# Are We There? The Search for Amenities and The Early-Career Gender Pay Gap

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- Millennials search for jobs providing <u>amenities</u> (Halzack, 2012 WaPo; Michelson, 2021 Harvard Business Review)
  - Schedule flexibility
  - Job-protected parental leave
- More employers offer amenities to highly educated workers (Cain Miller, 2018, 2019 NYT; Fuhrmans, 2018 WSJ; Shellenbarger, 2005 WSJ)





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  - $\rightarrow\,$  Does the pay gap arise and increase as young workers
  - climb the job ladder?

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  - $\rightarrow$  constraints to job search?

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- $\rightarrow\,$  Gender differences in wage gains from job changes

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- $\rightarrow~{\rm Gender}$  differences in wage gains from job changes

- a. <u>Model</u>: Estimate gender-specific determinants of wage gains from job changes
- Preferences: for flexibility and parental leave
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- $\rightarrow~\mathbf{Price~of}$  work-life balance enhancing **amenities** higher for women

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- $\rightarrow~{\bf Preferences}$  not strongly different across genders
- $\rightarrow~{\bf Search~frictions}$  slightly stronger for out-of-work women
- $\rightarrow$  Price of work-life balance enhancing amenities higher for women explains 42% of growth in early-career pay gap due to search.

## **Reduced-Form Evidence**

D'Angelis, Boston College

#### Data

• National Longitudinal Survey of Youth (1997)

# Data, Sample Selection & Characteristics

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- Early career
- Highly educated workers
- Strong labor market attachment

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## Sample Characteristics

- > 50% of workers change at least one job by 5th year of experience  $${\rm Appendix}$$
- % workers in jobs providing amenities rise over time Appendix
- wages and gender wage gap rise over time



Appendix

## The gender pay gap arises soon after labor market entry





(a) Enter Labor Market in 2000-2012

Appendix: Figure by parental status

Appendix: composition adjusted wages

(b) Enter Labor Market in 2000-2007

## Returns to job changes explain the early-career pay gap

Figure 2: Average Hourly Pay Gap Decomposition - Selected Results





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Differences across genders in returns to job changes explain

• 75% of the pay gap,

## Returns to job changes explain the early-career pay gap

Figure 2: Average Hourly Pay Gap Decomposition - Selected Results



Differences across genders in returns to job changes explain

• 75% of the pay gap, 67.5% of the gap among executives & professionals.  $${\rm Appendix}$$ 

## Wage gains for job changers are lower among women

(a) Baseline specification

$$w_{it} = \alpha + \beta_1 \exp_{i,t-1} + \beta_2 \exp_{1,t-1}^2 + \delta \text{change\_job}_{i,t-1} + + \gamma \text{change\_job}_{i,t-1} * \exp_{i,t-1} + \eta \text{change\_job}_{i,t-1} * \exp_{i,t-1}^2 + + x'_{i,t-2}\psi + \nu_i + \varepsilon_{i,t}$$
(1)

Appendix: variables

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(1)

(b) Heterogeneity in Reason for Job Change

$$w_{it} = \alpha + \beta_1 \exp_{i,t-1} + \beta_2 \exp_{1,t-1}^2 + \sum_{k=1}^K \delta_k \text{change\_job\_reason}_{k,i,t-1} + \sum_{k=1}^K \gamma_k \text{change\_job\_reason}_{k,i,t-1} * \exp_{i,t-1} + \sum_{k=1}^K \eta_k \text{change\_job\_reason}_{k,i,t-1} * \exp_{i,t-1}^2 + x'_{i,t-2}\psi + \varepsilon_{i,t}$$
(2)

Appendix: variables

Appendix: job change reasons

	Reduced Form					
	Tab	le 6 - Return	ns to Job Change			
		(a) Compare with	(a) Compare All Job Changers with Job Stayers		(b) Compare Job Shoppers with Job Stayers	
		Μ	F	Μ	F	
		(1)	(2)	(3)	(4)	_
Actual Exp	perience=AE at (t-1)	0.0767**	0.0808	0.0771**	0.0759	_
AE(t-1) Se	quared	0.0008	-0.0025	0.0010	-0.0021	
Change J	ob in t-1(I[Change(t-1)])	(0.0036) -0.2575	(0.0059) -0.0056	(0.0036) -0.2597*	(0.0060) -0.0245	
AE(t-1)*I	[Change(t-1)]	(0.1703) 0.1375	(0.0895) 0.0572	(0.1468) 0.1739**	(0.1252) 0.0662	
		(0.0866)	(0.0482)	(0.0837)	(0.0605)	
AE(t-1)Sq	r* <b>I</b> [Change(t-1)]	-0.0108 (0.0099)	-0.0078 (0.0060)	-0.0160 (0.0106)	-0.0079 (0.0081)	
Adjusted 1	$\mathbb{R}^2$	0.123	0.107	0.135	0.107	_
Ν		1790	2188	1790	2188	
Job Chang	ge Motive	Ν	Ν	Y	Y	
Occ. & Inc	d. $t - 2$	Υ	Y	Υ	Υ	
Additional	Contr.	Y	Y	Y	Y	_

	Reduced Form					
	Tab	le 6 - Return	ns to Job Change			
		(a) Compare All Job Changers with Job Stayers		(b) Compare Job Shopper with Job Stayers		;
		Μ	F	Μ	F	
		(1)	(2)	(3)	(4)	-
Actual Ex	perience=AE at (t-1)	0.0767**	0.0808	$0.0771^{**}$	0.0759	-
		(0.0378)	(0.0574)	(0.0372)	(0.0586)	
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		(0.0036)	(0.0059)	(0.0036)	(0.0060)	
Change J	ob in $t-1(\mathbf{I}[Change(t-1)])$	-0.2575	-0.0056	$-0.2597^{*}$	-0.0245	
		(0.1703)	(0.0895)	(0.1468)	(0.1252)	
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Occ. & In	d. $t - 2$	Υ	Υ	Y	Υ	
Additional	Contr.	Υ	Υ	Y	Y	

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Actual Experie	ence=AE at (t-1)	0.0767** (0.0378)	0.0808 (0.0574)	0.0771** (0.0372)	0.0759 (0.0586)	_
AE(t-1) Squar	ed	0.0008	-0.0025 (0.0059)	0.0010 (0.0036)	-0.0021 (0.0060)	
Change Job is	n t-1( $\mathbf{I}[Change(t-1)]$ )	-0.2575 (0.1703)	-0.0056 (0.0895)	$-0.2597^{*}$ (0.1468)	-0.0245 (0.1252)	
$AE(t-1)^*I[Cha$	ange(t-1)]	0.1375 (0.0866)	(0.0572) (0.0482)	$0.1739^{**}$ (0.0837)	0.0662 (0.0605)	
$AE(t-1)Sqr^*I[$	Change(t-1)]	-0.0108 (0.0099)	-0.0078 (0.0060)	-0.0160 (0.0106)	-0.0079 (0.0081)	
Adjusted $R^2$ N		0.123 1790	0.107 2188	$0.135 \\ 1790$	0.107 2188	_
Job Change M	lotive	Ν	Ν	Υ	Υ	_
Occ. & Ind. t Additional Co	- 2 ntr.	Y Y	Y Y	Y Y	Y Y	

• Between years 3 and 4 in labor market:

average man  $\rightarrow 22\%$  wage growth; average woman  $\rightarrow 18\%$  wage growth.

duction	Reduced Form	Model	& Estimation	Counterfa	ctual	Concl
	Tab	le 6 - Return	ns to Job Change			
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AE(t-1)*1	I[Change(t-1)]	0.1375 (0.0866)	(0.0572) (0.0482)	$0.1739^{**}$ (0.0837)	0.0662 (0.0605)	
AE(t-1)Se	qr*I[Change(t-1)]	-0.0108 (0.0099)	-0.0078 (0.0060)	-0.0160 (0.0106)	-0.0079 (0.0081)	_
Adjusted N	$R^2$	0.123 1790	0.107 2188	0.135 1790	0.107 2188	
Job Chan	ge Motive	Ν	Ν	Y	Y	_
Occ. & Ir Additiona	nd. $t-2$ al Contr.	Y Y	Y Y	Y Y	Y Y	

• Between years 3 and 4 in labor market: average man  $\to$  22% wage growth; average woman  $\to$  18% wage growth.

• By year 5: \$.81 hourly gap

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$AE(t-1)^*I[$	Change(t-1)]	0.1375 (0.0866)	(0.0572) (0.0482)	$0.1739^{**}$ (0.0837)	0.0662 (0.0605)	
AE(t-1)Squ	r*I[Change(t-1)]	-0.0108 (0.0099)	-0.0078 (0.0060)	-0.0160 (0.0106)	-0.0079 (0.0081)	
Adjusted I N	R <sup>2</sup>	0.123 1790	0.107 2188	$0.135 \\ 1790$	0.107 2188	_
Job Chang	ge Motive	Ν	Ν	Υ	Y	_
Occ. & Ind Additional	d. $t-2$ Contr.	Y Y	Y Y	Y Y	Y Y	

- Between years 3 and 4 in labor market: average man  $\to$  22% wage growth; average woman  $\to$  18% wage growth.
- By year 5: \$.81 hourly gap
- Results robust for unmarried and childless workers. (Appendix: Robustness
# Summary of reduced-form evidence

Among Millennial American college graduates

- The likelihood to work in amenity-providing firm rises with experience
- $\rightarrow$  Workers search for amenities

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- $\rightarrow\,$  Job search & job changes affect the gap

# Summary of reduced-form evidence

Among Millennial American college graduates

- The likelihood to work in amenity-providing firm rises with experience
- $\rightarrow$  Workers search for amenities
  - The gender wage gap rises with experience
  - Male workers obtain stronger wage gains from job changes
- $\rightarrow\,$  Job search & job changes affect the gap
- $\rightarrow~{\rm Compared}$  to men, women may
  - Be more willing to renounce to wage gains in exchange for amenities →preferences
    Appendix: Quit Probabilities
  - Receive lucrative job offers at lower rate  $\rightarrow$  search frictions
  - Receive job offers entailing lower wages  $\rightarrow$  **job offers**

### Structural Hedonic Search Model

D'Angelis, Boston College

# Search model with amenities & gendered workers

#### Builds on

Hwang, Mortensen & Reed (1998); Bonhomme & Jolivet (2009)

#### Estimation

Sequential Maximum Likelihood (Bonhomme & Jolivet, 2009)

#### Set-up

- Partial equilibrium
- Preferences, search frictions and job offers are gender-specific
- Job offers vary by workers' type and  $\underline{\mathrm{career}}$

• Workers' utility

$$u_g(w, \mathbf{a}) = w + \delta'_g \mathbf{a} \tag{3}$$

w = ln(W) = log-wage **a** = [**flexibility**; **parental leave**; child care; long hours]'  $\delta_q$  = vector of preferences parameters.

