
CEGS
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Unpaid Care Work and Gender Pay Gaps in China

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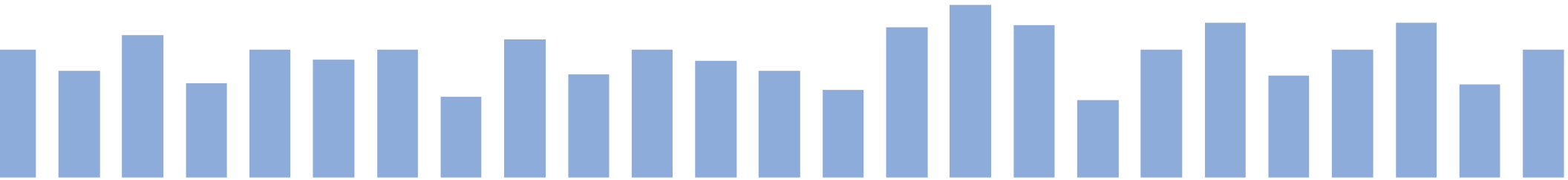
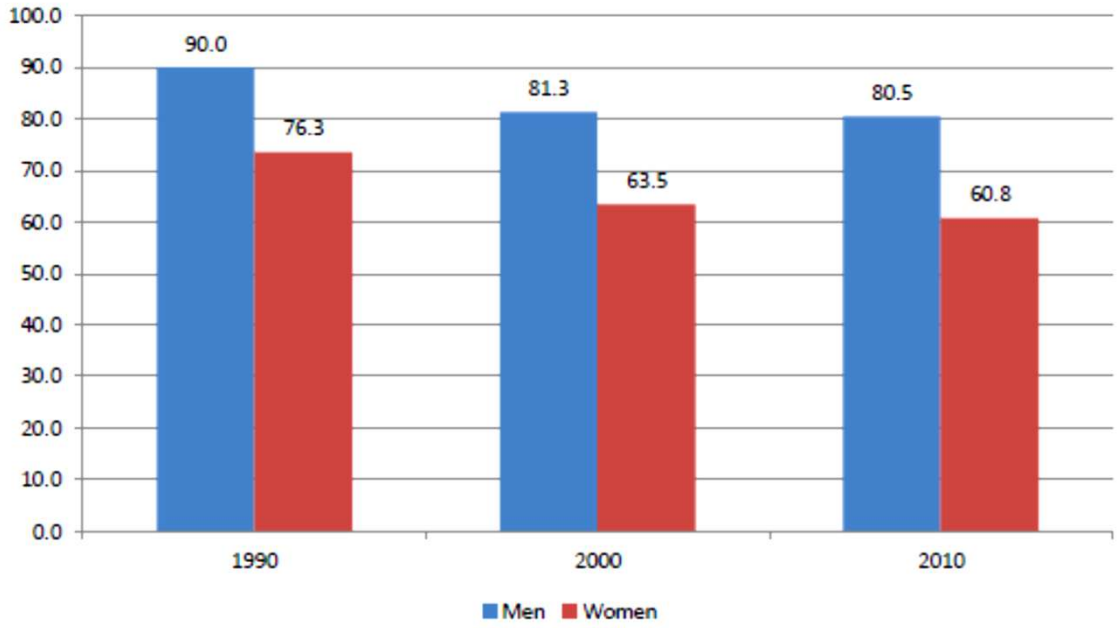
Motivation

- This presentation examines the gender pattern of unpaid care work and its' effect on gender earnings gaps in China, using data from the 2008 China Time Use Survey (CTUS).
- In China, as in other countries, the bulk of unpaid care work is performed by women at home, and is largely unpaid.
- The economic value of unpaid care work amounted to approximately one-third of China's GDP in 2008, and more than 70 percent of that value was contributed by women (Dong and An 2013).
- While unpaid care work is essential for human wellbeing, women's responsibility for unpaid care work limits their ability to participate equally with men in the labor market.



