

Job Search and Mobility Over the Life-Cycle: Implications for the Child Penalty

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Motivation

- ◇ Women's earnings and wage growth decrease dramatically following childbirth (child penalty)
 - ◇ Largely attributed to decrease in labor supply, human capital depreciation

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- ◇ Do job search and job switches play a role? Can mothers successfully change jobs for better wages or work amenities?
- ◇ Key idea: if women search and switch less due to children, forgo profitable EE transitions
- ◇ Potentially large implications for wages, work conditions, wage growth, labor supply and welfare

Motivation

- ◇ Many reasons why (soon-to-be) mothers search less and make fewer job-to-job transitions:
 - ◇ Time and mental capacity limits for search: childcare, health
 - ◇ Fewer offers due to discrimination from potential employers
 - ◇ Eligibility for parenthood-related benefits (e.g. parental leave) depend on job tenure
 - ◇ Costly adjustment to new work environment

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 - ◇ Costly adjustment to new work environment
- ◇ Paired with greater need for 'child-friendly' amenities (Goldin, 2014)
 - ◇ Observe overtime work and irregular hours → decrease around birth
 - ◇ Job transitions and amenities over the life-cycle? Evidence of compensating wage differentials?

This Paper

- ◇ Use novel linked Dutch data: administrative and survey data
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- ◇ Job search and policy:
 - ◇ Do effects of policies such as childcare subsidies vary when allowing for endogenous search?

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 - ◇ Evaluate reform that eliminated tenure requirement for parental leave eligibility in 2015 on mothers' employment and lifetime earnings

Preview of Findings

- ◇ Child-related search and mobility costs are substantial:
 - ◇ Account for 34% of child penalty, a 10% decrease in life-cycle earnings
 - ◇ Driven by complementarities between labor supply and job search + dynamic compounding

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 - ◇ Account for 34% of child penalty, a 10% decrease in life-cycle earnings
 - ◇ Driven by complementarities between labor supply and job search + dynamic compounding
- ◇ Endogenous job search adjustments matter for labor market policies:
 - ◇ Effect of childcare policy on earnings would be understated by 22%
- ◇ PL Reform in 2015: facilitated return to employer for new mothers, but decreased employment in the year of birth for newly eligible mothers.

Literature

- ◇ Child penalty and life-cycle models: Bang (2023), Wang (2023), Eckstein et al. (2019), Adda et al. (2017), Francesconi (2002)
- ◇ Search models w/ endogenous search effort: Faberman et al. (2021), Mukoyama et al. (2018)
- ◇ Job mobility and search of mothers: Philippe and Skandalis (2024), Xiao (2023), Laffers and Schmidpeter (2021), Bronson and Thoursie (2021)
- ◇ Amenities and child penalty: Bang (2023), Xiao (2023), Erosa et al. (2022), Le Barbanchon et al. (2020), Hotz et al. (2018), Adda et al. (2017), Goldin (2014), Flabbi and Moro (2012)

Key Contributions:

- Microdata evidence on (on-the-job) job search of women around childbirth
- Examine pattern of wage and amenities over the life-cycle
- Develop and estimate model to understand role of search friction for child penalty

Outline

1 Data Patterns

2 Model

3 Estimation

4 Counterfactual Simulations

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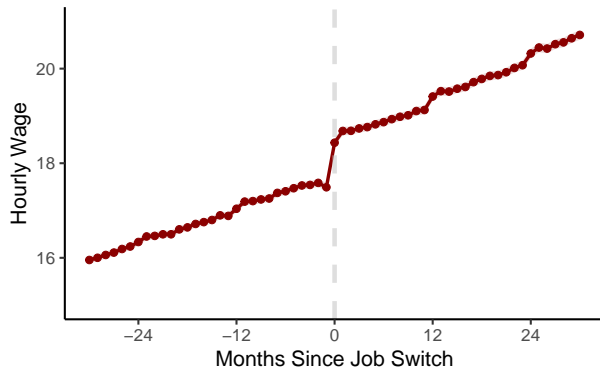
4 Counterfactual Simulations

Data

Combine linkable data sources from the Netherlands for years 2006-2020:

- ◇ Administrative Employment and Registry Data (universe of Dutch population)
 - ◇ Employment, hours, wages, job transitions
 - ◇ Individual characteristics: age, gender, nationality, education
 - ◇ Household characteristics: cohabitation and marital status, date of birth of children
- ◇ Labor Force Survey (50k adults in the work-force yearly)
 - ◇ On-the-job and off-the-job search
 - ◇ Job amenities
- ◇ Working Conditions Survey (20k employed adults yearly)
 - ◇ On-the-job search
 - ◇ Job amenities (consistent with LFS) + more

Data Patterns - Wages and Job Mobility

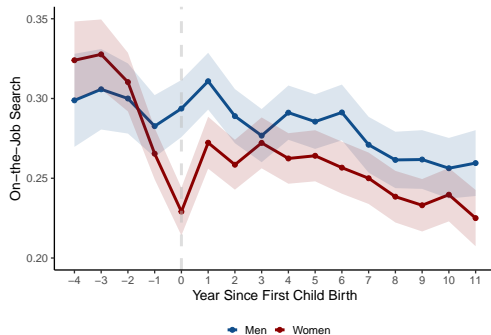
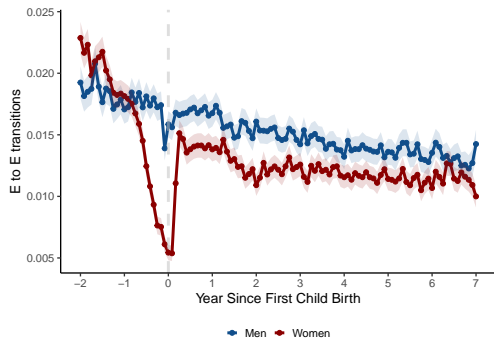


Δ Hourly Wage EE Transition

	Hourly Wage	
Switch	0.721 (0.023)	0.744 (0.056)
t	0.069 (0.001)	0.064 (0.002)
N	842967	842967
Indiv. FE	Yes	No

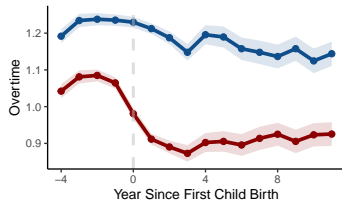
One job-to-job transition increases hourly wage by 4%.