• Workers' utility

$$u_g(w, \mathbf{a}) = w + \delta'_g \mathbf{a} \tag{3}$$

w = ln(W) = log-wage  $\mathbf{a} = [\mathbf{flexibility}; \mathbf{parental leave}; child care; long hours]'$  $\delta_g = vector of preferences parameters.$ 

#### • Search frictions

 $\lambda_0 \ (\lambda_1) =$  instantaneous prob. job offer when unemployed (employed) q = instantaneous prob. job loss  $\lambda_2 =$  instantaneous prob. constrained job move

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### • Search frictions

 $\lambda_0 \ (\lambda_1) =$  instantaneous prob. job offer when unemployed (employed) q = instantaneous prob. job loss  $\lambda_2 =$  instantaneous prob. constrained job move

### • Mobility

Unemployed  $\rightarrow$  accept any job offer

Employed  $\rightarrow P(\text{mobility}) = q + \lambda_1 \bar{F}_u(w_t + \delta' \mathbf{a}_t) + \lambda_2$ 

(4)

• Workers' utility

$$u_g(w, \mathbf{a}) = w + \delta'_g \mathbf{a} \tag{3}$$

w = ln(W) = log-wage  $\mathbf{a} = [\mathbf{flexibility}; \mathbf{parental leave}; child care; long hours]'$  $\delta_g = vector of preferences parameters.$ 

#### • Search frictions

 $\lambda_0 \ (\lambda_1) = \text{instantaneous prob. job offer when unemployed (employed)}$ q = instantaneous prob. job loss $\lambda_2 = \text{instantaneous prob. constrained job move}$ 

• Mobility

Unemployed  $\rightarrow$  accept any job offer Employed  $\rightarrow P(\text{mobility}) = q + \lambda_1 \bar{F}_u(w_t + \delta' \mathbf{a}_t) + \lambda_2$ 

(4)

• Equating Flows In and Out of Employment  $\rightarrow$  s.s. distribution of  $(w, \mathbf{a})$ 

$$g(w, \mathbf{a}) = (1+k) \frac{f(w, \mathbf{a})}{(1+k\bar{F}_u(w+\delta'\mathbf{a}))^2}$$
(5)

allows to estimate preferences accounting for workers' constraints

• Cross-sectional relation between wages and amenities depends on

$$g(w, \mathbf{a}) = (1+k) \frac{f(w, \mathbf{a})}{(1+k\bar{F}_u(w+\delta'\mathbf{a}))^2}$$
(6)

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• Cross-sectional relation between wages and amenities depends on

$$g(w, \mathbf{a}) = (1+k) \frac{f(w, \mathbf{a})}{(1+k\bar{F}_u(w+\boldsymbol{\delta}'\mathbf{a}))^2}$$
(6)

• Preferences

allows to estimate preferences accounting for workers' constraints

• Cross-sectional relation between wages and amenities depends on

$$g(w, \mathbf{a}) = (1+k) \frac{f(w, \mathbf{a})}{(1+k\bar{F}_u(w+\delta'\mathbf{a}))^2}$$
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- Preferences Search frictions Job offers distribution
- $\rightarrow\,$  Identify gender-specific preferences
- $\rightarrow\,$  Account for gender-specific constraints
- Knowledge of  $g(w,\mathbf{a})$  and workers' labor market transitions
  - $\rightarrow$  Likelihood function

Appendix: functional forms

Appendix: likelihood and estimation

• Parameters: job offers distribution ( $\theta$ ), frictions ( $\lambda$ ), preferences ( $\delta$ ).

 $\begin{array}{c} \text{Labor market} \\ \text{equilibrium:} \\ \text{Identify } \theta \end{array}$ 

 $\text{Unemployed}_t \rightarrow \text{Job}_{1,t+1}$ 





 $\text{Unemployed}_t \rightarrow \text{Unemployed}_{1,t+1}$ 

 $\begin{array}{ccc} \operatorname{Job}_{1,t} \to & \operatorname{Unemployed}_{1,t+1} \\ & \operatorname{Job}_{1,t} \to & \operatorname{Job}_{1,t+1} \end{array}$ 

 $Job_{1,t} \rightarrow Job_{2,t+1}$ 

Guess  $\tilde{\delta}^0$ 

Only modeled

factors affect

transitions:

Identify  $\lambda$ 















 $\tilde{\delta}^n$ 

#### D'Angelis, Boston College

## Summary of structural estimation results

Among Millennial American college graduates

- **Preferences** for work-life balance enhancing amenities are strong
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  - When out of work

Results

- Job offers entail lower wages for women
  - Gender gap in wage offered increases when flexibility provided
  - Gender gap in wage offered increases when parental leave provided

Results

#### **Counterfactual Analysis**

D'Angelis, Boston College

Figure 3: Predicted and Counterfactual Average Log-Wage Growth



Figure 3: Predicted and Counterfactual Average Log-Wage Growth



• Search frictions

 $\rightarrow$  33% of early-career pay gap growth

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ightarrow 42%

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Appendix: more results

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Appendix: more results

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Summary: how the search for amenities affects the pay gap
• Men and women strongly value flexibility and parental leave

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Since the pay gap is not the outcome of compensating differentials

• Women obtain lower utility than men from their jobs.

Expected Utility Decomposition

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  - From the very beginning of workers' careers
  - Among similarly educated, similarly committed workers
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- Policies subsidizing provision of certain benefits may reduce the gap

#### Thank You!

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#### Appendix

Introc	luction	
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SPECIAL SERIES Flex-Work: ISO Work-Life Balance

#### When Employers Make Room For Work-Life Balance

March 15, 2010 - 12:00 AM ET Heard on Morning Edition



npr				
🗄 NEWS 🖞 ARTS & LIFE				
	nen Employers Mak e Balance			
Heard o	n Mernina Edition	<b>The Washington</b> Democracy Dies in Dark	<b>Jost</b> crees	
	Workplace retaining to	flexibility can op workers	be key to recr	uiting

By Sarah Halzack December 2, 2012

#### The New York Times

# TheUpshot Work in America Is Greedy. But It Doesn't Have to Be. Long, inflexible hours are the norm. But in a tight job market, more companies are offering flexibility on the when and where of work.

retaining top workers

By Sarah Halzack December 2, 2012 The New Hork Times

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## J to recruiting

# Fairer Flextime: Employers Try New Policies for Alternative Schedules

By Sue ShellenbargerStaff Reporter of The Wall Street Journal Nov. 17, 2005 12:01 am ET

The New york Times

#### TheUpshot

### Lowe's Joins Other Big Employers in Offering Paid Parental Leave

In the absence of government policy on paid leave, more private companies are choosing to offer it.



Feb. 1, 2018

The New Hork Times

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#### Harvard Business Review

**Employee Retention** 

#### How Small Companies Can Offer Great Paid-Leave Programs

by Joan Michelson

January 07, 2021



The New York Times

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**Employee Retention** 

## How Small Companies Can Offer Great Paid-Leave

Feb. 1, 2018

## THE WALL STREET JOURNAL.

#### BUSINESS

#### As More New Dads Get Paternity Leave, Companies Push Them to Take It

At some companies, new fathers get advice from older colleagues to take their full paid leave; 'If you don't take it, it's borderline idiotic,' one manager said

By Vanessa Fuhrmans July 11, 2018 5:30 am ET

- Women more likely to marry/cohabit and do so earlier
- Women more likely to have children and do so earlier

Table 1 - NLS	Y Sample -	Family	Formation	Decisions
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	М	F	Diff.	Obs.
Age at labor market entry	24.25	24.32	-0.07	714
Married/cohabiting by labor market entry	0.26	0.39	-0.13***	714
Married/cohabiting by 3rd yr in labor market	0.48	0.60	$-0.12^{***}$	714
Married/cohabiting by 5th yr in labor market	0.65	0.72	-0.07**	714
Married by 2015	0.68	0.70	-0.02	714
Has child by labor market entry	0.03	0.06	$-0.03^{*}$	714
Has child by 3rd yr in labor market	0.11	0.12	-0.02	714
Has child by 5th yr in labor market	0.21	0.24	-0.03	714
Has child by 2015	0.52	0.59	$-0.06^{*}$	714
Age at first child birth	28.50	28.09	0.41	400

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# Sample Characteristics: Education

Table A1 -	NLSY	Sample -	Education
------------	------	----------	-----------

	М	F	Diff.	Obs.
No more in educ by labor market entry	0.67	0.62	0.05	714
Enrolled in school at labor market entry	0.15	0.17	-0.02	714
Bachelor degree by labor market entry	0.71	0.78	-0.07**	714
Master degree by age 26	0.07	0.10	$-0.03^{*}$	714
Prospective PhD graduate	0.02	0.02	0.01	714