Employment Rates of Men and Women Aged 18-64 in Urban China (%)



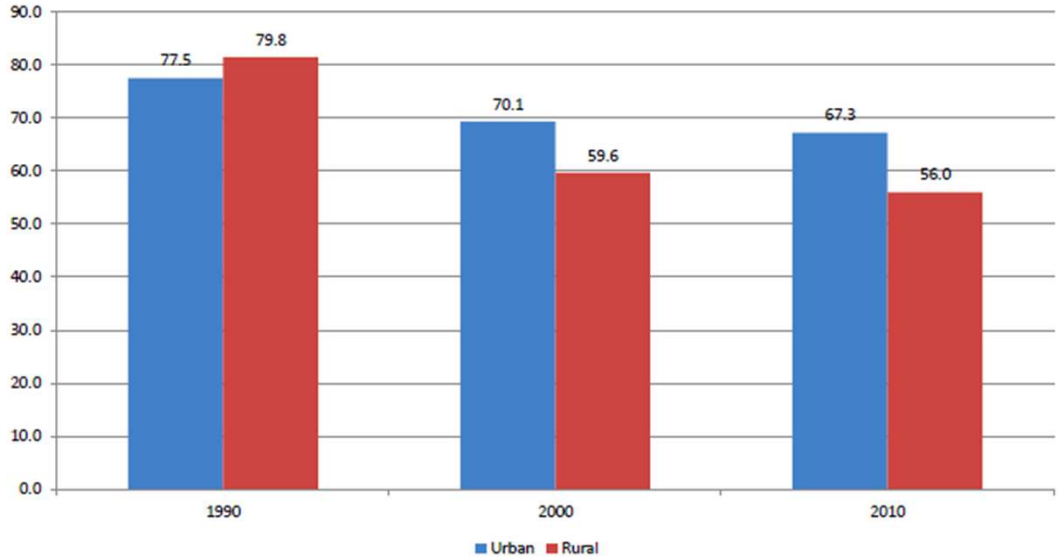
Source: ACWF, The 1990, 2000 and 2010 waves of Chinese Women Social Status Survey

Labor Force Participation Rates, Selected Countries, 2013 (%)

	Women	Men	Gap (men-women)
Sweden	79.9	83.5	3.6
Canada	74.2	81.5	7.3
France	67.6	75.5	7.9
USA	66.9	78.5	11.6
Japan	66.7	85.0	18.3
China (urban)	62.8	81.0	18.2

Source: OECD https://stats.oecd.org/index.aspx?DataSetCode=LFS SEXAGE I R, page 15-64, except China which is from CHIP, ages 15-60, formal urban only.

Female-to-Male Earnings Ratio in China, by Sector (%)



Source: ACWF, The 1990, 2000 and 2010 waves of Chinese Women Social Status Survey

Gender Wage Gaps, Selected Countries

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Country	Women's as a % of Men's
Sweden	96
France	82
Mexico	79
Brazil	76
China (urban)	74
United State	64

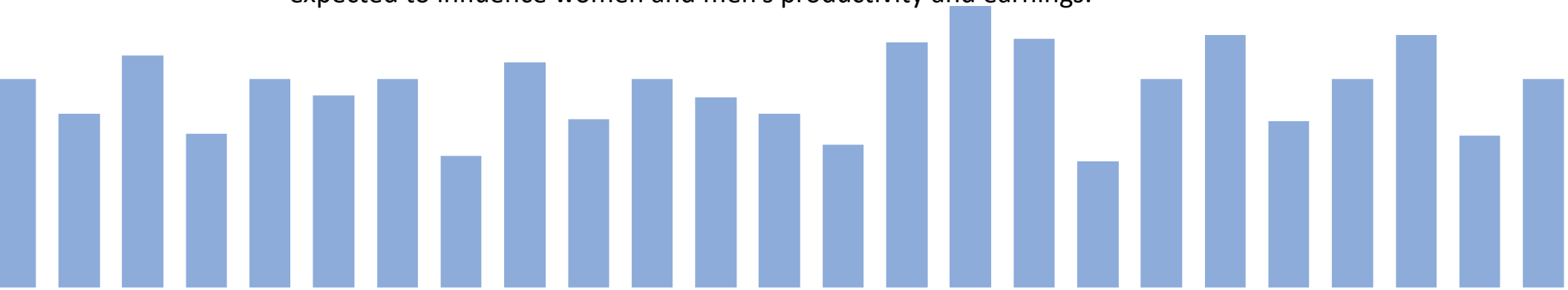
Source: ILO http://www.ilo.org/wcmsp5/groups/public---dgreports/--dcomm/--publ/Documents/publication/wcms 324678.dpf

Literature Review

- Women not only spent more time on unpaid care work than men, but they also spent a larger proportion of unpaid work time on those activities that need to be performed on a daily basis and at specific times during the day (Noonan 2001; Hersch and Stratton 2002).

