

# Marital (In)Stability, Sorting, and Inequality

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# Research agenda in econ: who marries whom, and why?

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  - Does increasing sorting contribute to rising between-household **inequality**?
- New ideas in this project: what is the role of *marriage and divorce*?

## How to measure sorting? The contingency table

Male\Female	$t_{i,f} = 1$	$t_{i,f} = 2$	$\dots$	$t_{i,f} = N$	Marginal
$t_{i,m} = 1$	$P(1, 1)$	$P(1, 2)$	$\dots$	$P(1, N)$	$P(t_{i,m} = 1)$
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- Likelihood ratio

$$s(j, j') = \frac{P(t_{i,m} = j, t_{i,f} = j')}{P(t_{i,m} = j) P(t_{i,f} = j')}$$

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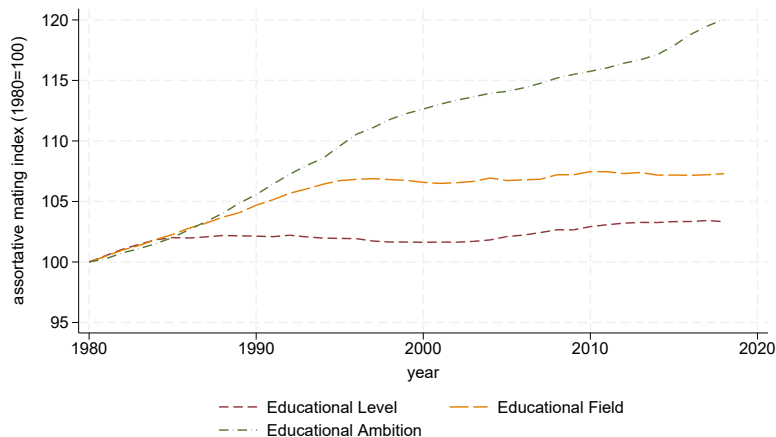
$$s(j, j') = \frac{P(t_{i,m} = j, t_{i,f} = j')}{P(t_{i,m} = j) P(t_{i,f} = j')}$$

- The weighted sum of likelihood indices for “sorted couples”

$$\mathcal{S} = s(1, 1) \times w_1 + s(2, 2) \times w_2 + \dots + s(N, N) \times w_N$$

- Types are based on educational attainment. Weights: see Almar & Schulz (2024).

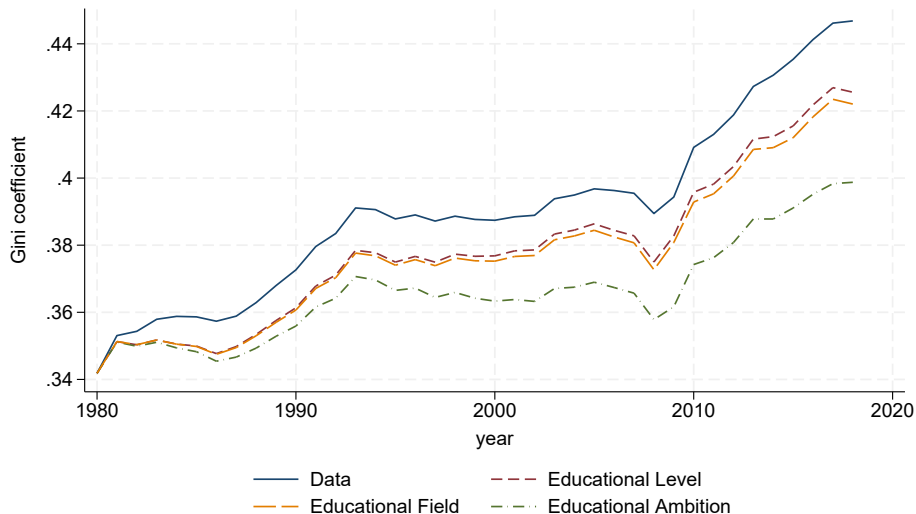
# Does increasing sorting contribute to rising inequality? Yes.



- Ambition types: see Almar, Friedrich, Reynoso, Schulz & Vejlin (2025).

[Details](#)

# Marital Sorting contributes to Inequality



## New ideas: a broader understanding of sorting patterns

- The literature focuses on *same-type* couples (homophily).
- This takes into account only the main diagonal of the contingency table.
- Somewhat narrow. Same-type couples are typically a minority.
- Different-type couples: **hypergamy** (marry up) and **hypogamy** (marry down).

# New ideas: a broader understanding of sorting patterns

- The literature focuses on *same-type* couples (homophily).
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- Somewhat narrow. Same-type couples are typically a minority.
- Different-type couples: **hypergamy** (marry up) and **hypogamy** (marry down).
- New ideas in this project:
  - ① Develop new measures of hypergamy/hypogamy, study the trends.
  - ② Disentangle marriage and divorce margins to understand the trends.
  - ③ What are the implications for the link between sorting and inequality as well as gender differences in labor market outcomes?

