individuals who declared a preference to not receive any offers among those available on the screen. We return to these participants below.

Using these coefficients, we then estimate the willingness to pay for job attribute X_j as the ratio of the value of the coefficient of that attribute (i.e., α_1) to the negative of the coefficient for the wage attribute (i.e., α_2) using the following equivalence:

$$\text{WTP}(X_j) = -\frac{\partial U / \partial X_j}{\partial U / \partial W_j} = -\frac{\alpha_1}{\alpha_2}. \quad (4)$$

We calculate willingness to pay using our point estimates of α_1 and α_2 and compute confidence intervals using the delta method, as programmed in Stata using the WTP (willingness to pay) command.

B. Data

Our data consist of the information collected in the preexperimental survey, the experimental data, and the information provided on the CV that the participants

⁶ We multiply the wage by -1 to more easily calculate the willingness to pay. Clearly, we anticipate that α_2 would be negative, since higher wages would be preferred. We will refer to $-W_j$ as the cost of a job in the tables of results.

prepared during the workshop. We start, in table 4, by describing the characteristics of the 1,487 study participants. The largest age group in our sample was 26–45 years old (39%), a slightly lower fraction were under 25, and fewer than a quarter were over 45. More than half (60%) were single, and 34% were childless, while 27% had dependents at home (either a child under 5 years or an adult who requires permanent care). Nearly half (49%) live more than a 45-minute commute from downtown (where all the fictional jobs in the experiment were located). Educational attainment (coded from the CV rather than self-reported in the interview) was relatively high: almost 50% of the

TABLE 4
DESCRIPTIVE STATISTICS OF THE PARTICIPANTS

Variable	N (1)	Experimental Sample Mean (2)	Bogotá Mean (3)
A. Demographics			
Age 18–25	1,487	.38	.20
Age 26–45	1,487	.39	.46
Age ≥46	1,487	.23	.33
Single	1,386	.60	NA
Childless	1,487	.34	NA
Dependents	1,321	.27	NA
Long commute	1,487	.49	.45
High school dropout	1,487	.16	.25
High school	1,487	.49	.33
Tertiary	1,487	.35	.43
B. Household Characteristics			
Household head	1,321	.30	.31
Household income <800	1,364	.42	.26
Household income 800–1,500	1,364	.43	.26
Household income >1,500	1,364	.15	.48
C. Labor Supply			
Active	1,483	.32	.73
Inactive	1,363	.68	.27
Unemployment spell <8 weeks	895	.50	.31
Flexibility number 1 priority	1,487	.23	NA
Flexibility number 2 or 3 priority	1,487	.42	NA
School holidays	1,487	.13	NA
School holidays + dependents	1,487	.03	NA
D. Offered Wage (Experiment)			
Monthly wage	36,666	311.35	NA
Hourly wage	36,666	2.47	NA

Note. This table compares the mean from the experimental sample to the mean from Bogotá. Column 1 presents the size from the experimental sample. Column 2 shows the mean of each baseline characteristic in the experimental sample. Column 3 presents information from the National Household Survey (Gran Encuesta Nacional de Hogares) from Departamento Administrativo Nacional de Estadística and corresponds to the third trimester of 2019. The sample consists of women from our target age range (18–65 years old). NA = not available (information not collected in the National Household Survey).

sample had obtained their high school diploma, 16% had less education than that, and almost 35% reported some tertiary education. Column 3 of table 4 presents, as a reference, the mean for some of these attributes in Bogotá for the population of women from 18 to 65 years old, according to the employment household survey. It is noteworthy that our experiment oversamples the youngest age group, the commuting time to work of employed women in Bogotá is similar to the sample of participants, and a larger percentage of women in Bogotá are school dropouts or have tertiary education in comparison to our sample.

Almost a third of the sample is the head of their household, both in our sample and in the population of Bogotá. Nearly half (42%) of the households have a total income below our lowest wage range (800,000 COP), while a similar fraction has a household income within the range of wages we report (800,000–1,500,000 COP), and 15% have incomes above that threshold. These numbers show that our sample consists of women from households with lower incomes relative to households in Bogotá.

Panel C summarizes our participants' labor situation. One-third of the sample actively participates in the labor force, while 68% does not. In contrast, women of this age range in Bogotá are mostly active in the labor market. Of those who are looking for work, 50% have been unemployed for fewer than 8 weeks. When asked about the main factors driving their preferences for jobs (where we specified the following alternatives: location, salary, schedule, available free time, coworkers, and the relationship with the boss), 23% reported that a flexible schedule was their most important criteria, while 42% declared that it was their second or third priority. Finally, 13% of the sample participated in the workshop during school holidays, and 3% took part during school holidays and had dependent family members at home.

Note that we have no data on the actual job postings women applied to and whether they included benefits such as schedule flexibility or the wages they offered. We also do not have information on the employment women held in the past and whether it involved some schedule flexibility.

Panel D shows the average offered wage for each woman-screen-job triplet. The average monthly wage was US\$311.35, while the average hourly wage was US\$2.47.