- As a result, women's unpaid care work is more intertwined with their paid work than men's (Bonke et al. 2005; Qi and Dong 2016).

- The gender differences in the amount and the timing and flexibility of unpaid care work are expected to influence women and men's productivity and earnings.



Literature Review

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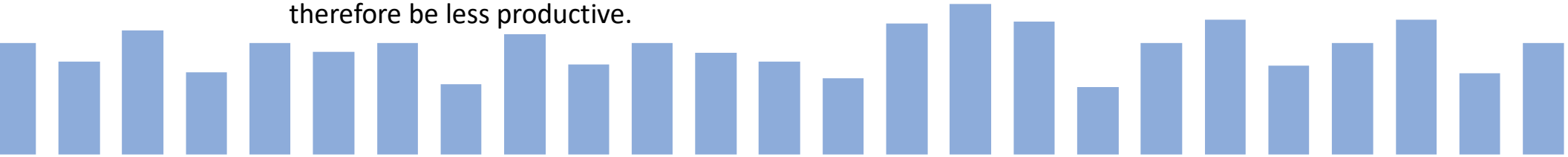
- Several theories have been proposed to explain how unpaid care work may affect earnings.

- **Efforts deficits (Becker 1985)**
  Because household production requires time and consumes energy, workers bearing greater household responsibilities expend less effort on the job and therefore earn lower wages.

- **Compensating wage differentials (Rosen 1986)**
  Individuals who seek convenient work hours and flexible schedule have to accept lower wages to compensate the employers for accommodating their preferences.

- **Employer's prejudice (Williams 2000)**
  Workers with household responsibilities receive lower wages even through they are as productive as others because the employer think they would be tired and distracted and therefore be less productive.



Literature Review

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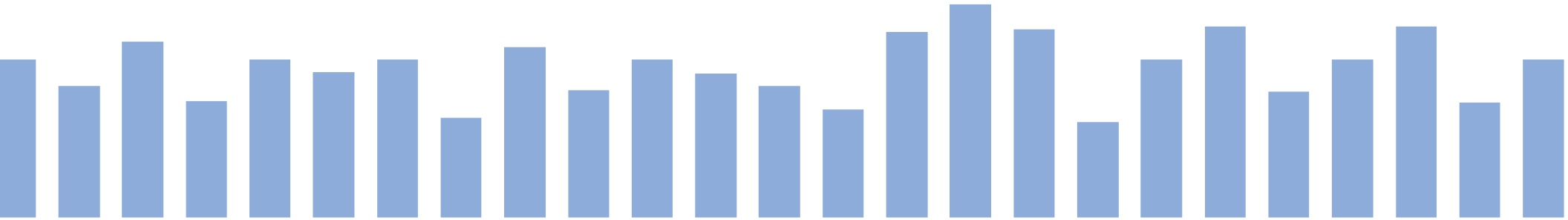
- The earnings effects of unpaid care work have been examined empirically in developed countries (Maani and Cruickshank 2010)..

- **Most of the existing studies focus on the amount of time spent on unpaid care work.**
  - An increase in the amount of time spent on unpaid care work has a negative wage effect for women. The evidence for men is mixed.

- **The literature on the timing and flexibility's effect is relatively sparse.**
  -Bonke et al. (2005) found that the wages are lower for Danish women who spend more time on unpaid care work or perform unpaid care work immediately before and after paid work during a workday.