#### Sample Characteristics: Employment History

	$(a) \leq b$	Year 5 of	Experience	(b) >	Year 5 o	f Experience
	Μ	F	Diff.	М	F	Diff.
(1)			Job C	hanges		
Job-to-Job transition	0.487	0.391	$0.096^{***}$	0.438	0.372	0.065
Gap in weeks betw. jobs	4.914	5.116	-0.202	6.604	8.148	-1.544
Gap in weeks betw. jobs   Gap $>0$	9.577	8.405	1.172	11.741	12.980	-1.240
(2)		Freque	ncies of Labor	• Market §	Status Sp	oells
Employed	0.809	0.790	$0.019^{*}$	0.656	0.612	$0.044^{***}$
Unemployed	0.060	0.056	0.004	0.033	0.025	0.007
Out of Labor Force	0.119	0.144	-0.024***	0.062	0.120	-0.058***
Employed but not working	0.000	0.001	-0.001	0.000	0.000	0.000
Other, not working	0.011	0.010	0.001	0.249	0.242	0.006
(3)			Periods Out o	of Employ	ment	
Spells out of employment	1.460	1.695	-0.235	2.338	2.759	-0.422**
Weeks out of employment	10.299	12.270	-1.971	45.199	57.390	-12.190***

#### Table 3 - Employment History

• Gender differences in labor market attachment arise over time



#### Sample Characteristics: Employment History

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#### Table 2 - NLSY Sample - Jobs Held & Job Changes

	М	F	Diff.	Obs.
Total number of jobs held	2.47	2.42	0.05	714
Changes employer by 5th year in labor market	0.52	0.51	0.01	714
Year of experience at first job change	3.90	3.72	0.18	462
Year of experience at first job change changes by 5th year	3.01	2.94	0.07	366

- Dynamic early careers for both men & women
- 52% of men and 51% of women change job by the 5th year of experience
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#### Labor Market Outcomes: Wages, Hours, Weeks Worked

#### Table 4 - NLSY Sample - Amenities & Labor Market Outcomes

	First Year				Last Year				
	Μ	F	Diff.	М	F	Diff.	Obs.		
(a)	Time Varying Labor Market Outcomes								
Hourly wage at j (2005 Dollars)	15.94	16.15	-0.21	27.72	23.65	$4.06^{***}$	714		
Average weekly hours j	43.56	42.62	0.94	44.29	40.86	$3.43^{***}$	714		
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- Wage gap arises over time in labor market
- Women's labor supply decreases over time, but wage gap remains
  - When workers have no children and are not married
  - In spite of similar weeks worked and work hours across genders

#### Labor Market Outcomes: Firms' Characteristics

		First Year			Last Year		
	М	F	Diff.	М	F	Diff.	Obs.
(b)	Т	`ime Va	rying Empl	oyer j Cha	racterist	tics	
Unpaid parental leave	0.22	0.31	-0.10***	0.51	0.66	-0.15***	714
Paid parental leave	0.32	0.49	$-0.17^{***}$	0.48	0.55	$-0.07^{*}$	714
Child care	0.07	0.10	-0.03	0.10	0.12	-0.01	714
Flexible schedule	0.40	0.39	0.01	0.54	0.45	$0.09^{**}$	714
Medical insurance	0.76	0.84	-0.08***	0.93	0.90	0.03	714
Life insurance	0.57	0.64	-0.07*	0.77	0.78	-0.02	714
Dental care	0.69	0.77	-0.07**	0.82	0.84	-0.02	714
Stock ownership	0.21	0.19	0.03	0.24	0.19	$0.05^{*}$	714
N. Employees	768.49	641.91	126.59	1123.62	571.77	$551.85^{*}$	505(519)

#### Table 5 - NLSY Sample - Amenities & Labor Market Outcomes

• Search for amenities may explain partly explain wage dynamics


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Unpaid parental leave	0.22	0.31	-0.10***	0.51	0.66	-0.15***	714				
Paid parental leave	0.32	0.49	$-0.17^{***}$	0.48	0.55	$-0.07^{*}$	714				
Child care	0.07	0.10	-0.03	0.10	0.12	-0.01	714				
Flexible schedule	0.40	0.39	0.01	0.54	0.45	$0.09^{**}$	714				
Medical insurance	0.76	0.84	-0.08***	0.93	0.90	0.03	714				
Life insurance	0.57	0.64	$-0.07^{*}$	0.77	0.78	-0.02	714				
Dental care	0.69	0.77	-0.07**	0.82	0.84	-0.02	714				
Stock ownership	0.21	0.19	0.03	0.24	0.19	$0.05^{*}$	714				
N. Employees	768.49	641.91	126.59	1123.62	571.77	$551.85^{*}$	505(519)				

#### Table 5 - NLSY Sample - Amenities & Labor Market Outcomes

• Search for amenities may explain partly explain wage dynamics

1. Search  $\rightarrow$  better jobs  $\rightarrow$  higher wages and better amenities for all workers



#### Labor Market Outcomes: Firms' Characteristics

Table 5 - NLS	Y Sample -	Amenities	& Labor	Market	Outcomes
---------------	------------	-----------	---------	--------	----------

	First Year			i.	Last Year						
	Μ	F	Diff.	М	F	Diff.	Obs.				
(b)	Т	Time Varying Employer j Characteristics									
Unpaid parental leave	0.22	0.31	-0.10***	0.51	0.66	-0.15***	714				
Paid parental leave	0.32	0.49	$-0.17^{***}$	0.48	0.55	$-0.07^{*}$	714				
Child care	0.07	0.10	-0.03	0.10	0.12	-0.01	714				
Flexible schedule	0.40	0.39	0.01	0.54	0.45	$0.09^{**}$	714				
Medical insurance	0.76	0.84	-0.08***	0.93	0.90	0.03	714				
Life insurance	0.57	0.64	$-0.07^{*}$	0.77	0.78	-0.02	714				
Dental care	0.69	0.77	-0.07**	0.82	0.84	-0.02	714				
Stock ownership	0.21	0.19	0.03	0.24	0.19	$0.05^{*}$	714				
N. Employees	768.49	641.91	126.59	1123.62	571.77	$551.85^{*}$	505(519)				

• Search for amenities may explain partly explain wage dynamics

- 1. Search  $\rightarrow$  better jobs  $\rightarrow$  higher wages and better amenities for all workers
- 2. Share of men in amenity-providing jobs increase faster  $\rightarrow$  contributes to the opening wage gap?

## Labor Market Outcomes: No Children By 2015

		First Ye	ar	<i>L</i>						
	Μ	F	Diff.	М	F	Diff.	Obs.			
(a)	ſ	Time Varying Labor Market Outcomes								
Hourly wage at j (2005 Dollars)	15.96	16.59	-0.63	27.89	23.72	$4.17^{**}$	314			
Average weekly hours j	44.64	43.12	1.52	44.09	43.11	0.98	314			
Weeks employed in t	47.94	48.94	-1.00	39.44	37.62	1.82	314			
(b)	Ti	ime Vary	ying Emplo	oyer j Char	acteristi	ics				
Unpaid parental leave	0.21	0.33	-0.12**	0.50	0.60	$-0.10^{*}$	314			
Paid parental leave	0.35	0.53	-0.18***	0.49	0.59	$-0.10^{*}$	314			
Child care	0.08	0.11	-0.03	0.12	0.12	0.00	314			
Flexible schedule	0.40	0.33	0.07	0.55	0.46	0.09	314			
Medical insurance	0.74	0.83	-0.08*	0.94	0.90	0.04	314			
Life insurance	0.58	0.61	-0.03	0.76	0.76	0.00	314			
Dental care	0.72	0.75	-0.04	0.85	0.84	0.01	314			
Stock ownership	0.22	0.18	0.04	0.26	0.21	0.05	314			
N. Employees	945.13	624.50	320.64	1453.50	577.58	875.92	217(222)			

#### Table A2 - NLSY Sample - Amenities & Labor Market Outcomes - No Children by 2015

# Labor Market Outcomes: Not Married By 2015

	1	First Yea	ır	1						
	М	F	Diff.	М	F	Diff.	Obs.			
(a)	Т	Time Varying Labor Market Outcomes								
Hourly wage at j (2005 Dollars)	15.25	16.59	-1.35	25.34	22.75	2.60	220			
Average weekly hours j	44.25	43.23	1.02	43.43	42.51	0.92	220			
Weeks employed in t	48.05	48.07	-0.02	40.03	37.71	2.32	220			
(b)	Ti	me Vary	ing Emplo	oyer j Char	acteristi	cs				
Unpaid parental leave	0.19	0.37	-0.18***	0.40	0.55	-0.15**	220			
Paid parental leave	0.34	0.49	-0.14**	0.52	0.56	-0.05	220			
Child care	0.05	0.08	-0.03	0.13	0.09	0.04	220			
Flexible schedule	0.36	0.32	0.04	0.53	0.45	0.08	220			
Medical insurance	0.69	0.83	-0.14**	0.92	0.85	0.07	220			
Life insurance	0.56	0.60	-0.05	0.74	0.74	0.00	220			
Dental care	0.68	0.74	-0.06	0.81	0.82	-0.01	220			
Stock ownership	0.28	0.18	$0.10^{*}$	0.24	0.23	0.01	220			
N. Employees	1085.53	688.96	396.57	1597.27	679.20	918.06	151(154)			

#### Table A3 - NLSY Sample - Amenities & Labor Market Outcomes - Not Married by 2015

# Pay Gap by Women's Parental Status





(a) Enter Labor Market in 2000-2012

(b) Enter Labor Market in 2000-2007

### When does the pay gap arise?

Composition-Adjusted Experience-Specific Average Gender Wage Gap

$$w_{ijt} = \sum_{j=2000}^{2007} \delta_{jt} y_{ji} + \sum_{j=2000}^{2007} \eta_{jt} y_{ji} f_i + \nu_{ijt}$$
(7)

- $f_i = 1$  if female
- $y_{ji} = 1$  if *i* entered the labor market in year  $j \in \{2000, ..., 2007\}$
- $w_{ijt} = i$ 's real log-wage in year  $t \in \{1, ..., 10\}$

For g = f, m and  $\omega_j^g = \frac{(\text{n.weeks work})_j}{(\text{n.weeks work})}$ :

$$\bar{w}_t^g = \sum_{j=2000}^{2007} \omega_j^g \hat{w}_{jt}^g \tag{8}$$

- Diverging wage profiles between male and female workers
- $\rightarrow\,$  Different returns to experience.