Before presenting our results, table 5 describes the patterns of responses of women in the experiment. We find that participants declared that they were not interested in any of the job offers presented in only 5% of the screens. The type of ad selected most often is full time/flexible (46%), followed by full time/not flexible (35%). Finally, we find that the left, middle, and right options were selected with almost the same probability, which indicates that the selection

TABLE 5
PROBABILITY OF SELECTING AN AD

	Percentage	N
A. By Type of Flexibility Offered		
Full time/not flexible	35.45	9,584
Full time/flexible	46.05	13,068
Part time/not flexible	21.28	13,403
Part time/flexible	10.66	4,154
No interest	5.01	13,403
B. By Position on the Screen		
Left	31.32	13,403
Middle	31.85	13,403
Right	31.67	13,403

Note. Panel A shows the probability that an ad was selected depending on the type of contract it featured; *N* corresponds to the total number of times that the contract type appeared in all of the screens. Panel B shows the probability of selecting offers that were located in the left, middle, and right of the screen; *N* in this panel accounts for the total number of screens in our sample.

appears to have been made deliberately and not by simply pointing to the same point on the screen.

IV. Results

A. Average Willingness to Pay

In this section, we estimate our empirical model. Table 6 presents the coefficients of our main estimating equation, broken down by monthly (col. 1)

TABLE 6
CONDITIONAL LOGIT COEFFICIENTS FOR CHOSEN JOBS

	Monthly Wage (1)	Hourly Wage (2)
Full time/flexible	.25*** (.02)	.33*** (.03)
Part time/not flexible	.32*** (.09)	-.49*** (.03)
Part time/flexible	-.53*** (.11)	-1.16*** (.06)
Monthly wage (USD)	-.004*** (.00)	
Hourly wage (USD)		-1.47*** (.11)
N	36,651	36,651

Note. This table presents the coefficients from the conditional logit estimation where the dependent variable Y_{ijs} , a binary variable indicating that option *j* was selected by woman *i* in screen *s*, is regressed on contract characteristics and monthly (col. 1) and hourly (col. 2) wages. Standard errors, clustered within screen by woman, are presented within parentheses.

*** $p < .01$.

and hourly (col. 2) wages. This is relevant only for part-time contracts. In column 1, we see whether, for the same monthly wage, women prefer part-time to full-time contracts. In column 2, we show whether women prefer part-time contracts if they earn half the amount of the full-time contract each month.

These results suggest that women strongly prefer flexible contracts over those that are more rigid. The coefficient for full time/flexible is positive and strongly statistically significant. As expected, they also desire higher wages: the coefficient on wage is very significant. Finally, we observe that the coefficient for part time changes the sign between the two columns. It indicates that women very much prefer part-time employment when the monthly wage is fixed (i.e., for the same wage, they prefer to work less), but for a given hourly wage, they actually prefer working full-time to part-time. This could indicate that there is a fixed cost associated with starting to work, thus requiring a higher per-hour payment to prefer that type of contract. We also observe that participants have a strong distaste for combining flexibility and part-time employment. This suggests that once schedules are significantly shortened, flexibility does not have the same benefits it does with a full-time schedule.

We transform this into a measure of willingness to pay by using equation (4) and the parameters estimated in table 6. We present willingness to pay in table 7. For example, in the case of monthly earnings for a full-time, flexible job, we divide the coefficient on full time/flexible (0.25) by the negative of the coefficient on the wage (-0.004) to obtain an estimated willingness to pay of US\$57 per month. A similar calculation leads us to measure the willingness to pay in terms of hourly wage as US\$0.22 per hour ($0.33/1.47$; see table 6). Our estimate is relatively precise: our 95% confidence intervals range from US\$44 to US\$69 per month and from US\$0.18 to US\$0.26 per hour. This is a very large amount (10%–20%), given the minimum wage of US\$284 per month or US\$1.78 per hour. It corresponds to around 18% of the average monthly wage and around 9% of the average hourly wage.

TABLE 7
WILLINGNESS TO PAY

	Monthly Wage	Hourly Wage
Full time/flexible	56.65***	.22***
Part time/not flexible	73.60***	-.33***
Part time/flexible	-121.38***	-.79***
N	36,651	36,651

Note. This table presents the estimated willingness to pay for each job attribute (i.e., full time/flexible, part time/not flexible, and part time/flexible) as the ratio of the coefficient of that attribute (from table 6) to the negative of the coefficient for the wage attribute. We use the delta method to estimate the variance of the willingness to pay (see Hole 2007 for a discussion).

*** $p < .01$.

The willingness to pay for a part-time contract is around US\$74 per month, and the 95% confidence interval is a bit wider at US\$47–US\$100 per month. This corresponds to almost a quarter of the average monthly wage. However, as discussed above, this would clearly not compensate employers for the fact that these women would work half as many hours. The willingness to pay on an hourly basis is thus negative, with a mean of US\$0.33 and a confidence interval of US\$0.26–US\$0.40. It corresponds to around 13% of the average hourly wage, suggesting a nonnegligible magnitude.