Objectives

- Qi and Dong (2016) expand the thin literature on the timing and flexibility effect by estimating the earnings effects of unpaid care work's interference with paid work in China.
- (1) Introduce three indicators to measure the degree to which unpaid care work interferes with paid work, either by directly disrupting it or by being intertwined with it
- (2) Estimate the effects of three interference indicators together with the amount of time on unpaid care work on men and women's earnings
- (3)Decompose the gender earnings gap to assess the extent to which the gender earnings gap is explained by the gender differences in unpaid care work.

Data

The analysis uses data from the 2008 CTUS
-The survey consists of 37,142 individuals aged between 15 and 74 years in 16,616 households from 10 provinces.
-Each interviewee reported two 24-hour time diaries for a weekday and a weekend day.
-The survey also collected background information of the interviewees.

The analysis focuses on individuals aged between 21 and 50 who participated in non-agricultural employment.
The sample for analysis consists of 6,460 men and 5,339 women.

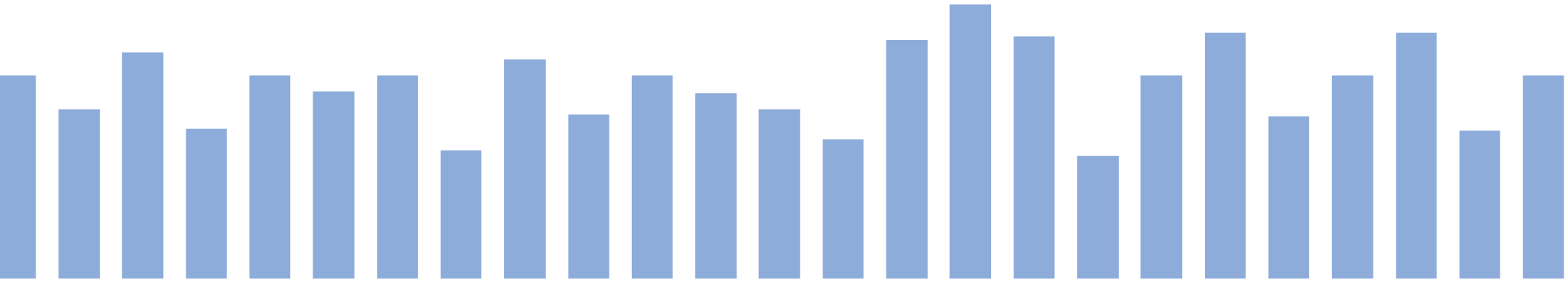
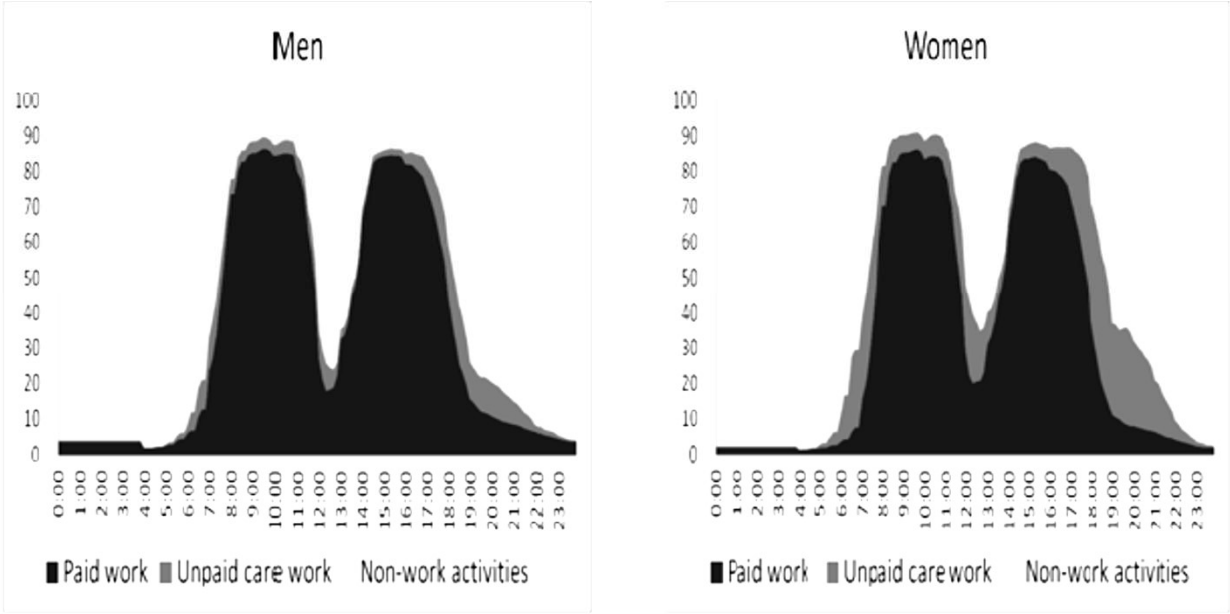