Data Patterns - Job-to-Job Switches and On-the-Job Search

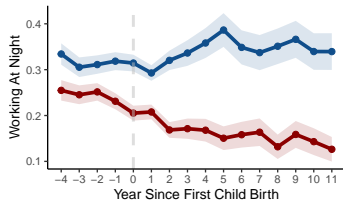


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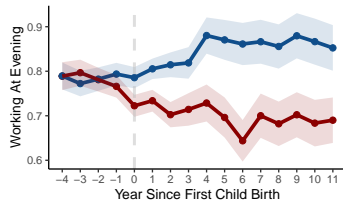
Data Patterns - Amenities



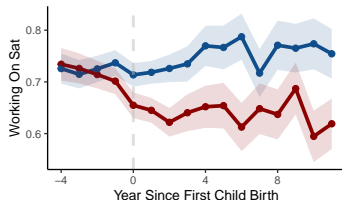
Women Men



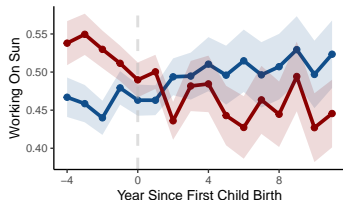
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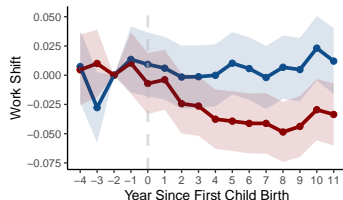
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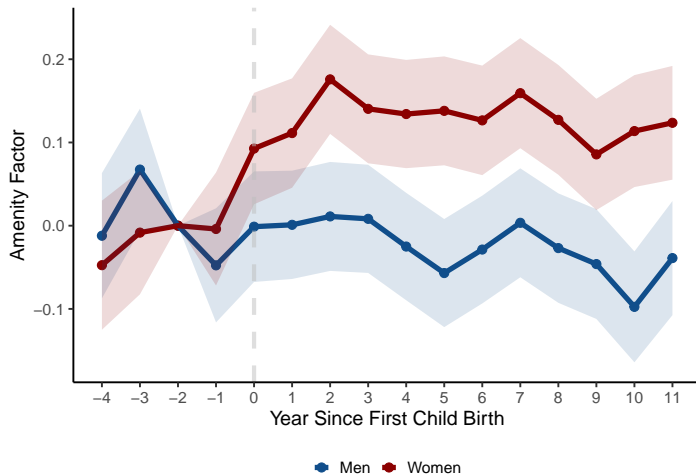


Men Women

Outcomes are the categorical for frequency (0-Never, 1-Sometimes 2-Regularly) [more](#)

Data Patterns - Amenities

Use PCA to create composite amenity measure:



For estimation measure is aggregated at firm-level Firm-Level

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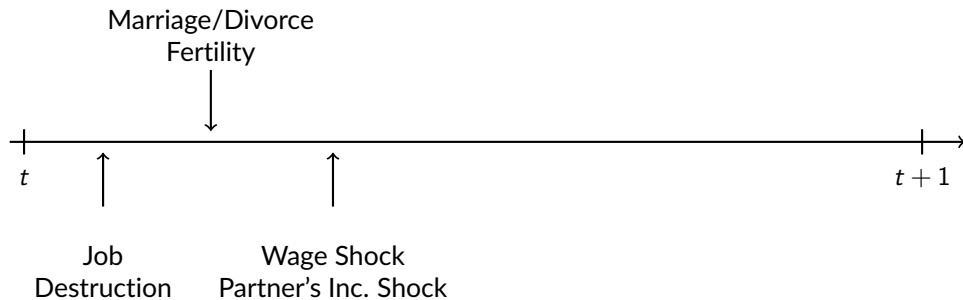
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Model - Overview

- ◇ Women aged 20-60 make yearly discrete choices on
 1. Work hours h_t
 2. Job search: s_t
 3. Job acceptance: d_t
- ◇ Jobs consist of wage and amenity bundle (ω, a) , finite number of types J : all wage-amenity combinations.
- ◇ Two education groups e
- ◇ Human capital accumulation
- ◇ Exogenous marriage/divorce and fertility

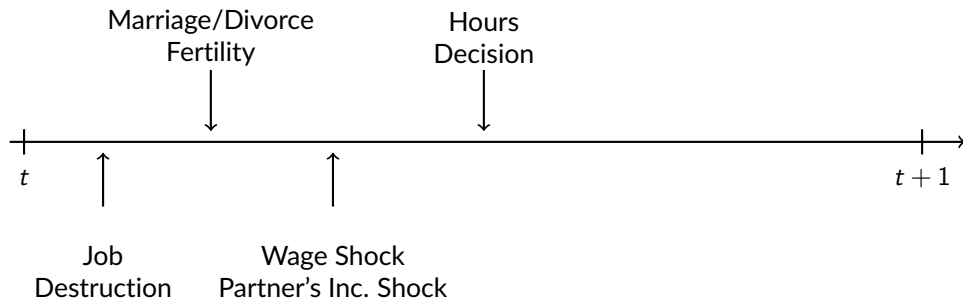
Model - Timing

A life-cycle model of women's job search, mobility and employment :



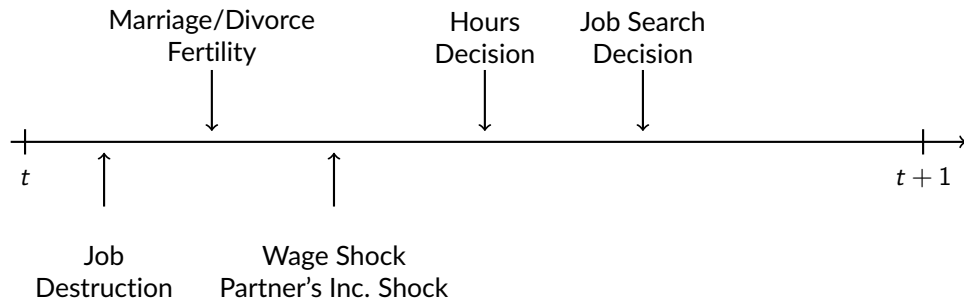
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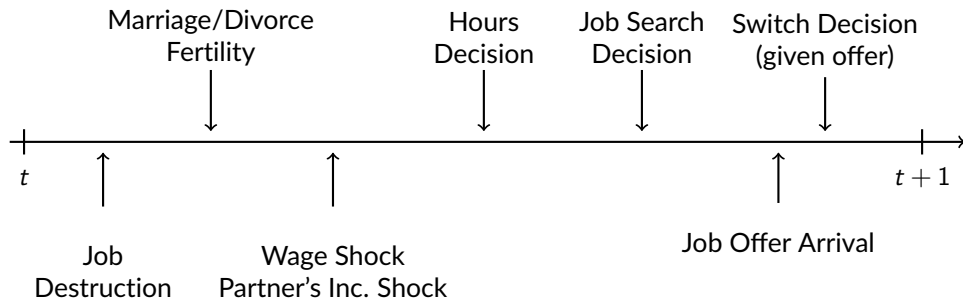
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Model - Job Search

- ◇ Job offers are random draws from distribution $F_{j_0}(j)$ over job types
 - ◇ Distribution independent from current job j_0 , except for extra probability ψ of drawing offer of current type (persistence)
- ◇ Non-employed search with distribution $F_0(j)$, derived from $F_{j_0}(j)$ excluding ψ

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- ◇ Non-employed search with distribution $F_0(j)$, derived from $F_{j_0}(j)$ excluding ψ
- ◇ Job search increases probability of job offer arrival $p(s_t)$
- ◇ Individual can stay at current job as long as $h_t > 0$, if $h_t = 0$ and no new job was found then $h_{t+1} = 0$