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- $\rightarrow\,$  Different returns to experience.
  - Returns to general human capital (Becker 1964)
  - Returns to search capital (Burdett & Mortensen 1998)

- Diverging wage profiles between male and female workers
- $\rightarrow\,$  Different returns to experience.
  - Returns to general human capital (Becker 1964)
  - Returns to *search capital* (Burdett & Mortensen 1998)
- $\rightarrow\,$  Isolate the contribution of returns to search capital to the pay gap



# Potential, Actual, Work-History Experience: Variables Construction

#### Potential Experience Variable

 $\exp_{it}$  is the number of years since labor market entry.

#### Actual Experience Variable

For each year of potential labor market experience  $J \in \{1, ..., 10\}$ , in calendar year t, a worker's actual (or aggregate) experience in years is

$$\exp_{iJt} = \frac{\sum_{j=1}^{J} \text{n. weeks worked in year of exp. j}}{52} \tag{9}$$

#### Work History Experience Variable

$$\exp_{i,\iota t} = (n. \text{ weeks worked } \iota \text{ years ago})/(52)$$
 (10)

The variable takes value 0 if  $\iota$  years before t a worker had not yet entered the labor market or if the worker experienced a one year long career interruption.

## Returns to Experience for Male and Female Workers

#### Potential & Actual Experience Models

$$w_{it} = \alpha + \beta_0 \exp_{it} + \beta_1 \exp_{it}^2 + x'_{it} \delta + \varepsilon_{it}$$
(11)

Work History Model

$$w_{it} = \alpha + \sum_{\iota=1}^{I} \beta_{\iota} \exp_{i,\iota t} + x'_{it} \delta + \varepsilon_{it}$$
(12)

- $w_{it}$ : log-wage of worker i at time t
- $x_{it}$ : controls (AE and HW models include labor market interruptions)
- $\varepsilon_{it} = \nu_i + u_{it}$ .  $\nu_i$ : individual fixed effect;  $u_{it}$ : mean-zero error

		Males		Females			
	Work Hist.	Actual Exper.	Potential Exper.	Work His.	Actual Exper.	Potential Exper.	
	(1)	(2)	(3)	(4)	(5)	(6)	
		One Year of Te	nure	One Year of Tenure			
Experience 2	1.05	1.04	1.00	1.07	1.04	1.00	
Experience 4	1.25	1.24	1.18	1.25	1.23	1.16	
Experience 6	1.50	1.48	1.39	1.40	1.42	1.33	

Table A4 - Returns to experience



# Variables in Returns to Job Changes Models

All models include controls for

- $w_{it}$  log-real wage in year t
- $\exp_{i,t-1}$  actual experience in year t-1
- change\_job<sub>i,t-1</sub> = 1 i if changed employer between t 2 and t 1
- $x'_{i,t-2}$  worker and job characteristics at t-2
  - Bachelor degree by time t-2
  - Enrolled in school in t-2
  - (Log of) weekly hours worked in t-2
  - Quadratic in t-2 tenure
  - Dummy for union bargained contract in t-2
  - (Log of) n. employees at t-2 employer
  - Dummies for whether employer j offered parental benefits and flexible schedule in t-2
  - US Region-specific unemployment rate in t-2
  - 1-digit occupation dummies
  - 1-digit industry dummies
  - Dummies for whether employer j offered, respectively, medical insurance, life insurance, dental care, a retirement plan, and stock ownership.

# Heterogeneous Reasons for Job Change

- Job Shopping (S): worker i obtained a new job
- Job Destruction (D): plant closure, layoff, worker i was fired
- Family Constraints (FC): includes pregnancy
- Working Environment (WE): worker i disliked previous job work environment.
- Other (O): other reasons (e.g. medical).
- Mobility Constraints (MC): transportation costs, lack of infrastructures.

	Postdated JC Decision				Anticipated JC Decision								
	No Married by $(t - 2)$		No Married No Child by $(t - 2)$ by $(t - 2)$		No M by	No Married No Chi by t by t		hild No Mar t by 20		arried No Ch 2015 by 20		Child 2015	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
	b/se	b/se	b/se	b/se	b/se	b/se	b/se	b/se	b/se	b/se	b/se	b/se	
AE (t-1)	$0.0614^{*}$	0.0834	$0.0769^{*}$	0.0698	$0.0685^{*}$	0.0754	$0.0644^{*}$	0.0760	0.0690*	0.0823	$0.0641^*$	0.0699	
	(0.0369)	(0.0585)	(0.0402)	(0.0590)	(0.0378)	(0.0615)	(0.0384)	(0.0582)	(0.0383)	(0.0628)	(0.0378)	(0.0593)	
$AE(t-1)^2$	0.0025	-0.0032	0.0014	-0.0011	0.0017	-0.0020	0.0027	-0.0019	0.0009	-0.0021	0.0018	-0.0011	
	(0.0037)	(0.0060)	(0.0043)	(0.0059)	(0.0037)	(0.0062)	(0.0039)	(0.0059)	(0.0037)	(0.0062)	(0.0037)	(0.0059)	
I[Ch(t-1)])	-0.2732	-0.0875	$-0.2883^{*}$	-0.0594	-0.3329	-0.0791	$-0.3019^{*}$	-0.0532	-0.5420	-0.2153	-0.3077	-0.0777	
	(0.1714)	(0.1613)	(0.1549)	(0.1381)	(0.2114)	(0.2002)	(0.1648)	(0.1482)	(0.3856)	(0.3425)	(0.3000)	(0.2523)	
AE(t-1)*I[Ch(t-1)]	$0.2077^{**}$	0.0961	$0.2105^{**}$	0.0846	$0.2369^{**}$	0.0594	$0.2285^{**}$	0.0862	$0.3297^{*}$	0.0859	0.1970	-0.0310	
	(0.0939)	(0.0903)	(0.0888)	(0.0673)	(0.1145)	(0.1067)	(0.0980)	(0.0709)	(0.1826)	(0.1557)	(0.1498)	(0.1043)	
$AE(t-1)Sqr^*I[Ch(t-1)]$	$-0.0204^{*}$	-0.0143	$-0.0232^{**}$	-0.0101	$-0.0229^{*}$	-0.0092	-0.0266**	-0.0122	-0.0320*	-0.0107	-0.0184	0.0058	
	(0.0105)	(0.0146)	(0.0112)	(0.0092)	(0.0126)	(0.0167)	(0.0132)	(0.0104)	(0.0192)	(0.0235)	(0.0163)	(0.0138)	
Adjusted $R^2$	0.165	0.106	0.144	0.105	0.141	0.105	0.168	0.104	0.148	0.108	0.159	0.110	
N	1790	2188	1790	2188	1790	2188	1790	2188	1790	2188	1790	2188	
N_g	304	382	304	382	304	382	304	382	304	382	304	382	
Job Change Motive	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
Occ. & Ind. $t - 2$	Y	Y	Y	Y	Y	Y	Y	Y	Y	Υ	Y	Y	
Additional Contr.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	

Table A5 - Returns to Job Change No Married/No Children

#### Preferences for may differ by gender

- Probability of quitting job falls as valuable amenities are provided
- The stronger fall in quit probability the stronger preferences for amenities (Groenberg & Reed 1994, Dale-Olsen 2006)
- $\rightarrow$  Conditional Logit Model of Job Quit (Chamberlain 1981, Kitazawa 2012)

Estimating quit probabilities: model & control variables

$$y_{ijt}^* = z'_{ijt}\xi + \nu_i + u_{ijt}$$
(13)  
=  $\alpha + \beta w_{it} + \gamma \mathbf{I} \left[ \text{Parental Leave}_{ijt} \right] + \delta \mathbf{I} \left[ \text{Flexible Schedule}_{ijt} \right] + x'_{ijt}\eta + \nu_i + u_{ijt}$ 

$$y_{ijt} = \mathbf{I}[j(t) \neq j(t+1)] = \mathbf{I}[y_{*ijt} \ge 0]$$
 (14)

$$\Pr\left[y_{ijt} = 1 | z_{ijt}, \nu_i\right] = \frac{\exp\{z'_{ijt}\xi + \nu_i\}}{1 + \exp\{z'_{ijt}\xi + \nu_i\}}$$
(15)

Controls include:

- Quadratic function years of actual experience
- Quadratic function years of tenure
- Dummy for union bargained contract
- Dummies for bachelor degree by t and enrolled in school in t
- Number of spells out of labor force by t
- Dummies for medium or high US region unemployment rate

#### Table A6 - Conditional Logit Model of Job Quit

Log-Hourly Wage in 2005 USD	-0.3818***	-0.6458***
I[Parental Benefits Available at j]	(0.1343) -0.2746 <sup>***</sup>	(0.1563) - $0.2672^{***}$
	(0.1016)	(0.1027)
I[Flexible Schedule Available at j]	$-0.5219^{-0.5}$ (0.1716)	$-0.7214^{+++}$ (0.1645)
Log-Number of Employees at Employer j	-0.1386**	-0.0605
First Child Born by t	(0.0543) -0.3044	(0.0478) -0.5525**
M	(0.3197)	(0.2758)
Married by t	(0.2851)	(0.2263)
N	1479	1751
Controls	Υ	Y

#### Estimated Average Elasticity of Quit Probability

- Average probability of quitting time t job falls faster for women when
  - Parental leave provided at time t job
  - Flexible schedule provided at time  $t \mbox{ job}$
  - $\rightarrow\,$  Women may have stronger preferences for these amenities
  - Wage rises at time t job
  - $\rightarrow$  At current wage, harder for women to further climb job ladder (Light & Ureta 1992)

D'Angelis, Boston College

## Steady-state: derivations from Bonhomme & Jolivet (2009)

• For *U* = measure of unemployed workers Flows in and out of unemployment are equal

$$\lambda_0 U = q(1 - U) \tag{16}$$

Flows in and out of jobs yielding  $\tilde{u} \leq u$  are equal

$$\lambda_0 U F_u(u) + \lambda_2 F_u(1-U) \bar{G}_u = q(1-U) G_u(u) + \lambda_2 \bar{F}_u(u)(1-U) G_u(u) + \lambda_1 \bar{F}_u(u)(1-u) G_u(u)$$
(17)