Table 1 Time spent on paid work and unpaid care work

	Men		Women	
	Weekday	Weekly	Weekday	Weekly
Paid work (hours)	8.41	49.04	7.95	44.86
Unpaid work (hours)	0.97	9.45	2.31	20.59
% doing unpaid work	63.3	82.5	91.0	97.0
Total work (hours)	9.38	58.49	10.26	65.44
Observations	6,359	6,460	5,238	5,339

Source: All tables presented are from Qi and Dong (2016) .

Figure 1 Men's and women's participation rates in paid work, unpaid care work, and non-work activities on a weekday



Measures of Work Interference

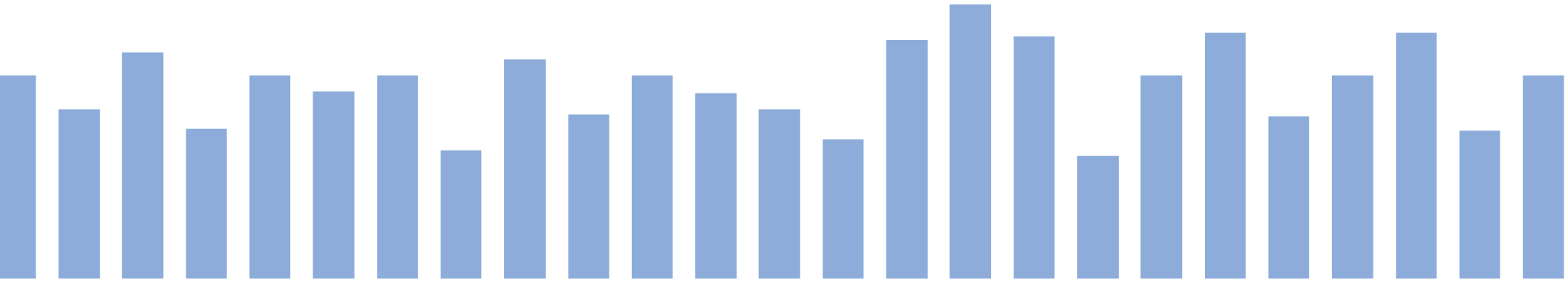
Three measures:

(1)MAX = Maximum duration of time on paid work and non-work activities that is not interrupted by unpaid care work during a weekday

(2)RUPT = 1 if unpaid care work occurs between two episodes of paid work at least once during a week day

(3)SWITCH = number of the times an individual switches between paid work and unpaid care work during a week day

- MAX have a positive effect on earnings
- RUPT and SWITCH have a negative effect on earnings



Summary statistics of work interruption

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	Men	Women
MAX (Maximum duration of paid work and non-work activities that is not interrupted by unpaid care work)		
Mean	6.42	5.71
RUPT (Percent performing unpaid care work during the paid work period		
Mean	21.2	45.6
SWITCH (Number of times activity was switched)		
Mean	0.70	1.55
% 0 time	58.0	24.8
% 1 time	23.9	29.1
% 2 times	11.9	25.6
% 3 times or more	6.3	20.4
Observations	6,359	5,238