Model - Wages, HC, Consumption

- ◇ Wages: $w_t = h_e(exp_t, \omega_t) + \epsilon_t$, ϵ_t iid normal
- ◇ Human capital is general, evolves depending on labor supply and job type:

$$exp_{t+1} = \begin{cases} exp_t + 1 * \eta_j & \text{if full-time} \\ exp_t + \lambda_e * \eta_j & \text{if part-time} \\ \delta exp_t & \text{if no work} \end{cases}$$

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- ◇ Labor income: $y_t = w_t h_t$, where $h_t = 1$ (full-time) or $h_t = 0.6$ (part-time).
- ◇ Husband's income: $y_{ht} = \iota_e(\text{age}_t) + \epsilon_t^h$, ϵ_t^h iid normal
- ◇ Age and education-specific marriage, divorce and fertility rates [more](#)

Model - Preferences

- ◇ Women's deterministic period utility:

$$U_t(\Omega_t; s_t, h_t, d_t) = \underbrace{u(c_t)}_{\text{utility from consumption}} - \underbrace{v(n_t, \text{childage}_t, a_t, h_t)}_{\text{disutility of working depending on children, amenities and hours}} \\ - \underbrace{\kappa(\text{childage}_t, s_t, d_t)}_{\text{search and switching costs depending on age of children}}$$

where $\Omega_t = \{e, n_t, \text{childage}_t, m_t, \text{exp}_t, j_t, \text{emp}_{t-1}\}$

- ◇ Amenities affect disutility of working, especially with children
- ◇ Preference shocks iid EV type I

Model - Dynamic Search Incentives

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- ◇ Job search increases both wage and amenity in the future
- ◇ Incentive is strongest during young ages:
 - ◇ Search cost lower without children
 - ◇ Most start at the bottom of job ladder
 - ◇ Benefit can last for rest of work life (persistence)
- ◇ Childless women anticipate childbirth
 - ◇ strive to find good job before moving becomes harder

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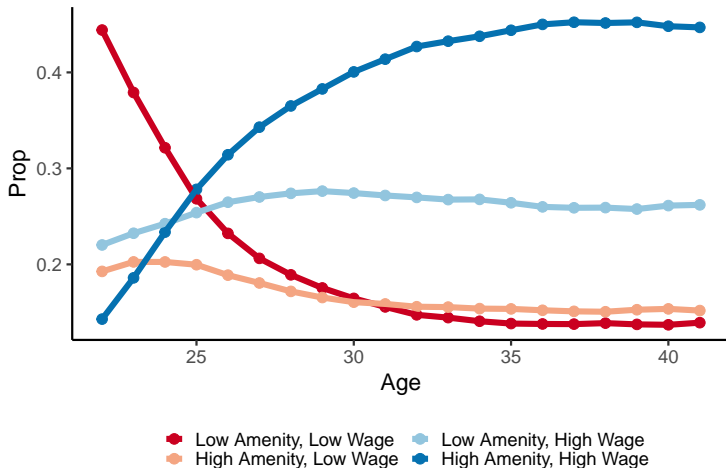
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Estimation - Firm-Specific Amenities and Wages

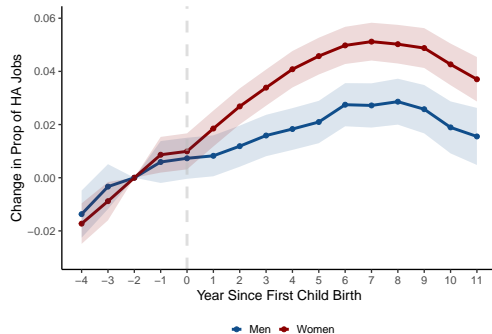
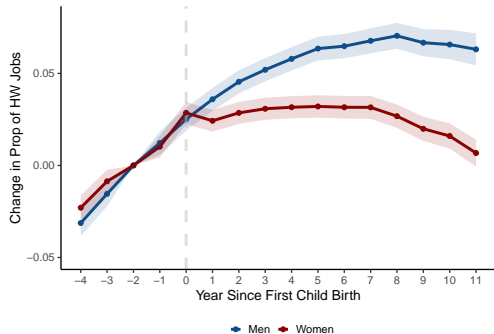
- ◇ Sample: All individuals who responded to Labour Force or Work Conditions Survey, 70k unique women, 660k amenity observations. [more](#)
- ◇ Construct firm-specific amenity (a) and wage (ω) measures as FEs.
 - ◇ For wages: AKM regression with age and education controls.
 - ◇ For amenities: firm FE regression.
- ◇ Construct ω for virtually all and a for 85% employee-month observations (more large firms)
- ◇ Measures explain 44% of wage residual (excluding individual FE) and 20% of amenity values

Estimation - Amenity and Wage Types over Lifecycle

Create four job types, combinations of above and below median wage and amenity level: LALW, LAHW, HALW, HAHW



Firm-Level Discrete Type Measures - Around Birth by Gender



Estimation

- ◇ Fertility, marital transitions, and husband's earnings estimated in initial step
- ◇ Main estimation with Method of Simulated Moments
 - ◇ 113 Moments, stocks and transition rates:
 - ◇ FT, PT by age, education, number/age of children, job type
 - ◇ Search and switching by age, education, number/age of children, job type
 - ◇ Wages and wage increases by hours, age, education, job type [List](#)
 - ◇ 44 Parameters: Preference (17), Wage (7), HC (6), Search Cost (5), Switching cost(1) Job Finding Rate (4), Job Offer Distribution (4)

Identification - Search and Job Type Parameters

- ◇ Job search and switching costs: search and switching rates by age and child's age
- ◇ Offer arrival rates: job switch rates conditional on searching/not searching

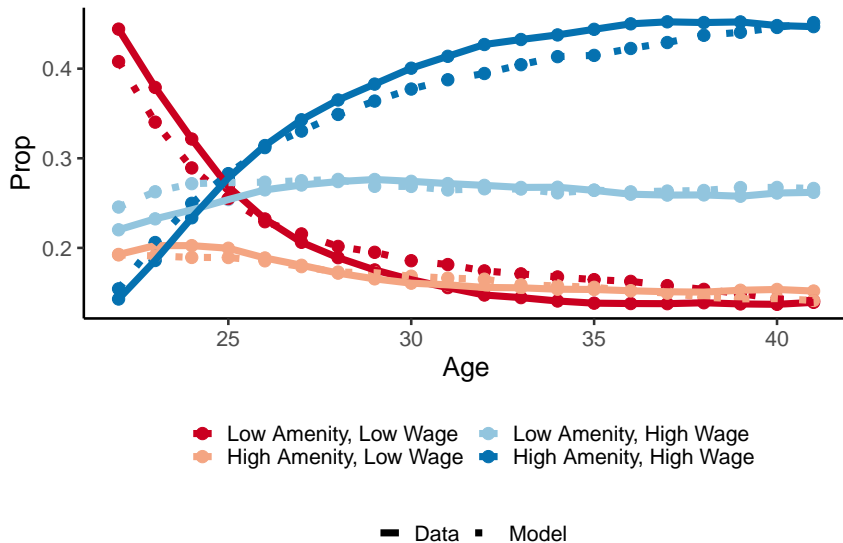
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- ◇ Offer distribution: empirical distribution of job types, type-to-type transitions
- ◇ Human capital evolution: changes in hourly wage by job type and work hours