Finally, the willingness to pay for part-time, flexible jobs is negative and statistically significant in terms of monthly and hourly wages. Participants in our focus groups indicated that working part-time under a flexible schedule may drive employers to add more activities, such as requiring more time for trainings or meetings that are not accounted for in the contracted schedule, and employees may end up working more time for less money. In general, it depends on the activities they need to do at their work, and the functions need to be well specified to accept those types of jobs. While there could be alternative hypotheses that could explain this pattern, such as the fact that workers may suffer self-control issues that would lead them to experience low productivity, we cannot test these alternatives. It is thus possible that combining flexible scheduling and part-time work may lead to the sensation that the lower number of hours of work being contracted will not be respected by the employer, although this remains a conjecture.

There are many ways that we can use these results to try to measure the potential cost of women's preferences for flexibility in terms of their labor market outcomes. The willingness to pay for part-time employment we estimate (US\$74) is larger than the average difference in wages we observe between full-time and part-time female workers in the 2018 Colombian labor force survey. This would thus suggest that many women would be unable to find part-time employment at the wage level they wish to achieve.

We also computed that the willingness to pay for part-time employment is even lower among our participants who were out of the labor force than those who were unemployed. This suggests that an even larger subsidy would be required if we were to try to increase the offer of part-time jobs in a way that would convince women currently not working to join the labor force.

If, as reported by our participants, informal employment provides more schedule flexibility, the willingness to pay for flexibility that we estimated as US\$56 would be 49.4% of the wage gap between the formal and informal sectors. This suggests that a fraction of the gender gap in participation in the informal sector may be due to this desire for flexibility. Bringing these women into the formal sector could thus potentially require a larger offer of flexible schedule arrangements in this context.

Finally, if we were to think that flexible schedule arrangements are prevalent but just not official, we can ask what fraction of workers would need to be “paying” our estimated willingness to pay in terms of wages to fully explain the gender gap in terms of wage. We find that if all workers who obtained flexible schedules received a wage that was US\$56 per month lower than those who had inflexible schedules, 43% more women than men would need to have made that request to fully explain the gender gap. This is definitely a larger gap than the one we observe in overall participation or in informal market jobs.

Similarly, we can ask how much of the informal/formal wage gap could be due to the fact that women select the informal sector to obtain flexibility. We know that there are 9% more women than men in the informal sector. Assuming that all of these additional women select informality to acquire more flexibility and that these women value flexibility at our estimated US\$56, we should thus observe a wage gap of around US\$5, which is smaller than the more than 40% that has been estimated by Torres (2020). Thus, the need for flexibility could explain a relatively small fraction of the informal penalty in Colombia.

We also allow α_1 and α_2 to vary by worker by estimating equation (4) separately for each participant. While for some individuals we do not have enough variation in choices to obtain a valid estimate, we can measure the variance in individual’s willingness to pay among those where such an estimate is feasible. Figure 2 presents the distribution of willingness to pay for each type of employment, eliminating estimates that were above the 95th percentile and below the 5th percentile, given that some extreme values were obtained.⁷

These results suggest that the average estimates presented in the previous table hide a substantial degree of variation. While a majority of participants have small, positive willingness to pay for full-time, flexible contracts, a substantial fraction of our sample has much larger willingness to pay.

The variance in the estimated coefficients is even larger for part-time, not flexible arrangements. While the average estimate of table 7 is positive, but too small to compensate for the loss in hours, we observe that a substantial fraction of our sample shows larger willingness to pay for part-time employment. This suggests that some subgroups of the population may benefit from such offers. We will come back to this in the next section.

Finally, the estimates in figure 2C show that our average estimate of willingness to pay for part-time, flexible employment is hiding substantial variance, although the estimates appear to be mostly concentrated around zero. There

⁷ See the appendix, available online, for distributional effects estimated for hourly wages.