OLS estimates of the correlates of the work interference

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		Men			Women	
	MAX	RUPT	SWITCH	MAX	RUPT	SWITCH
CHILD	-0.138	0.035***	1.246***	-0.428***	0.053***	2.097***
OLD	-0.877***	0.027	1.251***	-0.183	0.064*	1.205**
HELPER	0.142**	-0.046***	-0.703***	0.173***	-0.050***	-1.179***
MARRIED	-0.235	0.045**	0.862***	-0.350**	0.060***	1.961***
EDU	-0.059***	0.004	0.021	-0.067***	0.009**	-0.042
EXP	-0.000	0.006*	0.103**	-0.054**	0.011**	0.245***
EXPSQ	-0.001	-0.000	-0.002*	0.000	-0.000	-0.003*
RURAL	0.297**	0.104***	0.171	-0.045	0.158***	1.805***
Adj. R^2	0.0645	0.0448	0.0594	0.0962	0.0737	0.1087
Observations	6431	6431	6431	5304	5304	5304

OLS estimates of the earnings equation

	(1)	(2)	(3)	(1)	(2)	(3)
MAX	0.015***			0.023***		
RUPT		-0.090***			-0.104***	
SWITCH			-0.006***			-0.005***
Unpaid work time	-0.005***	-0.004***	-0.003***	-0.004***	-0.004***	-0.004***
Education	0.054***	0.054***	0.054***	0.085***	0.085***	0.085***
Adj. R^2	0.30	0.30	0.30	0.32	0.32	0.32
Obs.	6,431	6,431	6,431	5,304	5,304	5,304

Blinder-Oaxaca decomposition
The gender earnings gap = 0.23

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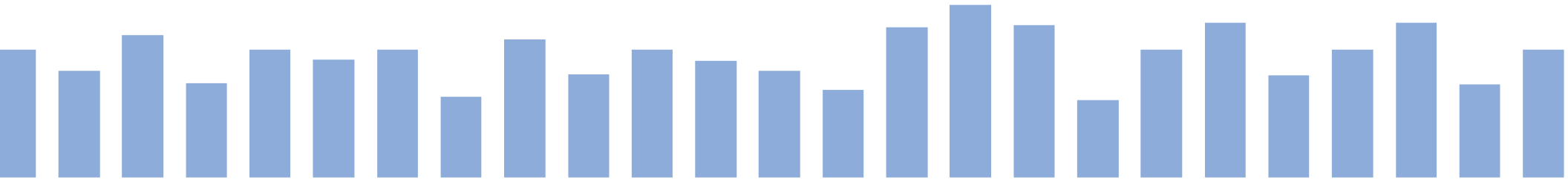
	MAX	RUPT	SWITCH
Explained (%)	11.6	12.9	13.3
Unexplained (%)	88.4	87.1	86.7
Explained by (%)			
Work interference	5.2	9.2	11.7
Unpaid care work time	23.2	17.9	16.1
Occupation	9.24	8.86	8.94
Observations	11,735	11,735	11,735



Summary

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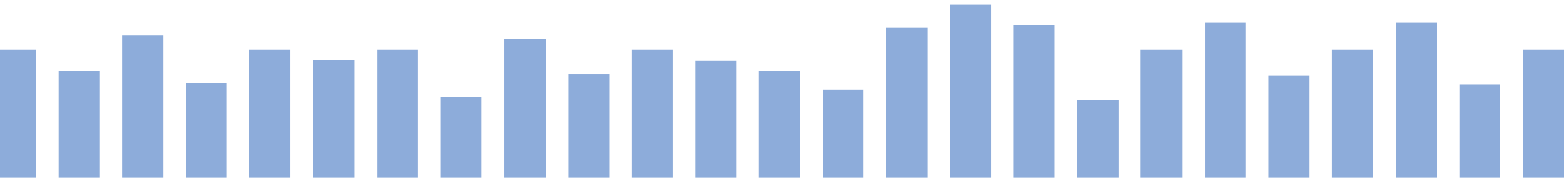
- Responsibilities for unpaid care work are the main causes of unpaid care work interference with paid work for both women and men; however, their impact is stronger for women than for men.

- While the amount of time spent on unpaid care work has more or less the same negative effect on the earnings of both men and women, the interference lowers earnings more for women than for men.

- The gender differences in the time spent on unpaid care work and its interference with paid work account for 28 percent of the gender earnings gap in China, which is more than what can be explained by the gender differences in education and occupation combined.



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