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- ◇ Human capital evolution: changes in hourly wage by job type and work hours
- ◇ Disutility of working: employment rate and hours by motherhood status, child's age, amenity type
- ◇ Wage increase due to high type: difference in firm AKM FEs

Model Fit - Job Types By Age



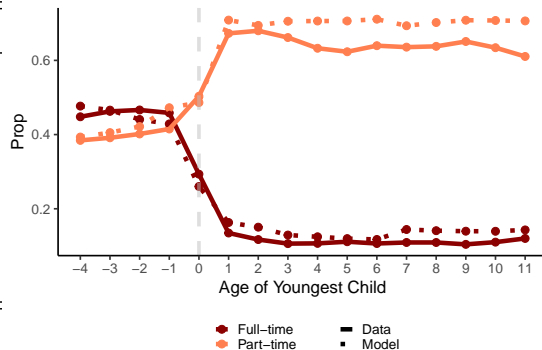
Model Fit - Switching Across Job Types

Data / **Model**

t+1/t	LALW	HALW	LAHW	HAHW
LALW	0.41 / 0.46	0.17 / 0.18	0.11 / 0.10	0.07 / 0.08
HALW	0.20 / 0.17	0.37 / 0.44	0.07 / 0.09	0.11 / 0.06
LAHW	0.20 / 0.16	0.11 / 0.16	0.65 / 0.59	0.12 / 0.12
HAHW	0.18 / 0.22	0.35 / 0.22	0.18 / 0.21	0.70 / 0.73

Model Fit - Switching Rates and Employment

	Model	Data
Job Switch LALW Childless	0.34	0.35
Job Switch LALW Mother	0.16	0.16
Job Switch HALW Childless	0.32	0.30
Job Switch HALW Mother	0.15	0.15
Job Switch LAHW Childless	0.18	0.20
Job Switch LAHW Mother	0.08	0.10
Job Switch HAHW Childless	0.13	0.18
Job Switch HAHW Mother	0.06	0.10



Key Estimates

- ◇ High amenity jobs lower work disutility by 9% compared to low amenity jobs
- ◇ High wage jobs increase intercept of log wages by .27, roughly 20% of av. wage

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- ◇ High amenity jobs lower work disutility by 9% compared to low amenity jobs
- ◇ High wage jobs increase intercept of log wages by .27, roughly 20% of av. wage
- ◇ On-the-job search is effective: job finding rates are 26% (non-searchers) and 79% (searchers)
- ◇ Search costs are higher for mothers and pregnant women:
 - ◇ Baseline: .26, Pregnancy: .82, Child Aged 1-13 \approx 2.00
 - ◇ Search cost of 1.0 = roughly 1200-1300 EUR.
- ◇ Job offer distribution: 36.3% LALW, 29.3% HALW, 16.7% LAHW, 17.7% HAHW

more

List

Labor Supply Elasticities

- Results for permanent 1% increase in wages and a 1 pp. increase in the disutility reduction from high-amenity jobs (9% to 10%)

	Hours Elasticities					% Δ HAHW	% Δ LALW
	All	Childless	Mothers	<35	≥ 35		
1% Δ Wage	0.22	0.20	0.26	0.25	0.17	0.52%	-0.80%
1 pp. Δ Amenity.	0.18	0.10	0.27	0.20	0.15	1.7%	-1.2%

no amenity

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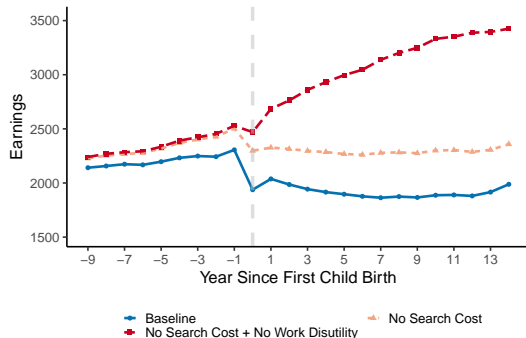
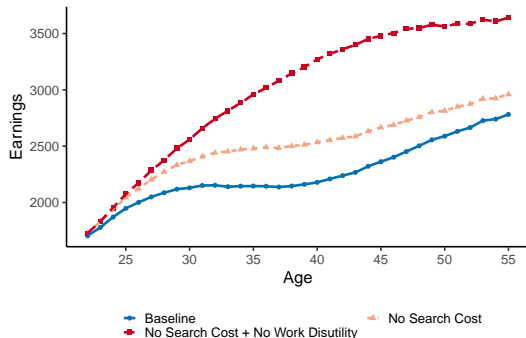
Child Penalty in Search Costs

- ◇ What if mothers and pregnant women do not face higher search costs?
 - ◇ More women obtain jobs with high wages + high amenities
 - ◇ Large increase in discounted earnings of over 10%

	Baseline	No Search Cost	% Diff
Search Non-Mothers	0.508	0.526	+3.5%
Search Mothers	0.411	0.512	+24.6%
Switching Non-Mothers	0.138	0.118	-14.5%
Switching Mothers	0.044	0.055	+25%
Employment	0.869	0.921	+6%
Lifetime Earnings	512.8k	564.9k	+10.1%
% in HAHW	0.410	0.469	+14.4%
% in LAHW	0.268	0.281	+4.9%
% in HALW	0.152	0.120	-21.1%
% in LALW	0.169	0.130	-23.1%

Child Penalty in Search Costs

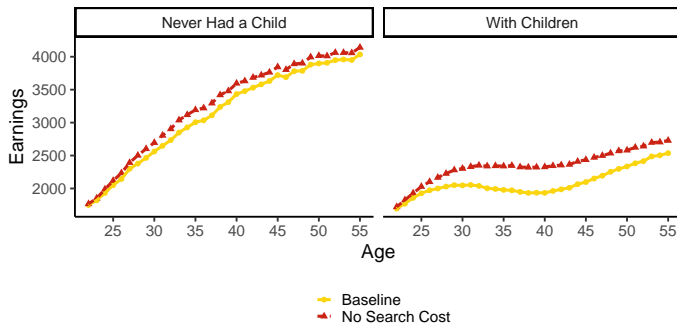
- ◇ In our model, children affect careers through 1) work disutility and 2) search cost
- ◇ Search costs account for 34% of the lifetime earnings losses associated with children



Child Penalty in Search Costs - Anticipation

- ◇ When **expecting to have children** how do women make employment and job search decisions?
- ◇ Examine effects for permanently childless women

	Age	% Δ
Search NC	<35	-.9%
Search NC	≥ 35	.3%
Search C	<35	14.6%
Search C	≥ 35	23.2%
Hours NC	<35	2.8%
Hours NC	≥ 35	.6%
Earnings NC	-	4.1%
Earnings C	-	11.9%