• For  $k = \frac{\lambda_1}{\lambda_2 + q}$  the st.s. distribution of employed workers across u is  $G_u(u) = \frac{F_u(w + \delta'a)}{(1 + k\bar{F}_u(w + \delta'a))} \Rightarrow g_u(u) = (1 + k)\frac{f_u(w + \delta'a)}{(1 + k\bar{F}_u(w + \delta'a))^2}$ (18)

The observed cross sectional distribution of (w, a) is

$$g(w,a) = (1+k)\frac{f(w,a)}{(1+k\bar{F}_u(w+\delta'a))^2}$$
(19)

$$\underbrace{w^*(b, \operatorname{car}_{occ}, \operatorname{car}_{ind})}_{\text{wage offers}} = \mu_0^w + \mu_1^w b + \rho' \mathbf{a}^* + \sum_{occ=1}^3 \varphi_{occ}^w \operatorname{car}_{occ} + \sum_{ind=1}^3 \varphi_{ind}^w \operatorname{car}_{ind} + \sigma_w \varepsilon_w$$

(20)



(20)





amenity k provision

differs by career

(21)

- b: log-percentile of CAT-ASVAB test
- $\varepsilon_w, \varepsilon_{a_1}, ..., \varepsilon_{a_4}$  independent and  $\varepsilon_j \sim \Phi(0, 1)$  for  $j \in \{w, a_1, ..., a_4\}$ 
  - $\rightarrow$  Functional forms for  $f_{t+1}(w_{t+1}, \mathbf{a}_{t+1}|.)$  and  $\bar{F}(u_t|.)$

## Structural model functional forms

The joint wage and amenities offer density and the job offers distribution are

$$f(w^*, \mathbf{a}^*|.) = \frac{1}{\sigma_w} \phi\left(\frac{w^* - \mu^w(X) - \rho'\mathbf{a}}{\sigma_w}\right) \prod_{k=1}^K \Phi\left(\mu^{a_k}(X)(-1)^{(1-a_k^*)}\right)$$
(22)  
$$\bar{F}_u(u|.) = \sum_{\mathbf{a}^* \in \{0,1\}^K} \Phi\left(\frac{(\mu^w(X) + \rho'\mathbf{a}^* + \delta'\mathbf{a}^* - u)}{\sigma_w}\right) \prod_{k=1}^K \Phi\left(\mu^{a_k}(X)(-1)^{(1-a_k^*)}\right)$$
(23)

• Labor market entry:

Individual contribution to the likelihood function,  $l_{t_0}$ , is

$$l_{t_0} = \underbrace{\left(\frac{q}{\lambda_0 + q}\right)^{1 - e_{t_0}}}_{\text{share unemp.}} \underbrace{\left(\frac{\lambda_0}{\lambda_0 + q}\right)^{e_{t_0}}}_{\text{share employed}} g_{t_0}(w_{t_0}, \mathbf{a}_{t_0}|.)^{e_{t_0}} \tag{24}$$

• Labor market entry:

Individual contribution to the likelihood function,  $l_{t_0}$ , is

$$l_{t_0} = \underbrace{\left(\frac{q}{\lambda_0 + q}\right)^{1 - e_{t_0}}}_{\text{share unemp.}} \underbrace{\left(\frac{\lambda_0}{\lambda_0 + q}\right)^{e_{t_0}}}_{\text{share employed}} g_{t_0}(w_{t_0}, \mathbf{a}_{t_0}|.)^{e_{t_0}} \tag{24}$$

• For every following month  $(t + 1) \in \{(t_0 + 1), ..., T\}, l_{t+1}$  is

$$l_{t+1} = [1 - \lambda_0]^{uu_t} \times \lambda_0^{uj_t} f_{t+1}(w_{t+1}, \mathbf{a}_{t+1}|.)^{uj_t} \times \\ \times q^{ju_t} \times [1 - \lambda_1 \bar{F}(u_t|.) - \lambda_2 - q]^{s_t} \times \\ \times [\lambda_1 \mathbf{1}\{w_{t+1} + \delta' \mathbf{a}_{t+1} > w_t + \delta' \mathbf{a}_t\} + \lambda_2]^{jj_t} f_{t+1}(w_{t+1}, \mathbf{a}_{t+1}|.)^{jj_t}$$
(25)

• Labor market entry:

Individual contribution to the likelihood function,  $l_{t_0}$ , is

$$l_{t_0} = \underbrace{\left(\frac{q}{\lambda_0 + q}\right)^{1 - e_{t_0}}}_{\text{share unemp.}} \underbrace{\left(\frac{\lambda_0}{\lambda_0 + q}\right)^{e_{t_0}}}_{\text{share employed}} g_{t_0}(w_{t_0}, \mathbf{a}_{t_0}|.)^{e_{t_0}} \tag{24}$$

• For every following month  $(t + 1) \in \{(t_0 + 1), ..., T\}, l_{t+1}$  is

$$l_{t+1} = [1 - \lambda_0]^{uu_t} \times \lambda_0^{uj_t} f_{t+1}(w_{t+1}, \mathbf{a}_{t+1}|.)^{uj_t} \times \\ \times q^{ju_t} \times [1 - \lambda_1 \bar{F}(u_t|.) - \lambda_2 - q]^{s_t} \times \\ \times [\lambda_1 \mathbf{1}\{w_{t+1} + \delta' \mathbf{a}_{t+1} > w_t + \delta' \mathbf{a}_t\} + \lambda_2]^{jj_t} f_{t+1}(w_{t+1}, \mathbf{a}_{t+1}|.)^{jj_t}$$
(25)

• Labor market entry:

Individual contribution to the likelihood function,  $l_{t_0}$ , is

$$l_{t_0} = \underbrace{\left(\frac{q}{\lambda_0 + q}\right)^{1 - e_{t_0}}}_{\text{share unemp.}} \underbrace{\left(\frac{\lambda_0}{\lambda_0 + q}\right)^{e_{t_0}}}_{\text{share employed}} g_{t_0}(w_{t_0}, \mathbf{a}_{t_0}|.)^{e_{t_0}} \tag{24}$$

• For every following month  $(t+1) \in \{(t_0+1), ..., T\}, l_{t+1}$  is

$$l_{t+1} = [1 - \lambda_0]^{uu_t} \times \lambda_0^{uj_t} f_{t+1}(w_{t+1}, \mathbf{a}_{t+1}|.)^{uj_t} \times \\ \times q^{ju_t} \times [1 - \lambda_1 \bar{F}(u_t|.) - \lambda_2 - q]^{s_t} \times \\ \times [\lambda_1 1\{w_{t+1} + \delta' \mathbf{a}_{t+1} > w_t + \delta' \mathbf{a}_t\} + \lambda_2]^{jj_t} f_{t+1}(w_{t+1}, \mathbf{a}_{t+1}|.)^{jj_t}$$
(25)

• Labor market entry:

Individual contribution to the likelihood function,  $l_{t_0}$ , is

$$l_{t_0} = \underbrace{\left(\frac{q}{\lambda_0 + q}\right)^{1 - e_{t_0}}}_{\text{share unemp.}} \underbrace{\left(\frac{\lambda_0}{\lambda_0 + q}\right)^{e_{t_0}}}_{\text{share employed}} g_{t_0}(w_{t_0}, \mathbf{a}_{t_0}|.)^{e_{t_0}} \tag{24}$$

• For every following month  $(t+1) \in \{(t_0+1), ..., T\}, l_{t+1}$  is

$$l_{t+1} = [1 - \lambda_0]^{uu_t} \times \lambda_0^{uj_t} f_{t+1}(w_{t+1}, \mathbf{a}_{t+1}|.)^{uj_t} \times \\ \times q^{ju_t} \times [1 - \lambda_1 \bar{F}(u_t|.) - \lambda_2 - q]^{s_t} \times \\ \times [\lambda_1 1\{w_{t+1} + \delta' \mathbf{a}_{t+1} > w_t + \delta' \mathbf{a}_t\} + \lambda_2]^{jj_t} f_{t+1}(w_{t+1}, \mathbf{a}_{t+1}|.)^{jj_t}$$
(25)

• Labor market entry:

Individual contribution to the likelihood function,  $l_{t_0}$ , is

$$l_{t_0} = \underbrace{\left(\frac{q}{\lambda_0 + q}\right)^{1 - e_{t_0}}}_{\text{share unemp.}} \underbrace{\left(\frac{\lambda_0}{\lambda_0 + q}\right)^{e_{t_0}}}_{\text{share employed}} g_{t_0}(w_{t_0}, \mathbf{a}_{t_0}|.)^{e_{t_0}} \tag{24}$$

• For every following month  $(t+1) \in \{(t_0+1), ..., T\}, l_{t+1}$  is

$$l_{t+1} = [1 - \lambda_0]^{uu_t} \times \lambda_0^{uj_t} f_{t+1}(w_{t+1}, \mathbf{a}_{t+1}|.)^{uj_t} \times \\ \times q^{ju_t} \times [1 - \lambda_1 \bar{F}(u_t|.) - \lambda_2 - q]^{s_t} \times \\ \times [\lambda_1 1\{w_{t+1} + \delta' \mathbf{a}_{t+1} > w_t + \delta' \mathbf{a}_t\} + \lambda_2]^{jj_t} f_{t+1}(w_{t+1}, \mathbf{a}_{t+1}|.)^{jj_t}$$
(25)

• Labor market entry:

Individual contribution to the likelihood function,  $l_{t_0}$ , is

$$l_{t_0} = \underbrace{\left(\frac{q}{\lambda_0 + q}\right)^{1 - e_{t_0}}}_{\text{share unemp.}} \underbrace{\left(\frac{\lambda_0}{\lambda_0 + q}\right)^{e_{t_0}}}_{\text{share employed}} g_{t_0}(w_{t_0}, \mathbf{a}_{t_0}|.)^{e_{t_0}} \tag{24}$$