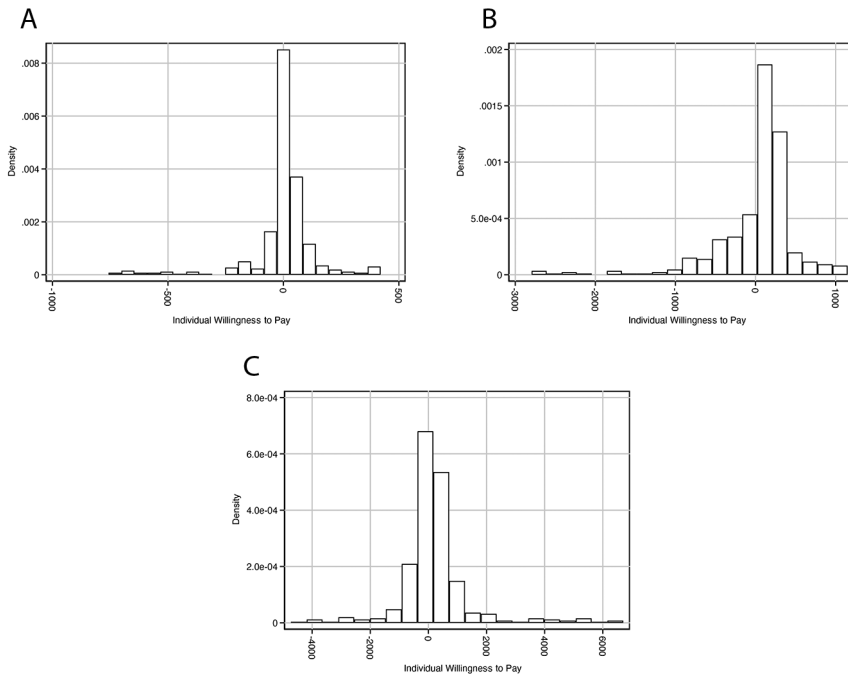


Figure 2. Individual willingness to pay for flexibility (monthly wages). Each panel presents the distribution of the individual willingness to pay obtained by running equation (4) separately for each participant using the monthly wage. Only estimates within the 5th to 95th percentiles of the distribution are reported ($N = 596$). Panel A reports the estimate for the full-time, flexible contract; panel B reports the estimate for the part-time, not flexible contract; and panel C reports the estimate for the part-time, flexible contract.

may thus be a small fraction of our sample who would be willing to pay substantial amounts to obtain a part-time, flexible job.

We show in figure 3 that while positively correlated, in general, the individual willingness to pay for different types of flexibility is not equivalent. For ease of exposition, we restricted our sample to those who had willingness to pay between -500 and 500 . For example, in figure 3A we show that there are a number of individuals who had a negative willingness to pay for part-time employment who had a small and positive willingness to pay for a flexible schedule within a full-time contract. Similarly, a number of individuals had a negative willingness to pay for full-time, flexible employment but had a positive willingness to pay for part-time jobs. We find in figure 3B much less correlation between the willingness to pay for schedule flexibility within full-time and part-time contracts. Finally, figure 3C shows a very strong correlation between willingness to pay for both types of part-time employment. Overall, this suggests that individuals who value flexibility tend to value all forms of flexibility in our experiment. However, there is also evidence that each type of flexibility generates different

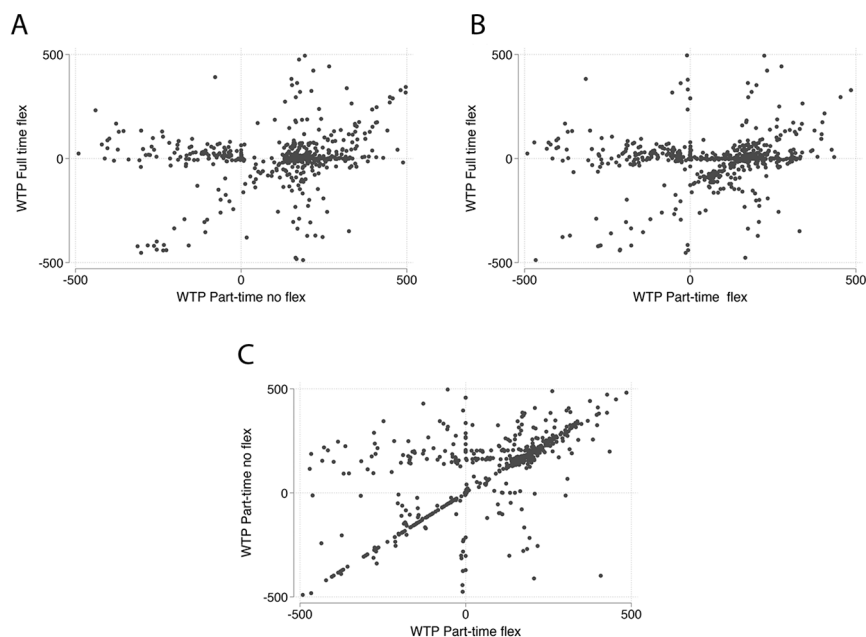


Figure 3. Correlations between individual willingness to pay (WTP) for flexibility (monthly wages) for different types of flexibility. Each panel presents the correlation between an individual WTP for two types of contracts obtained by running equation (4) separately for each participant. Only estimates within ± 500 are reported ($N = 359$). Panel A correlates estimates for the full-time, flexible and part-time, not flexible contracts; panel B correlates estimates for the full-time, flexible and part-time, flexible contracts; and panel C correlates estimates for the part-time, flexible and part-time, not flexible contracts.

types of responses for the same individual. In section IV.C, we will study whether there is any correlation in these differences with observable characteristics.

B. Robustness

We showed above that the participants exhibited a significant willingness to pay for flexibility (in terms of either schedule or number of hours). In this section we evaluate whether these results could be explained by confounding factors.

First, we are very much worried that participants suffered from inattention in their decision. If this were the case, our estimated trade-offs would basically reflect noise rather than their real preferences. Although we informed them that their answers to the hypothetical postings would be relevant when they selected from among the real job postings, they may have simply gone through the exercise automatically without much care. To demonstrate that our answers are unlikely to stem from simply noise, we exploit the fact that a subsample of our participants was shown exactly the same postings on two different screens. Table 8 shows that while the responses do not fully correspond, a large majority of participants (69%) responded in the same way on both screens.

TABLE 8
COMPARISON OF SELECTION IN IDENTICAL SCREENS

Second Screen	First Screen			
	None	Full Time/Not Flexible	Full Time/Flexible	Part Time/Not Flexible
None	6	9	0	6
Full time/not flexible	6	81	33	0
Full time/flexible	3	42	195	9
Part time/not flexible	6	21	12	51

Note. This table shows the number of answers of a given woman to two repeated screens to explore inattention. Numbers in the diagonal indicate that participants selected the same option in both screens, and numbers outside the diagonal present the range of answers in which individuals changed their answers.