Endogenous Search and Switching and Policy

- ◇ Do adjustments in job search and switching behavior matter for employment policies? → **Yes, effects are amplified**
- ◇ Consider childcare subsidy of 200 EUR per month per child

Endogenous Search and Switching and Policy

- ◇ Do adjustments in job search and switching behavior matter for employment policies? → **Yes, effects are amplified**
- ◇ Consider childcare subsidy of 200 EUR per month per child
- ◇ Effect on earnings is 22.6% greater with endogenous search and switching

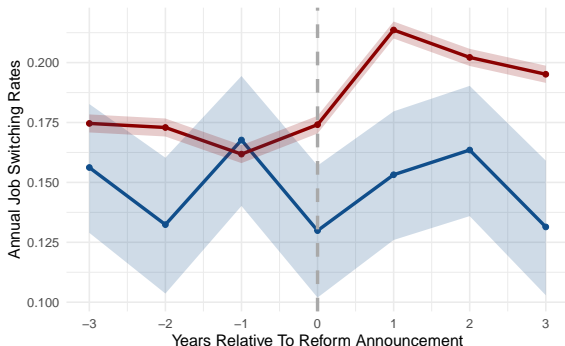
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Employment	0.869	+1.5%	+1.4%
Lifetime Earnings	512.8k	+1.4%	+1.8%
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Parental Leave Tenure Requirement Reform

- ◇ Pre-2015: Eligible for unpaid leave if worked at same employer for at least one year
- ◇ Post-2015: All eligible
- ◇ More job switching in year prior to giving birth

Parental Leave Tenure Requirement Reform

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- ◇ Post-2015: All eligible
- ◇ More job switching in year prior to giving birth
- ◇ For empirical analysis, sector without tenure requirement in pre-reform period can serve as control
- ◇ Construct diff-in-diff and event study



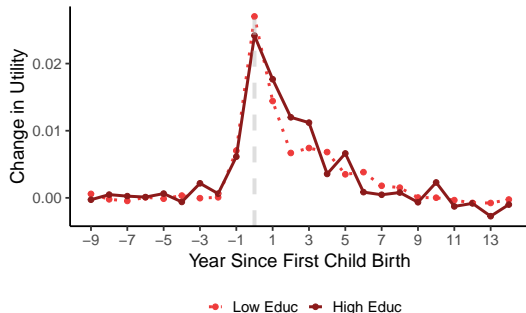
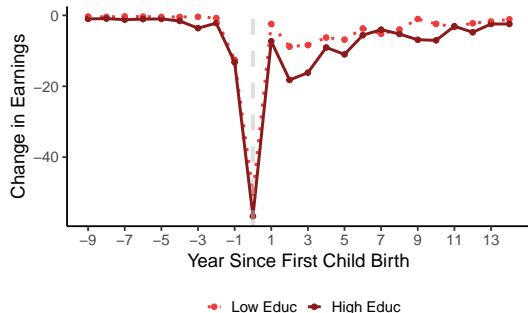
Parental Leave Tenure Requirement Reform - Simulated Effects

- ◇ More job switching in year prior to giving birth
- ◇ Newly eligible switchers take leave
- ◇ Return to pre-birth employer

	Baseline	PL Reform	% Diff	DiD
Search Pregnant Women	0.443	0.447	+0.9%	-
Switching Pregnant Women	0.167	0.188	+12.6%	+ 11.4%
Employment Mothers with Newborn	0.746	0.718	-3.8%	-
Employment Mothers with 1-yo	0.872	0.886	+1.8%	-
Lifetime Earnings	512.8k	511.9k	-0.2%	-
% in HAHW Mothers	0.426	0.427	+0.2%	-
% in LALW Mothers	0.158	0.158	-0.3%	-
Welfare	-	-	+0.1%	-

Parental Leave Tenure Requirement Reform

Earnings decrease by 3.3% in year of first birth. Utility increases by 2.5% in CE terms.



Conclusion

- ◇ Document data patterns for women's job search, mobility and amenities
 - ◇ Job search and switching decreases around childbirth until many years after
 - ◇ Amenities such as regular working hours increase
- ◇ Develop and estimate a life-cycle model of job search, job mobility and employment
 - ◇ Search is more costly for mothers and pregnant women
- ◇ Search costs of mothers account for a third of child penalty, 10% decrease in earnings
- ◇ Endogenizing search and job switching potentially important for employment policies
- ◇ 2015 Reform increased job switching of pregnant women and decreased employment of new mothers, overall small impact on lifetime earnings

THE END

Appendix

Summary Stats - Estimation Sample

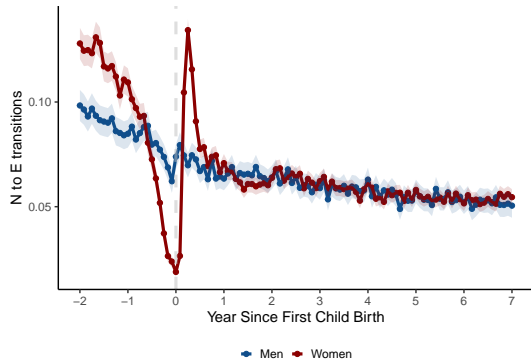
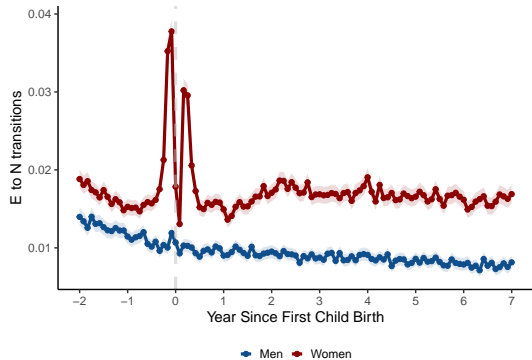
	Low Edu.	High Edu.
Proportion	0.60	0.40
Employed	0.76	0.90
Earnings	1487	2425
Age First Birth	27.9	30.8

Data Patterns - Change in Hourly Wage for Parents

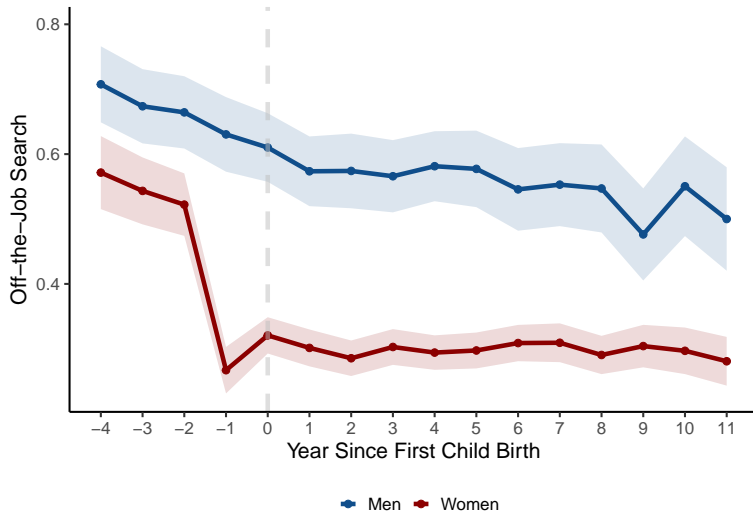
Hourly Wage	
t	0.087 (0.004)
man*t	0.013 (0.005)
parent	-0.4074 (0.099)
man*parent	0.276 (0.140)
parent*t	-0.017 (0.04)
man*parent*t	0.021 (0.005)
N	23438761
Indiv. FE	Yes