• For every following month  $(t + 1) \in \{(t_0 + 1), ..., T\}, l_{t+1}$  is

$$l_{t+1} = [1 - \lambda_0]^{uu_t} \times \lambda_0^{uj_t} f_{t+1}(w_{t+1}, \mathbf{a}_{t+1}|.)^{uj_t} \times \\ \times q^{ju_t} \times [1 - \lambda_1 \bar{F}(u_t|.) - \lambda_2 - q]^{s_t} \times \\ \times [\lambda_1 \mathbf{1}\{w_{t+1} + \delta' \mathbf{a}_{t+1} > w_t + \delta' \mathbf{a}_t\} + \lambda_2]^{jj_t} f_{t+1}(w_{t+1}, \mathbf{a}_{t+1}|.)^{jj_t}$$
(25)

• Labor market entry:

Individual contribution to the likelihood function,  $l_{t_0}$ , is

$$l_{t_0} = \underbrace{\left(\frac{q}{\lambda_0 + q}\right)^{1 - e_{t_0}}}_{\text{share unemp.}} \underbrace{\left(\frac{\lambda_0}{\lambda_0 + q}\right)^{e_{t_0}}}_{\text{share employed}} g_{t_0}(w_{t_0}, \mathbf{a}_{t_0}|.)^{e_{t_0}} \tag{24}$$

• For every following month  $(t + 1) \in \{(t_0 + 1), ..., T\}, l_{t+1}$  is

$$l_{t+1} = [1 - \lambda_0]^{uu_t} \times \lambda_0^{uj_t} f_{t+1}(w_{t+1}, \mathbf{a}_{t+1}|.)^{uj_t} \times \\ \times q^{ju_t} \times [1 - \lambda_1 \bar{F}(u_t|.) - \lambda_2 - q]^{s_t} \times \\ \times [\lambda_1 \mathbf{1}\{w_{t+1} + \delta' \mathbf{a}_{t+1} > w_t + \delta' \mathbf{a}_t\} + \lambda_2]^{jj_t} f_{t+1}(w_{t+1}, \mathbf{a}_{t+1}|.)^{jj_t}$$
(25)

• Labor market entry:

Individual contribution to the likelihood function,  $l_{t_0}$ , is

$$l_{t_0} = \underbrace{\left(\frac{q}{\lambda_0 + q}\right)^{1 - e_{t_0}}}_{\text{share unemp.}} \underbrace{\left(\frac{\lambda_0}{\lambda_0 + q}\right)^{e_{t_0}}}_{\text{share employed}} g_{t_0}(w_{t_0}, \mathbf{a}_{t_0}|.)^{e_{t_0}} \tag{24}$$

• For every following month  $(t + 1) \in \{(t_0 + 1), ..., T\}, l_{t+1}$  is

$$l_{t+1} = [1 - \lambda_0]^{uu_t} \times \lambda_0^{uj_t} f_{t+1}(w_{t+1}, \mathbf{a}_{t+1}|.)^{uj_t} \times \\ \times q^{ju_t} \times [1 - \lambda_1 \bar{F}(u_t|.) - \lambda_2 - q]^{s_t} \times \\ \times [\lambda_1 \mathbf{1}\{w_{t+1} + \delta' \mathbf{a}_{t+1} > w_t + \delta' \mathbf{a}_t\} + \lambda_2]^{jj_t} f_{t+1}(w_{t+1}, \mathbf{a}_{t+1}|.)^{jj_t}$$
(25)

# • The Likelihood Function is $L(.) = \prod_{i=1}^{N} \left[ l_{t_0} \prod_{t=t_0}^{T} l_{t+1}(e_{t+1}, w_{t+1}, \mathbf{a}_{t+1}, s_t, jj_t, ju_t, uj_t, uu_t | e_t, w_t, \mathbf{a}_t, b, \operatorname{car}_{occ}, \operatorname{car}_{ind}) \right]$

(26)

# Likelihood function and estimation

$$L_{1}(\theta) = L_{1}(\mu_{0}, \mu_{1}, \rho_{1}, \dots, \rho_{5}, \mu_{a_{1}}, \dots, \mu_{a_{5}}, \varphi_{occ1}^{w}, \dots, \varphi_{ind1}^{w}, \dots, \varphi_{occ1}^{a_{k}}, \dots, \varphi_{ind1}^{a_{k}}, \dots, \sigma_{w})$$

$$L(\theta, \lambda, \delta) = \sum_{i=1}^{N} \sum_{t=t_{0}}^{T} \underbrace{\log l_{1,t+1}(\theta)}_{\log(f(w_{t+1}, \mathbf{a}_{t+1})^{uj_{t}})} + \frac{1}{2} \sum_{i=1}^{N} \sum_{t=t_{0}}^{T} \sum_{t=t_{0}}^{T} \underbrace{\log l_{1,t+1}(\theta)}_{\log(h(w_{t+1}, \mathbf{a}_{t+1})^{uj_{t}})} + \frac{1}{2} \sum_{t=t_{0}}^{T} \sum_{t=t_{$$

# Likelihood function and estimation


# Likelihood function and estimation

$$L_{1}(\theta) = L_{1}(\mu_{0}, \mu_{1}, \rho_{1}, ..., \rho_{5}, \mu_{a_{1}}, ..., \mu_{a_{5}}, \varphi_{occ1}^{w}, ..., \varphi_{ind1}^{u}, ..., \varphi_{occ1}^{a_{k}}, ..., \varphi_{ind1}^{a_{k}}, ..., \varphi_{ind1}^{a_{k}}, ..., \varphi_{occ1}^{a_{k}}, ..$$

# Likelihood function and estimation

$$L_{1}(\theta) = L_{1}(\mu_{0},\mu_{1},\rho_{1},...,\rho_{5},\mu_{a_{1}},...,\mu_{a_{5}},\varphi_{occ1}^{w},...,\varphi_{ind1}^{w},...,\varphi_{occ1}^{ak},...,\varphi_{ind1}^{ak},...,\sigma_{w})$$

$$L(\theta,\lambda,\delta) = \sum_{i=1}^{N} \sum_{t=t_{0}}^{T} \log l_{1,t+1}(\theta) + \sum_{i=1}^{N} \sum_{t=t_{0}}^{T} \log l_{2,t+1}(\theta,\lambda,\delta) + \sum_{i=1}^{N} \sum_{t=t_{0}}^{T} \log l_{3,t+1}(\theta,\lambda,\delta) + \sum_{i=1}^{N} \sum_{t=t_{0}}^{T} \sum_{i=1}^{N} \sum_{i=1}^{N} \sum_{t=t_{0}}^{T} \sum_{i=1}^{N} \sum_{i=$$

	Ea Preferen	(a) stimated ces Parameters $\hat{\delta_k}$	The V of A	(b) Wage Value Amenities $e^{-\delta_k}$
	Males	Males Females		Females
Flexibility LR Test <i>p</i> -Value	0.825 [0.000]	0.814 [0.000]	0.438	0.443
Parental Leave LR Test $p$ -Value	$1.140 \\ [0.000]$	1.311 [0.000]	0.320	0.269

#### Table 7 - Hedonic Parameters

#### • More Results

	Es Preferenc	(a) stimated ces Parameters $\hat{\delta_k}$	( The Wa of An e	(b) age Value menities $-\delta_k$
	Males	Females	Males	Females
Flexibility LR Test <i>p</i> -Value	0.825 [0.000]	$0.814 \\ [0.000]$	0.438	0.443
Parental Leave LR Test $p$ -Value	$1.140 \\ [0.000]$	1.311 [0.000]	0.320	0.269

#### Table 7 - Hedonic Parameters

#### More Results

	E Preferen	(a) stimated ices Parameters $\hat{\delta_k}$	The V of A	(b) Vage Value menities $e^{-\delta_k}$
	Males	Females	Males	Females
Flexibility LR Test <i>p</i> -Value	0.825 [0.000]	0.814 [0.000]	0.438	0.443
Parental Leave LR Test $p$ -Value	$1.140 \\ [0.000]$	1.311 [0.000]	0.320	0.269

#### Table 7 - Hedonic Parameters

#### More Results

	Es Preferenc	(a) stimated ces Parameters $\hat{\delta_k}$	( The Wa of An e	(b) age Value nenities $-\delta_k$
	Males	Females	Males	Females
Flexibility LR Test <i>p</i> -Value	0.825 [0.000]	0.814 [0.000]	0.438	0.443
Parental Leave LR Test $p$ -Value	$1.140 \\ [0.000]$	1.311 [0.000]	0.320	0.269

#### Table 7 - Hedonic Parameters

#### • More Results

	E Preferen	(a) stimated ces Parameters $\hat{\delta_k}$	The W of A	(b) Vage Value menities $e^{-\delta_k}$
	Males	Females	Males	Females
Flexibility LR Test <i>p</i> -Value	0.825 [0.000]	0.814 [0.000]	0.438	0.443
Parental Leave LR Test $p$ -Value	$1.140 \\ [0.000]$	1.311 [0.000]	0.320	0.269

#### Table 7 - Hedonic Parameters

#### More Results

# Estimation results: Search frictions are stronger for out-of-work women

#### Table 8 - Search Frictions Parameters

	$\hat{\lambda}_0$	$\hat{\lambda}_1$	$\hat{\lambda}_2$	$\hat{q}$
		Fem	ales	
Coeff. Asy.Std.Err.	$0.199 \\ (0.013)$	0.013 (0.002)	$0.005 \\ (0.001)$	$0.008 \\ (0.001)$
		Ma	les	
Coeff. Asy.Std.Err.	$0.236 \\ (0.018)$	0.014 (0.002)	$0.005 \\ (0.001)$	$0.007 \\ (0.001)$