To further verify whether a lack of attention could explain our results, we repeat our estimating procedure, restricting our sample to the 333 individuals who answered the same when faced with two identical screens. These results are presented in table 9, broken down by monthly (col. 1) and hourly (col. 2) wages. Our results are roughly consistent with those presented in table 7, although larger. The willingness-to-pay estimates are US\$68 per month or US\$0.28 for full-time, flexible jobs. The willingness to pay for part-time employment is also larger in terms of monthly wage (US\$138) but smaller in terms of the compensation required for the hourly wage (US\$0.19). Finally, the distaste for part-time, flexible contracts is somewhat reduced in this sample when looking at monthly or hourly wages. Thus, these results suggest that our participants responded truthfully and carefully to the exercise and that our results are not driven by inattention.⁸

We next use another method to test whether participants' responses show evidence of inattention, this time assessing whether answers were given simply depending on the ad's position on the screen. Our finding that respondents were equally likely to select the left, middle, or right option on a given screen suggests that this explanation is unlikely. To test this more formally, we reestimate our main estimation equation and the willingness to pay, adding the job posting's position on the screen as a control in the regression. The results are shown in table 10. We find strong evidence that our results are completely orthogonal to the randomized position on the screen: the willingness to pay (as well as coefficients) of our job characteristics are unaffected by the introduction of such controls, and the controls play no statistical role in explaining which posting is preferred.⁹

Finally, we test whether our results are driven by fatigue. Since our procedure required participants to answer 10 different sets of job postings, their level

⁸ Estimates for the conditional logit regression are reported in table A1 (tables A1–A3 are available online).

⁹ See the results of the conditional logit estimation in table A2.

TABLE 9
WILLINGNESS TO PAY FOR INDIVIDUALS WHO REPEATED THEIR
ANSWERS ON TWO IDENTICAL SCREENS

	Monthly Wage	Hourly Wage
Full time/flexible	68.8***	.28***
Part time/not flexible	137.6***	-.19***
Part time/flexible	71.03***	-.36***
N	3,171	3,171

Note. This table presents the estimated willingness to pay for each job attribute (i.e., full time/flexible, part time/not flexible, and part time/flexible) as the ratio of the coefficient of that attribute to the negative of the coefficient for the wage attribute. We use the delta method to estimate the variance of the willingness to pay (see Hole 2007 for a discussion). The unit of observation is the same as in table 6 but for a restricted sample of women who chose the same answer on two identical screens.

*** $p < .01$.

of attention may have gradually decreased over the course of the experiment. Since we randomized the order of offers across participants, we can formally test for this possibility. Table 11 presents the average willingness to pay after reestimating our main empirical equation using only the first three screens, then the following three, and finally the last four. Randomizing the screen order makes it possible for each of these subgroups to include choices over all types of job schedules. For simplicity, in this table we focus only on the results that use monthly wage as the control variable. We find little evidence of fatigue in this data. If anything, it seems that there is evidence of learning, since as the screens progressed, the coefficients on our different types of schedule become more and more positive. This translates into a willingness to pay that is relatively constant between US\$50 and US\$59 for flexible but full-time schedules

TABLE 10
WILLINGNESS TO PAY, CONTROLLING FOR POSITION ON SCREEN

	Monthly Wage	Hourly Wage
Full time/flexible	56.55***	.22***
Part time/not flexible	73.55***	-.33***
Part time/flexible	-121.32***	-.79***
N	36,651	36,651

Note. This table presents the estimated willingness to pay for each job attribute (i.e., full time/flexible, part time/not flexible, and part time/flexible) as the ratio of the coefficient of that attribute to the negative of the coefficient for the wage attribute. Regression includes fixed effects for position within the screen. We use the delta method to estimate the variance of the willingness to pay (see Hole 2007 for a discussion).

*** $p < .01$.

TABLE 11
WILLINGNESS TO PAY FOR SCHEDULE FLEXIBILITY, DEPENDING ON SCREEN ORDER

	Screens 1–3 (1)	Screens 4–6 (2)	Screens 7–10 (3)
Full time/flexible	55.92***	50.37***	59.87***
Part time/not flexible	29.08	61.17***	103.07***
Part time/flexible	–237.01***	–118.57	–68.99
N	11,115	11,031	14,505

Note. This table presents the estimated willingness to pay for each job attribute (i.e., full time/flexible, part time/not flexible, and part time/flexible) as the ratio of the coefficient of that attribute to the negative of the coefficient for the wage attribute. We use the delta method to estimate the variance of the willingness to pay (see Hole 2007 for a discussion). The unit of observation is the same as in table 6, but here we restricted the sample to the first three screens in col. 1, the next three screens in col. 2, and the last four screens in col. 3.

*** $p < .01$.

and a strongly increasing willingness to pay for part-time employment increasing from US\$29 to US\$103 over the period. The distaste for the combination of flexibility and part-time employment also falls from US\$237 to US\$69 as time exposed to the experiment increases. The coefficients for the conditional logit regression are reported in table A3.