Women's hourly wage and wage growth decrease after having children, men's increase. [back](#)

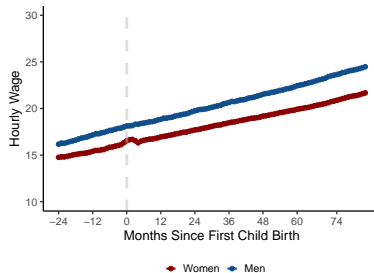
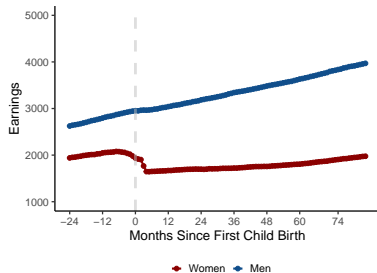
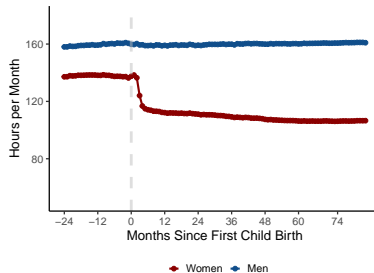
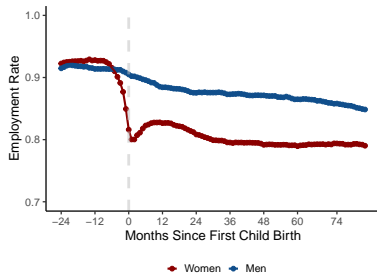
Data Patterns - EN and NE Transitions



Data Patterns - Off-the-Job Search



Data Patterns - Employment, Hours, Earnings, Wages



Estimates

Utility Parameters	
Consumption Constant	1.65
Consumption Scaler	2.42
Work Disutility Constant	0.86
Work Disutility First Kid	0.65
Work Disutility Second Kid	0.55
Work Disutility Third Kid	0.00
Work Disutility Pregnancy	0.00
Work Disutility Child Age 0	0.59
Work Disutility Child Age 1-2	1.57
Work Disutility Child Age 3-6	1.73
Work Disutility Child Age 7-12	1.45
Work Disutility Child Age 13-17	0.01
Work Disutility PT Discount	0.00
Work Disutility HA Discount	0.91
Work Disutility HA Discount Mothers	0.02

Estimates

Parameter	
Human Capital Process	
Depreciation	0.85
Part-time*Educ1	-0.02
Part-time*Educ2	-0.37
Increase in LWHA	-0.01
Increase in HWLA	0.00
Increase in HWHA	0.19
Wage Parameters	
Intercept	2.78
Experience	0.10
Experience Sq.	-0.01
Educ2	0.16
Educ2*Exp	-0.02
Educ2*Exp Sq.	0.01
High Wage Intercept	0.27

Estimates

Parameter	
Job Finding Rate	
When Not Search	0.26
When Search	0.79
Unemployed + Not Search	0.38
Unemployed + Search	1.00
Same Job Type	0.32
Offer Distribution	
LWLA Offer	0.36
LWHA Offer	0.29
HWLA Offer	0.17
Preference Shock Scale	
Switch	0.49
Search	2.32
Search Cost	
Constant	0.09
Child Pregnancy	0.82
Child Age 0-2	2.05
Child Age 3-7	1.94
Child Age 7-13	2.27

Moments - Employment and Wage by Age and Education

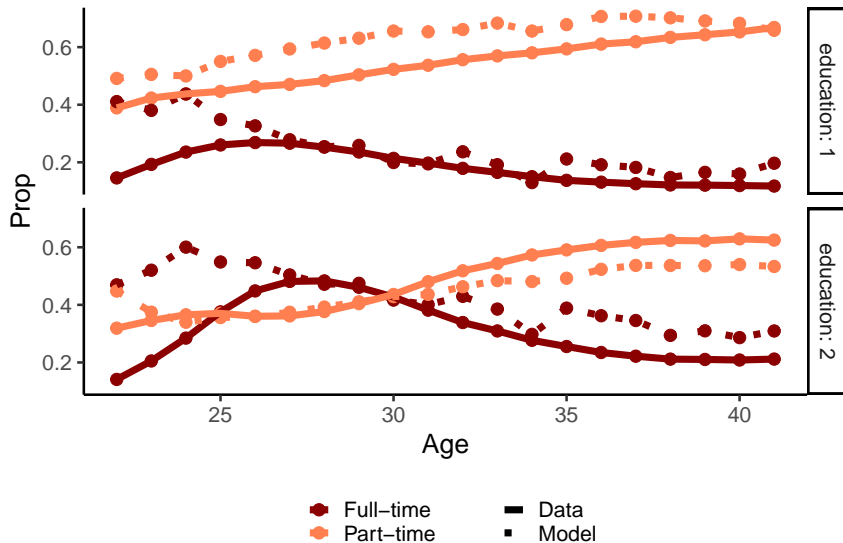
	Model	Data	Norm. Diff.
FT Age 22-29 E1	0.33	0.28	0.30
FT Age 30-37 E1	0.18	0.21	0.09
FT Age 38-45 E1	0.19	0.18	0.00
PT Age 22-29 E1	0.55	0.51	0.11
PT Age 30-37 E1	0.65	0.61	0.24
PT Age 38-45 E1	0.66	0.66	0.00
Wage Age 22-29 E1	12.14	12.36	0.30
Wage Age 30-37 E1	14.27	14.01	0.45
Wage Age 38-45 E1	14.54	14.68	0.12
FT Age 22-29 E2	0.51	0.46	0.28
FT Age 30-37 E2	0.37	0.43	0.45
FT Age 38-45 E2	0.31	0.32	0.02
PT Age 22-29 E2	0.38	0.39	0.01
PT Age 30-37 E2	0.46	0.48	0.04
PT Age 38-45 E2	0.51	0.56	0.30
Wage Age 22-29 E2	14.80	14.85	0.01
Wage Age 30-37 E2	19.22	19.10	0.06
Wage Age 38-45 E2	20.72	20.77	0.00

Moments

Total of 112 Moments:

- ◇ FT, PT, wages by age, education (18)
- ◇ FT, PT, number/age of children (18)
- ◇ FT rate by amenity type and child's age (6)
- ◇ Wage increases by hours, education, job type (12)
- ◇ Wages by wage type (2)
- ◇ Job type by age and child's age (21)
- ◇ Search rates by age and employment status, motherhood status (9)
- ◇ Switching by age, motherhood status, job type (11)
- ◇ Job type to job type switch rates (12)