# Estimation results: Search frictions are stronger for out-of-work women

#### Table 8 - Search Frictions Parameters

	$\hat{\lambda}_0$	$\hat{\lambda}_1$	$\hat{\lambda}_2$	$\hat{q}$
		Fer	nales	
Coeff.	0.199	0.013	0.005	0.008
Asy.Std.Err.	(0.013)	(0.002)	(0.001)	(0.001)
		Μ	ales	
Coeff.	0.236	0.014	0.005	0.007
Asy.Std.Err.	(0.018)	(0.002)	(0.001)	(0.001)

(a)	W	Wage Offers and Penalties/Premia by Careers								
	$\mu_0^w$	$\mu_0^w \qquad \varphi_e^w \qquad \varphi_p^w \qquad \varphi_o^w \qquad \varphi_{fin}^w \qquad \varphi_{tr}^w \qquad \varphi_{oth}^w$								
				Females						
Coeff.	2.318	-0.010	0.090	-0.381	0.040	0.262	0.100			
LR Test $p$ -Value	[0.000]	[1.000]	[0.100]	[1.000]	[0.300]	[1.000]	[0.57]			
				Males						
Coeff.	2.793	0.171	0.329	0.009	-0.004	0.036	-0.111			
LR Test $p$ -Value	[0.000]	[0.000]	[0.000]	[1.000]	[1.000]	[1.000]	[0.081]			
(b)	Wag	e Penalti	es/Pren	nia in Jol	os Offerin	ng Amer	ities			
		]	Flexibilit	у	Par	ental Le	ave			
				Females						
Coeff.			-0.025			0.279				
LR Test $p$ -Value			[0.300]			[0.000]				
		Males								
Coeff.			0.110			0.313				
LR Test $p$ -Value			[0.011]			[0.000]				

Table 9 - Job Offer Parameters



(a)	w	Wage Offers and Penalties/Premia by Careers					
	$\mu_0^w$	$\varphi^w_e$	$\varphi_p^w$	$\varphi_o^w$	$\varphi^w_{fin}$	$\varphi^w_{tr}$	$\varphi^w_{oth}$
				Females			
Coeff.	2.318	-0.010	0.090	-0.381	0.040	0.262	0.100
LR Test $p$ -Value	[0.000]	[1.000]	[0.100]	[1.000]	[0.300]	[1.000]	[0.57]
				Males			
Coeff.	2.793	0.171	0.329	0.009	-0.004	0.036	-0.111
LR Test $p$ -Value	[0.000]	[0.000]	[0.000]	[1.000]	[1.000]	[1.000]	[0.081]
(b)	Wag	e Penalti	ies/Prem	nia in Jol	os Offerin	ng Amer	ities
		]	Flexibilit	у	Par	ental Le	ave
				Females			
Coeff.			-0.025			0.279	
LR Test $p$ -Value			[0.300]			[0.000]	
				Males			
Coeff.			0.110			0.313	
LR Test $p$ -Value			[0.011]			[0.000]	

Table 9 - Job Offer Parameters





(a)	W	Wage Offers and Penalties/Premia by Careers							
	$\mu_0^w$	$\mu_0^w \qquad \varphi_e^w \qquad \varphi_p^w \qquad \varphi_o^w \qquad \varphi_{fin}^w \qquad \varphi_{tr}^w \qquad \varphi_{oth}^w$							
				Females					
Coeff.	2.318	-0.010	0.090	-0.381	0.040	0.262	0.100		
LR Test $p$ -Value	[0.000]	[1.000]	[0.100]	[1.000]	[0.300]	[1.000]	[0.57]		
				Males					
Coeff.	2.793	0.171	0.329	0.009	-0.004	0.036	-0.111		
LR Test $p$ -Value	[0.000]	[0.000]	[0.000]	[1.000]	[1.000]	[1.000]	[0.081]		
(b)	Wag	e Penalti	ies/Prem	ia in Joh	os Offerin	ng Amer	ities		
		]	Flexibilit	у	Pa	ental Le	ave		
				Females					
Coeff.			-0.025			0.279			
LR Test $p$ -Value			[0.300]			[0.000]			
				Males					
Coeff.			0.110			0.313			
LR Test $p$ -Value			[0.011]			[0.000]			

Table 9 - Job Offer Parameters

More Results Back

(a)	W	Wage Offers and Penalties/Premia by Careers								
	$\mu_0^w$	$\varphi_e^w$	$\varphi_p^w$	$\varphi_o^w$	$\varphi^w_{fin}$	$\varphi^w_{tr}$	$\varphi^w_{oth}$			
				Females						
Coeff.	2.318	-0.010	0.090	-0.381	0.040	0.262	0.100			
LR Test $p$ -Value	[0.000]	[1.000]	[0.100]	[1.000]	[0.300]	[1.000]	[0.57]			
		Males								
Coeff.	2.793	0.171	0.329	0.009	-0.004	0.036	-0.111			
LR Test $p$ -Value	[0.000]	[0.000]	[0.000]	[1.000]	[1.000]	[1.000]	[0.081]			
(b)	Wage	e Penalti	es/Prem	ia in Job	os Offerir	ng Amen	ities			
		I	Flexibilit	У	Par	ental Le	ave			
				Females						
Coeff.			-0.025			0.279				
LR Test $p$ -Value			[0.300]			[0.000]				
				Males						
Coeff.			0.110			0.313				
LR Test $p$ -Value			[0.011]			[0.000]				

Table 9 - Job Offer Parameters



(a)	W	Wage Offers and Penalties/Premia by Careers							
	$\mu_0^w$	$\mu_0^w \qquad \varphi_e^w \qquad \varphi_p^w \qquad \varphi_o^w \qquad \varphi_{fin}^w \qquad \varphi_{tr}^w \qquad \varphi_{oth}^w$							
				Females					
Coeff.	2.318	-0.010	0.090	-0.381	0.040	0.262	0.100		
LR Test $p$ -Value	[0.000]	[1.000]	[0.100]	[1.000]	[0.300]	[1.000]	[0.57]		
		Males							
Coeff.	2.793	0.171	0.329	0.009	-0.004	0.036	-0.111		
LR Test $p$ -Value	[0.000]	[0.000]	[0.000]	[1.000]	[1.000]	[1.000]	[0.081]		
(b)	Wag	e Penalti	es/Pren	nia in Jol	os Offerin	ng Amer	ities		
		]	Flexibilit	у	Pa	ental Le	ave		
				Females					
Coeff.			-0.025			0.279			
LR Test $p$ -Value			[0.300]			[0.000]			
				Males					
Coeff.			0.110			0.313			
LR Test $p\operatorname{-Value}$			[0.011]			[0.000]			

Table 9 - Job Offer Parameters



### Preferences for long hours and child care

	Es Preferen	(a) stimated ces Parameters $\hat{\delta_k}$	_	( The Wa of Am e	b) age Value nenities $^{-\delta_k}$
	Males	Females		Males	Females
Long Hours LR Test <i>p</i> -Value	$0.606 \\ [0.049]$	0.400 [1.000]		0.545	0.670
Childcare LR Test <i>p</i> -Value	$0.656 \\ [1.000]$	$1.140 \\ [1.000]$		0.519	0.726

### Table A7 - Hedonic Parameters

## More Estimation Results: Flexibility Parameters

	$\mu_0^f$	$\mu_1^f$	$\varphi^f_e$	$\varphi_p^f$	$\varphi^f_o$	$\varphi^f_{fin}$	$\varphi^f_{tr}$	$\varphi^f_{oth}$
				Fem	ales			
Coeff. Asy.Std.Err. LR Test <i>p</i> -Value	0.403 (1.694) [0.410]	-0.128 (0.391) [0.260]	$\begin{array}{c} 0.254 \\ (0.294) \\ [0.010] \end{array}$	$0.495 \\ (0.415) \\ [1.000]$	$\begin{array}{c} 0.606 \\ (0.432) \\ [0.090] \end{array}$	-0.098 (0.314) [0.710]	-0.286 (0.518) [1.000]	-0.437 (0.370) [0.580]
				Ma	des			
Coeff. Asy.Std.Err. LR Test <i>p</i> -Value	$\begin{array}{c} 1.946 \\ (2.741) \\ [1.000] \end{array}$	-0.526 (0.622) [1.000]	$\begin{array}{c} 0.310 \\ (0.425) \\ [0.000] \end{array}$	$\begin{array}{c} 0.614 \\ (0.452) \\ [0.001] \end{array}$	$\begin{array}{c} 0.394 \\ (0.339) \\ [0.008] \end{array}$	-0.214 (0.482) [1.000]	$\begin{array}{c} 0.682 \\ (0.685) \\ [0.093] \end{array}$	$\begin{array}{c} 0.060 \\ (0.371) \\ [1.000] \end{array}$

Table A8 - Estimated Flexibility Parameters

### More Estimation Results: Parental Leave Parameters

	$\mu_0^{pl}$	$\mu_1^{pl}$	$\varphi_e^{pl}$	$\varphi_p^{pl}$	$\varphi_o^{pl}$	$\varphi_{fin}^{pl}$	$\varphi_{tr}^{pl}$	$\varphi^{pl}_{oth}$
				Fem	ales			
Coeff. Asy.Std.Err. LR Test <i>p</i> -Value	2.429 (2.049) [0.120]	-0.387 (0.471) [0.220]	$\begin{array}{c} 0.449 \\ (0.303) \\ [0.340] \end{array}$	$\begin{array}{c} 0.536 \ (0.503) \ [0.060] \end{array}$	$0.182 \\ (0.409) \\ [0.860]$	-0.741 (0.340) [1.000]	-0.552 (0.473) [0.090]	-0.801 (0.352) [1.000]
				Ma	des			
Coeff. Asy.Std.Err. LR Test <i>p</i> -Value	-1.106 (2.729) [1.000]	$\begin{array}{c} 0.306 \\ (0.611) \\ [1.000] \end{array}$	$\begin{array}{c} 0.347 \\ (0.434) \\ [1.000] \end{array}$	$\begin{array}{c} 0.24 \\ (0.487) \\ [1.000] \end{array}$	-0.446 (0.355) [0.084]	-0.515 (0.408) [1.000]	$\begin{array}{c} 0.596 \\ (0.695) \\ [1.000] \end{array}$	$\begin{array}{c} 0.037 \\ (0.369) \\ [0.351] \end{array}$