Overall, we interpret these results as implying that the coefficients we estimate appear to reflect participants' real preferences and those preferences translate into willingness-to-pay values. If anything, they may be slightly underestimated for part-time employment because of participants' lack of familiarity with the experimental environment.

C. *Heterogeneous Effects*

Having shown a substantial willingness to pay for flexibility, we next explore which participants exhibited a greater desire for flexibility. We divide our analysis between two types of reasons for desiring flexibility: one is that the need for flexibility is driven by factors that make it difficult to pursue employment with a rigid full-time schedule, and the other is that flexibility is a luxury that an individual can afford if they do not need to obtain employment at any cost. We thus use participants' characteristics to try to differentiate these two hypotheses. Finally, we exploit the information about the economic sectors in which participants decided to look for a job to further explore heterogeneity in different types of occupations. For this entire analysis, we will explore only the selection of full time/flexible or part time/not flexible, as part time/flexible showed noisier estimates that make it more difficult to analyze on the same graph.

We first examine whether the demand for flexibility stems from a higher need for flexibility. To do so, we construct an index of the need for flexibility. The index for flexibility includes the following variables: number of children,

whether participants have dependents (children below 5 years old or other family member requiring full-time care), commuting time to the center of Bogotá, and whether the survey was taken during the school holidays.¹⁰ Those with children would be more likely to demand flexibility, particularly during periods when children need to be taken care of. Long commuting times are also likely to increase the demand for flexibility, since they may allow workers to alter their schedule in a way that reduces the time lost going to and from work. We transformed each of these variables into a standardized variable by subtracting the sample mean and divided by the standard deviation. We then obtain the average of these four standardized variables, standardize it, and split the sample between those with positive values and those with negative values. We present our main estimating equation for these subgroups. The results are shown in figure 4A.

We find limited evidence that the preference for flexible schedules is related to our proxy for the need for flexibility. Women with a positive or negative value of the index of flexibility appear to have similar willingness to pay for full-time, flexible schedules. We find that our needs characteristics are better able to explain preferences for part-time employment. Women with a positive value of the index have a willingness to pay for part-time employment that is double the estimate for those with a negative value of the index, although the difference is not statistically significant. This suggests that part-time employment may be a solution for women who find it difficult to combine their responsibilities with their desire to participate in the labor market.

Why would the demand for flexibility in determining one's hours not be related to variables that predict more difficulty in balancing household and labor market tasks? Here we review the childcare system to better understand how mothers in Colombia can combine work and family responsibilities.

According to the Encuesta de Calidad de Vida 2019, 45.6% of children younger than 5 years old attend a Hogar Comunitario de Bienestar (HCB), kindergarten, or center of child development; 31.8% stay at home under parents' care; and 16% stay at home under the care of another adult.¹¹ The average

¹⁰ We use the timing of the survey (when schools are in holidays) as a measure of higher need, since the childcare component of school is lost during that period.

¹¹ According to Bernal and Camacho (2010), HCB is a home-based childcare program providing childcare to vulnerable families and thereby promoting women's labor participation. Participating parents are required to pay a monthly fee not higher than 25% of a daily minimum wage. Traditional HCB childcare homes are led by a "communitarian mother," a home-based childcare provider in the same community. Each childcare home serves up to 15 children between the ages of 6 months and 6 years on part-time or full-time schedules.

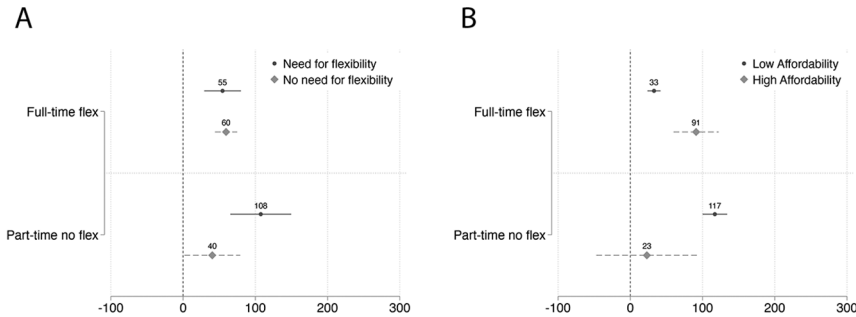


Figure 4. Heterogeneous willingness to pay for flexibility by flexibility needs and affordability. This figure presents the estimated willingness to pay for each job attribute (i.e., full time/flexible in the top part of the figure, part-time/not flexible in the bottom) as the ratio of the coefficient of that attribute to the negative of the coefficient for the wage attribute in a separate regression for each subgroup. We use the delta method to estimate the variance of the willingness to pay (see Hole 2007 for a discussion) and report the 95% confidence interval of the estimates. The sample identified as “need for flexibility” includes individuals whose index for flexibility is positive ($N = 21,436$), while those identified as “no need for flexibility” have a negative value for the index ($N = 32,176$). When we perform a formal test of equality, we conclude that the estimates are not statistically different for full time/flexible (we obtain a p -value of .75), while they are statistically different for part time (we obtain a p -value of .02). Those in the sample identified as “low affordability” have a negative value for the index of affordability ($N = 29,824$), while those identified as “high affordability” have a positive value ($N = 23,788$). When we perform a Wald test of equality, we conclude that the estimates are statistically different for full time/flexible and part time. We obtain a p -value of .0004 for full time/flexible and .01 for part time.

fee for private institutions was US\$38 per month, whereas it was US\$4 for HCB .