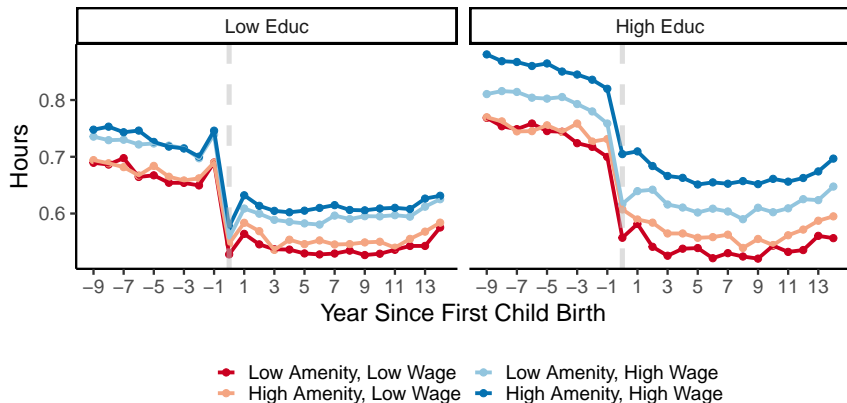
Model Fit - FT and PT Rates by Age and Education Level



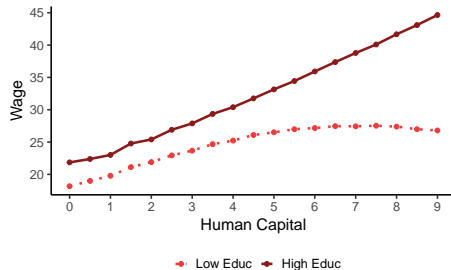
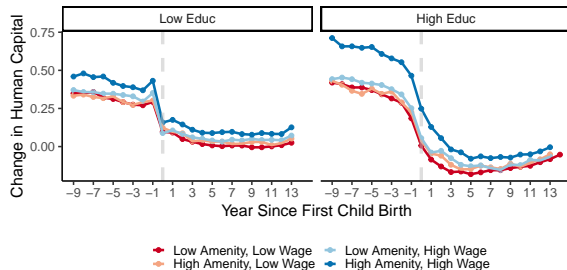
Estimates - Hours by Job Type around Birth

◇ Human capital accumulation parameters:

- ◇ PT: low educ. -.02, high edu. - .37
- ◇ Depreciation: 14.8 %



Estimates - Human Capital and Wages



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Model - Fertility and Marriage

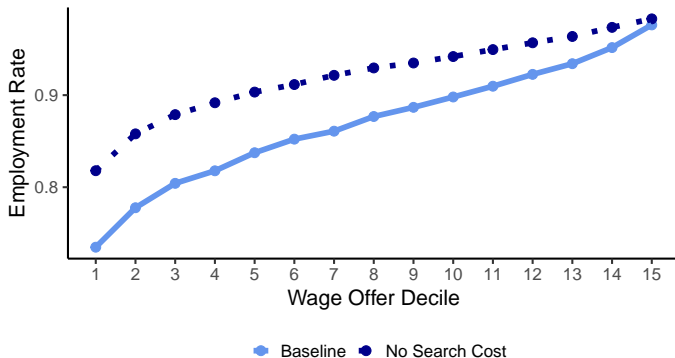
- ◇ Education-specific marriage and fertility rates:
 - ◇ Probability of marriage: $p^{mar} = \lambda_e^{mar}(age_t)$
 - ◇ Probability of pregnancy: $p^{fert} = \lambda_e^{fert}(age_t, m_t)$
 - ◇ Probability of divorce: $p^{div} = \lambda_e^{div}(age_t, n_t)$
- ◇ Child is born at beginning of next period after one year of pregnancy

back

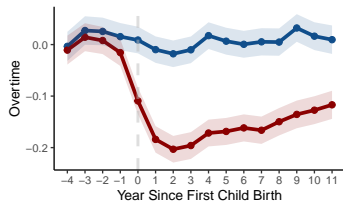
Child Penalty in Search Costs

- ◇ Women earn higher wages due to more HC accumulation and high wage jobs
- ◇ Conditional on the wage offer, women work more due to better amenities

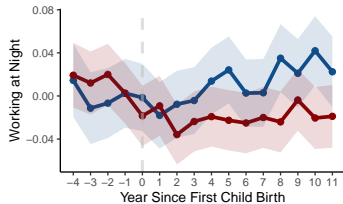
	Baseline	No Search Cost	% Diff
Hourly Wage Mother Age 45	17.7	18.9	+7.1%



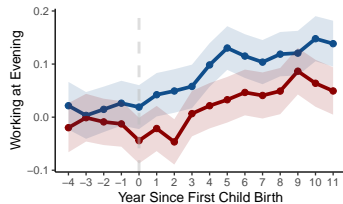
Data Patterns - Amenities with Education Controls



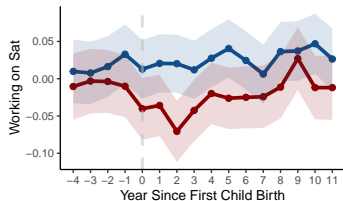
Men Women



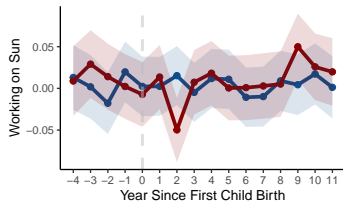
Men Women



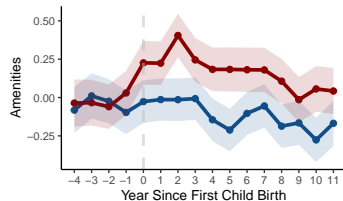
Men Women



Men Women



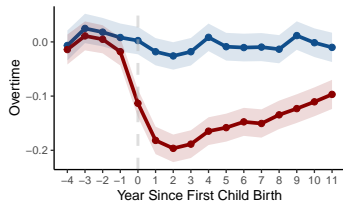
Men Women



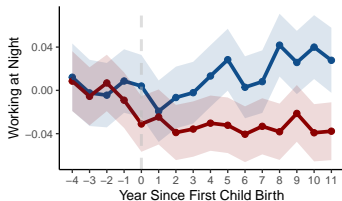
Men Women

Controls: age, year and education dummies. 0-Never, 1-Sometimes 2-Regularly

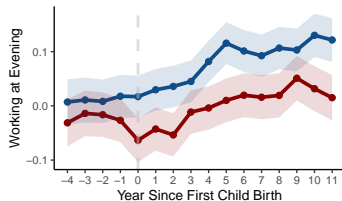
Data Patterns - Amenities with Occupation Controls