Table A9 - Estimated Parental Leave Parameters

### More Estimation Results: Long Hours Parameters

	$\mu_0^f$	$\mu_1^f$	$\varphi^f_e$	$\varphi_p^f$	$\varphi^f_o$	$\varphi^f_{fin}$	$\varphi^f_{tr}$	$\varphi^f_{oth}$
				Fem	ales			
Coeff. Asy.Std.Err. LR Test <i>p</i> -Value	-2.693 (1.950) [0.100	$\begin{array}{c} 0.432 \\ (0.450) \\ [0.550] \end{array}$	-0.283 (0.347) [1.000]	$\begin{array}{c} 0.283 \ (0.383) \ [0.120] \end{array}$	-0.894 (0.860) [0.010]	-0.044 (0.370) [0.780]	$1.130 \\ (0.549) \\ [0.030]$	-0.073 (0.349) [0.580]
				Ma	des			
Coeff. Asy.Std.Err. LR Test <i>p</i> -Value	-2.149 (3.544) [0.325]	$\begin{array}{c} 0.422 \\ (0.800) \\ [0.001] \end{array}$	$\begin{array}{c} 0.478 \\ (0.497) \\ [1.000] \end{array}$	$\begin{array}{c} 0.173 \\ (0.546) \\ [1.000] \end{array}$	$\begin{array}{c} 0.309 \\ (0.454) \\ [1.000] \end{array}$	-0.873 (0.511) [1.000]	-0.991 (0.828) [1.000]	-0.533 (0.442) [1.000]

Table A10 - Estimated Long Hours Parameters

## More Estimation Results: Child Care Parameters

	$\mu_0^f$	$\mu_1^f$	$\varphi^f_e$	$\varphi_p^f$	$\varphi^f_o$	$\varphi^f_{fin}$	$\varphi^f_{tr}$	$\varphi^f_{oth}$
				Fem	ales			
Coeff. Asy.Std.Err. LR Test <i>p</i> -Value	-1.264 (1.932) [0.420]	$\begin{array}{c} 0.027 \\ (0.459) \\ [1.000] \end{array}$	-0.135 (0.359) [1.000]	$0.144 \\ (0.473) \\ [1.000]$	-0.374 (0.663) [1.000]	$0.122 \\ (0.368) \\ [0.240]$	$\begin{array}{c} 0.311 \\ (0.632) \\ [0.690] \end{array}$	$0.094 \\ (0.444) \\ [0.520]$
				Ma	des			
Coeff. Asy.Std.Err. LR Test <i>p</i> -Value	$\begin{array}{c} 1.822 \\ (3.619) \\ [1.000] \end{array}$	-0.834 (0.863) [1.000]	-0.197 (0.764) [1.000]	$\begin{array}{c} 0.546 \\ (0.584) \\ [1.000] \end{array}$	-5.043 $[1.000]$	$\begin{array}{c} 0.214 \\ (0.992) \\ [1.000] \end{array}$	$\begin{array}{c} 0.389 \\ (1.262) \\ [1.000] \end{array}$	$\begin{array}{c} 0.804 \\ (0.686) \\ [0.001] \end{array}$

Table A11 - Estimated Child Care Parameters

	(a) Admin, Educ, Health, Social Services				(b)	Financi	ial Services	
	Admin.	Exec.	Prof.	Other	Admin.	Exec.	Prof.	Other
Women's Predicted log-Wage	2.789	2.812	2.903	2.437	2.781	2.811	2.903	2.424
		(	Counterf	actual Ave	erage Wage	Increase		
(1) Men's Frictions	-0.001	0.000	0.002	0.002	0.001	0.004	0.002	0.004
(2) Men's Preferences	-0.001	0.002	0.001	0.004	0.004	0.004	0.000	0.006
(3) Men's Price of Amenities	0.096	0.114	0.129	0.123	0.098	0.111	0.130	0.129

#### Table 10 - Counterfactual Wage Changes



	(a Heal	) Admi th, Soci	n, Educ ial Serv	;, ices	(b)	Financi	al Servi	ices
	Admin.	Exec.	Prof.	Other	Admin.	Exec.	Prof.	Other
Women's Predicted log-Wage	2.789	2.812	2.903	2.437	2.781	2.811	2.903	2.424
		(	Counterf	actual Av	erage Wage	Increase		
<ol> <li>Men's Frictions</li> <li>Men's Preferences</li> <li>Men's Price of Amenities</li> </ol>	-0.001 -0.001 0.096	$0.000 \\ 0.002 \\ 0.114$	$0.002 \\ 0.001 \\ 0.129$	0.002 0.004 0.123	$0.001 \\ 0.004 \\ 0.098$	$0.004 \\ 0.004 \\ 0.111$	$0.002 \\ 0.000 \\ 0.130$	0.004 0.006 0.129

#### Table 10 - Counterfactual Wage Changes



		(a) Admin, Educ, Health, Social Services					(b) 1	Financi	al Services		
		Admin.	Exec.	Prof.	Other		Admin.	Exec.	Prof.	Other	
	Women's Predicted log-Wage	2.789	2.812	2.903	2.437		2.781	2.811	2.903	2.424	
			(	Counterf	actual Av	erag	ge Wage I	Increase			
ſ	(1) Men's Frictions	-0.001	0.000	0.002	0.002		0.001	0.004	0.002	0.004	
	(2) Men's Preferences	-0.001	0.002	0.001	0.004		0.004	0.004	0.000	0.006	
	(3) Men's Price of Amenities	0.096	0.114	0.129	0.123		0.098	0.111	0.130	0.129	

#### Table 10 - Counterfactual Wage Changes



Table 10 - Counterfactual Wage Changes

## Impact of preferences, search frictions and job offers on women's pay

		(a) Admin, Educ, Health, Social Services				_	(b) 1	Financia	al Servi	ces
		Admin.	Exec.	Prof.	Other	_	Admin.	Exec.	Prof.	Other
	Women's Predicted log-Wage	2.789	2.812	2.903	2.437		2.781	2.811	2.903	2.424
			(	Counterf	actual Av	erag	e Wage I	Increase		
	(1) Men's Frictions	-0.001	0.000	0.002	0.002		0.001	0.004	0.002	0.004
$\left( \right)$	(2) Men's Preferences	-0.001	0.002	0.001	0.004		0.004	0.004	0.000	0.006
	(3) Men's Price of Amenities	0.096	0.114	0.129	0.123		0.098	0.111	0.130	0.129

Men's frictions & preferences for amenities

 $\rightarrow$  Women's avg. wage  $\sim$  unchanged



	(a) Admin, Educ, Health, Social Services					(b) 1	Financia	al Servi	ces
	Admin.	Exec.	Prof.	Other		Admin.	Exec.	Prof.	Other
Women's Predicted log-Wage	2.789	2.812	2.903	2.437		2.781	2.811	2.903	2.424
		(	Counterf	actual Av	era	ge Wage I	Increase		
(1) Men's Frictions	-0.001	0.000	0.002	0.002		0.001	0.004	0.002	0.004
(2) Men's Preferences	-0.001	0.002	0.001	0.004		0.004	0.004	0.000	0.006
(3) Men's Price of Amenities	0.096	0.114	0.129	0.123		0.098	0.111	0.130	0.129

Table 10 - Counterfactual Wage Changes

Men's frictions & preferences for amenities

 $\rightarrow$  Women's avg. wage  $\sim$  unchanged

Men's frictions, preferences and amenities' price

 $\rightarrow$  Women's avg. wage  $\uparrow$  10 to 13 log-points.

# Utility gap decomposition: method

$$\hat{E}(u|f,.) - \hat{E}(u|m,.) = \underbrace{\left[ (\hat{\mu}_{0}^{f} + \hat{\varphi}_{j}^{f,w} + \hat{\varphi}_{\tau}^{f,w}) - (\hat{\mu}_{0}^{m} + \hat{\varphi}_{j}^{m,w} + \hat{\varphi}_{\tau}^{m,w}) \right] + (\hat{\mu}_{1}^{f} - \hat{\mu}_{1}^{m})b}_{\text{u.gap due to different avg. wage offers}} \\
+ \underbrace{\sum_{k=1}^{4} \hat{\rho}_{k}^{f} \left[ \hat{\Phi}^{f}(.) - \hat{\Phi}^{m}(.) \right] + \sum_{k=1}^{4} \hat{\delta}_{k}^{f} \left[ \hat{\Phi}^{f}(.) - \hat{\Phi}^{m}(.) \right]}_{\text{u.gap due to different \% jobs offering amenities}} \\
+ \underbrace{\sum_{k=1}^{4} \hat{\Phi}^{m}(.) \left( \hat{\rho}_{k}^{f} - \hat{\rho}_{k}^{m} \right)}_{\text{u.gap due to different avg. price of amenities}} \\
+ \underbrace{\sum_{k=1}^{4} \hat{\Phi}^{m}(.) \left( \hat{\delta}_{k}^{f} - \hat{\delta}_{k}^{m} \right)}_{\text{u.gap due to different preferences}}$$
(27)

### Utility gap decomposition: results

#### Table A12 - Predicted Utility Gap Decomposition

	(a) Adr Hea	ninistration lth, Social	, Education Services	(b)	Financial S	al Services		
	Admin.	Executive	Professional	Admin.	Executive	Professional		
Utility Gap	0.125	-0.579	-0.261	0.206	0.044	-0.026		
			Utility Gap	Components				
(1) Wage Offers	-0.239	-0.798	-0.466	-0.199	-0.384	-0.430		
(2) Amenities Offers								
(2a) Through Wages	-0.124	-0.141	-0.142	-0.110	-0.125	-0.129		
(2b) Through Preferences	-0.110	-0.096	-0.138	-0.140	-0.117	-0.163		
(3) Selection	0.598	0.455	0.486	0.654	0.669	0.696		