Overall, this suggests that childcare is available at a reasonable cost for women who are in the lowest income groups. Yet worries about quality of these childcare centers and lack of available slots still imply that a substantial fraction of Colombian children are not enrolled in childcare (Araujo, Bóo, and Puyana 2013).

While we had hypothesized that the demand for a flexible schedule could be linked to family responsibilities, we find no evidence of differences between those with higher needs for flexibility. We think that this is linked to the fact that day cares and schools offer predictable schedules, and thus the presence of children may not really drive the demand for flexible schedules when working full-time. While not reported here, we also find that the demand for a flexible schedule increased radically when the workshop was held during weeks where there were school holidays, which would be consistent with this hypothesis, since women lose the childcare component of school during that period.

We next turn to variables determining affordability. The idea is that while many may desire flexibility, few may be able to afford it. As proxies for affordability, we construct an index that combines, in a similar fashion as previously, information regarding household income, education, and unemployment spell (reverse).

The results, displayed in figure 4B, show that flexible scheduling appears to be more of a luxury good than one based on necessities. Women with a positive value of the affordability index display a higher willingness to pay for this type of contract. We also find higher willingness to pay for part-time contracts by those with a higher capacity to pay than those with a lower capacity.

We also contrast our estimates of willingness to pay for flexibility with the stated preferences of women in our survey. Before the experiment, women were asked to list the criteria they were seeking in a future job. We divide our sample into three groups: (1) women who stated that flexibility was the most important criteria in their job search, (2) those who ranked it second or third, and (3) those who did not mention it as a priority. Figure 5 shows the estimates by these subsamples. We find strong evidence that participants who identified flexibility as a priority in their job search were willing to pay a higher price to acquire that characteristic than those who did not. This was the case for flexible

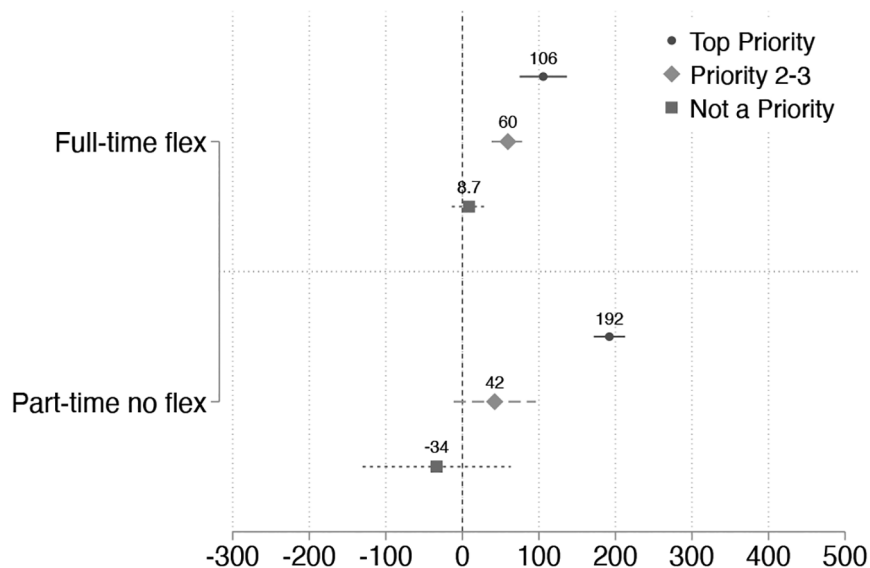


Figure 5. Heterogeneous willingness to pay for flexibility by declared preference for flexibility. This figure presents the estimated willingness to pay for each job attribute (i.e., full time/flexible in the top part of the figure, part time/not flexible in the bottom) as the ratio of the coefficient of that attribute to the negative of the coefficient for the wage attribute in a separate regression for each subgroup. We use the delta method to estimate the variance of the willingness to pay (see Hole 2007 for a discussion) and report the 95% confidence interval of the estimates. The sample identified as “top priority” includes women who listed flexibility as the first criteria when selecting a job ($N = 9,372$), “priority 2–3” includes those who listed it as the second or third criteria ($N = 14,619$), and “not a priority” includes those who did not include it as a priority ($N = 12,660$). When we perform a Wald test of equality between top priority and not a priority, we conclude that the estimates are statistically different for full time/flexible and part time (both p -values are 0). The Wald test of equality between priority 2–3 and not a priority is statistically different for full time/flexible (p -value of .0013) and not statistically different for part time/flexible (p -value of .18).