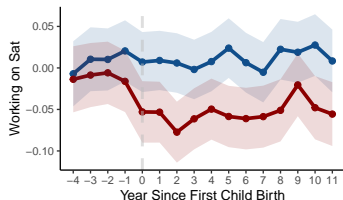
Men Women



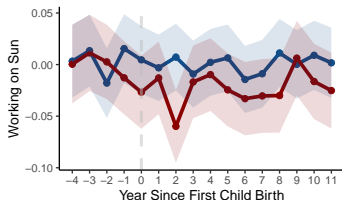
Men Women



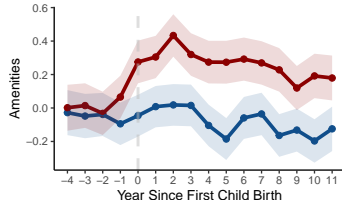
Men Women



Men Women



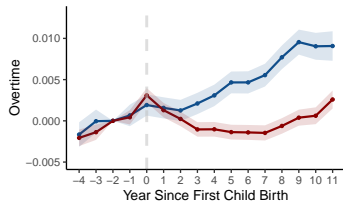
Men Women



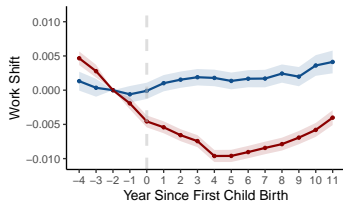
Men Women

Controls: age, year, education and occupation dummies. 0-Never, 1-Sometimes 2-Regularly

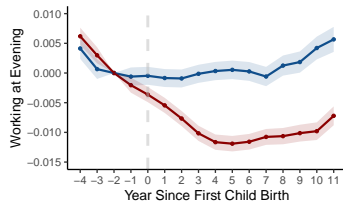
Amenities - Firm-Level Measures



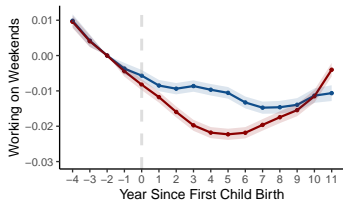
Men Women



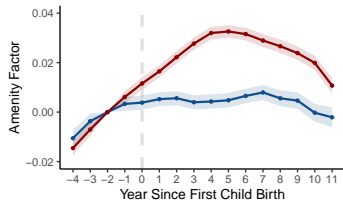
Men Women



Men Women

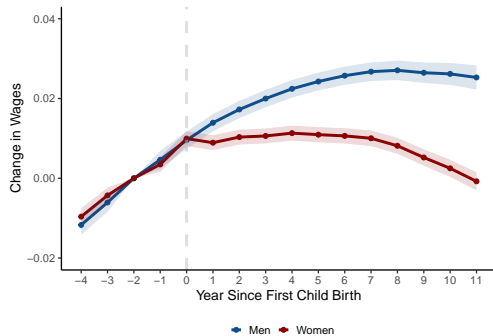


Men Women



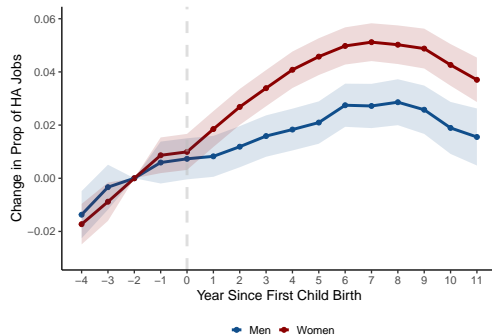
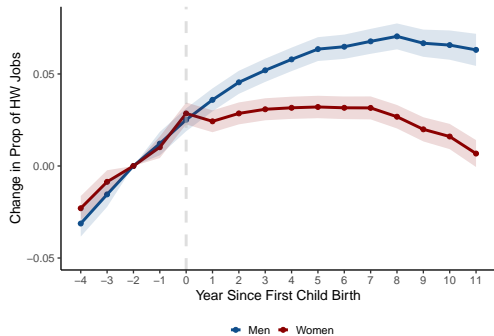
Men Women

Firm-Level Wage FE



back

Firm-Level Discrete Type Measures



Job Types

No Amenity Value

- ◇ What if amenities have no impact on work disutility?
 - ◇ Labor supply and earnings decrease, particularly in previously high amenity jobs
 - ◇ More people stay in LALW, less search, fewer people enter HAHW jobs

	Baseline	No Amenity Value	% Diff
Search HAHW	0.436	0.437	+0.2%
Search LALW	0.453	0.450	-0.7%
Earnings Non-Mothers	2895.2	2860.4	-1.2%
Earnings Mothers	2758.8	2678.8	-2.9%
Lifetime Earnings	512.8k	496.2k	-3.2%
% in HAHW	0.410	0.350	-14.6%
% in LAHW	0.268	0.320	+19.4%
% in HALW	0.152	0.143	-5.9%
% in LALW	0.169	0.187	+10.7%

Parental Leave Tenure Requirement Reform - DiD

- ◇ Treated: Women with children age 8 or younger
- ◇ Control: Women with children age order than 8 / no child and not pregnant

$$Switch_{it} = \beta_0 + \beta_1 * \mathbb{1}(t \geq 2015) * D_{it} + \beta_2 * \mathbb{1}(t \geq 2015) + \beta_3 * D_{it} + \gamma X_{it} + \epsilon_{it}$$

	(1)	(2)
β_1	0.005** (0.000)	0.004** (0.000)
β_2	-0.001** (0.000)	-0.003** (0.000)
β_3	0.002 (0.003)	0.001 (0.002)
Constant	0.103** (0.001)	0.110** (0.001)
Ind FE		Yes
R^2	0.01	0.05

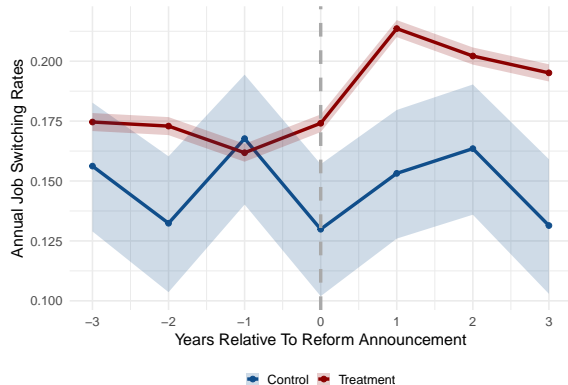
Parental Leave Reform - Empirical Evidence

The formal difference-in-difference estimation is specified as:

$$\text{Switch}_{it} = \beta_0 + \beta_1 \text{Post}_t \times \text{Treated}_i + \beta_2 \text{Post}_t + \beta_3 \text{Treated}_i + \gamma X_{it} + \epsilon_{it} \quad (1)$$

- ◇ Treated_i indicates whether woman i belongs to the treatment group
- ◇ Post_t indicates whether the time period t is after October 2014
- ◇ X_{it} represents a vector of control variables including age, education, and number of children, month
- ◇ Reform was announced in October 2014, implementation in January 2015.

Parental Leave Reform - Empirical Evidence



	Annual Job Switches in Pp.	
	(1)	(2)
Post \times Treated (β_1)	0.114* (0.085)	0.198** (0.085)
Post (β_2)	0.077 (0.085)	0.233** (0.095)
Treated (β_3)	0.477*** (0.063)	0.231*** (0.063)
Controls	No	Yes

Standard errors in parentheses. *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$