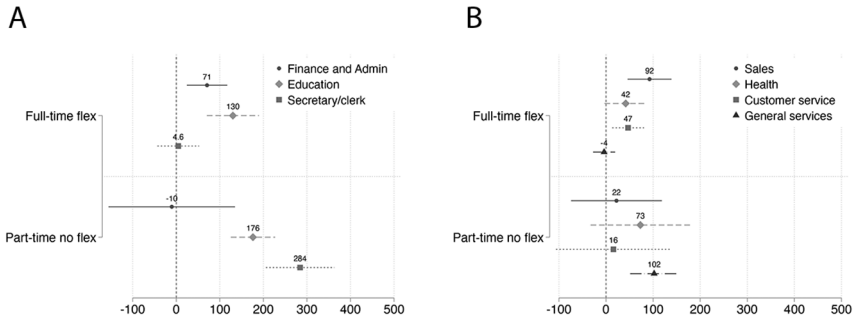


Figure 6. Heterogeneous willingness to pay for flexibility by economic sectors of job offers. This figure presents the estimated willingness to pay for each job attribute (i.e., full time/flexible in the top part of the figure, part time/not flexible in the bottom) as the ratio of the coefficient of that attribute to the negative of the coefficient for the wage attribute in a separate regression for each subgroup. We use the delta method to estimate the variance of the willingness to pay (see Hole 2007 for a discussion) and report the 95% confidence interval of the estimates. Each group is based on the type of occupation that was listed as desired by the participant for her job search. Occupations listed in panel A have been found to provide more schedule flexibility in the United States and the United Kingdom (for finance and administration, $N = 3.636$; for education, $N = 2.661$; for secretary/clerk, $N = 969$). Panel B includes occupations that have been shown to have less flexibility (for sales, $N = 7.446$; for health, $N = 2.574$; for customer service, $N = 5.151$; for general services, $N = 4.281$).

schedule, part-time employment, or a combination of both. This suggests that women are quite conscious of their preferences and that there is a large variance in how much some participants are willing to sacrifice to obtain flexibility.

One concern could be that what we identify as a measure of willingness to pay on the part of the workers actually reflects an anticipation of the demand-side availability for these types of jobs. Thus, women would be less willing to pay for a flexible position if they anticipate that these positions are less likely to be present. To study this, we divide participants by the type of occupations identified as their desired sector. In figure 6A, we group sectors that are classified as more flexible by the American Time Use Survey 2017–18, US Bureau of Labor Statistics, and the UK Office for National Statistics Labour Force Surveys 2017 and 2019.¹² According to this ranking, occupations in education, clerical/secretarial, and finance/administrative sectors are the most suitable for flexible arrangements, while those in sales, customer service, health, and general services are the least suitable. The second group is presented in figure 6B. However, this classification is imperfect, since part-time employment may be more common in some industries, but a flexible schedule may be more common in others. Nevertheless, it is still a useful approach to the question. In the

¹² The exact definition differs in each context. For the US data, we have the fraction of workers who can work from home, while in the United Kingdom we measure the fraction of workers reporting flexible work arrangements. We were unable to find similar types of statistics for Colombia.

data, we see a slightly larger willingness to pay for flexibility within a full-time contract among the occupations in figure 6A than those in figure 6B, excluding, however, secretarial employment. It is also higher in the sales sector than in the other (least flexible) sectors. For willingness to pay for part-time employment, we find, in general, larger estimates in figure 6A than in figure 6B, but again, one sector (this time finance and administration) does not match the pattern among sectors that are most flexible. When we perform a formal test of equality, we conclude that the estimates are statistically different in each panel for full time/flexible, while they are not statistically different for part time.¹³ Overall, we find that while women who were applying to positions in more flexible sectors had a slightly higher willingness to pay, the pattern is not as clear as to think that anticipation of demand is driving our results.¹⁴

V. Conclusions

This paper estimates women's willingness to pay for flexibility. We find that those who participated in our experiment have a positive average willingness to pay for flexibility. We find a large and statistically significant willingness to pay for a flexible time schedule. In addition, we find that while women are willing to earn less each month to obtain a part-time contract, they are unwilling to pay a positive amount in terms of their hourly wage. This result is robust to alternative explanations. Demand for a flexible work schedule seems to be driven more by factors that influence the capacity to "afford" a flexible job, while the demand for part-time employment is linked to constraints on job seekers' schedules. Overall, the results suggest that policies that seek to enhance flexibility in developing countries could increase female labor force participation. However, part-time employment more than schedule flexibility may be needed to increase the female labor force participation of lower-income households.

Latin America's labor market policies have historically been designed to promote formal employment; they have generally not considered part-time employment. Women who seek this type of work arrangement often turn to the informal sector. However, the fact that the willingness to pay for part-time employment does not come close to compensating employers for the lower time commitment of workers suggests that modest subsidies to employers would fail to increase women's employment through more offers of part-time jobs.

¹³ We obtain a *p*-value of .02 for full time/flexible and .87 for part time.

¹⁴ Figures A2–A4 (figs. A1–A4 are available online) present the willingness-to-pay estimates for hourly wages. Patterns similar to those described above are found.

Our design cannot determine how flexible work schedules may alter workers' productivity. Would flextime generate an increase in productivity and thus result in a win-win case for workers and firms? If it generates a loss in productivity, how would this loss compare with the willingness to pay we document here? We leave these questions to future research.

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