# Ideas for New Measures

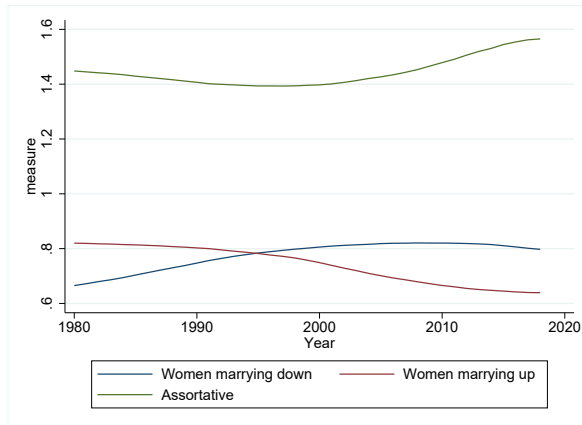
- The measure above (the main diagonal) → hypergamy of men, hypogamy of women

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- The measure below (the main diagonal) → hypergamy of women, hypogamy of men

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$t_{i,m} = 1$	$P(1, 1)$	$P(1, 2)$	$\dots$	$P(1, N)$	$P(t_{i,m} = 1)$
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# Hypergamy/Hypogamy/Sorting Trends



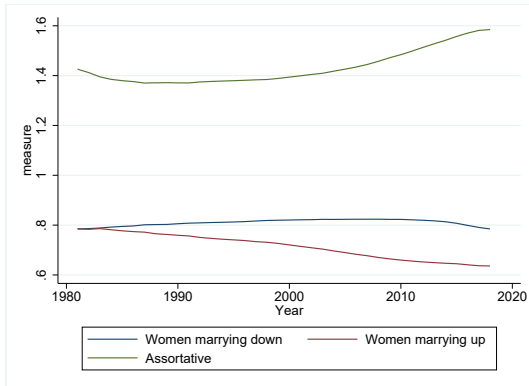
- Ongoing work, Almar, Ishihata, Schulz & Xiao (2025).

Marrying down by gender and type

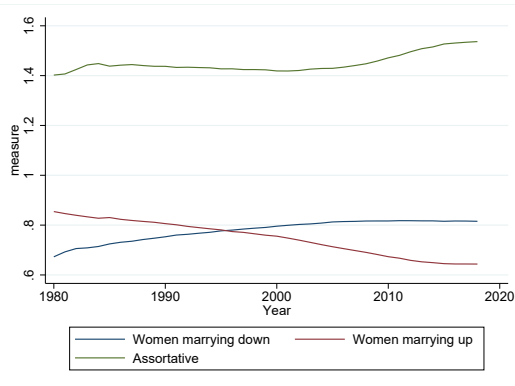


# The role of marriage and divorce

First relationships



Later relationships



Survival Analysis

# Conclusions and outlook

- Marriage market sorting patterns are changing. Not only due to first marriages.
- This matters for inequality across households and genders.
- Marginal type distributions change, but our measures take this into account.
- To understand the driving forces, we need theory and a structural model.

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  - Divorces are caused by *male job-loss* but *female job-finding and promotions* (Folke and Rickne, 2020; Holzner and Schulz, 2023; Foerster et al., 2025).

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  - Couples between “high-type” women and “low-type” men might be particularly at risk.
  - Increasing hypogamy of women might lead to more turnover in the marriage market.

**Thank you for your attention.**

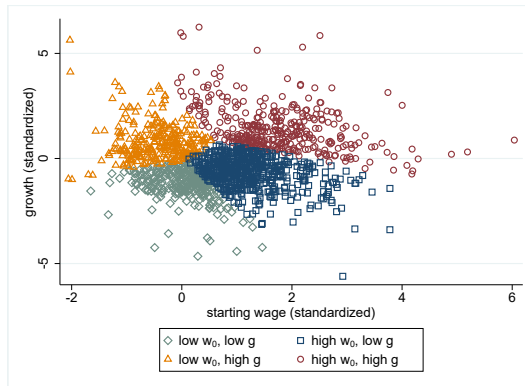
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# Ambition types vs. Educational level

- We construct the ambition type by **clustering labor market outcomes** (k-means) at the **educational-program level** (avg. starting wages and wage growth across graduates).

Educational Ambition, All Programs

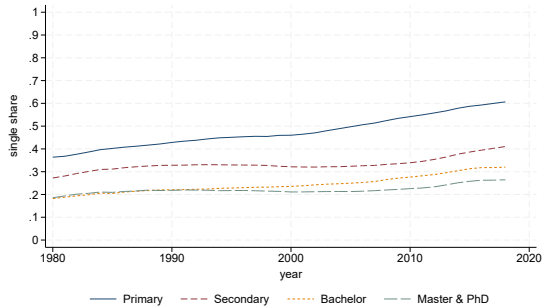


Educational Levels, All Programs

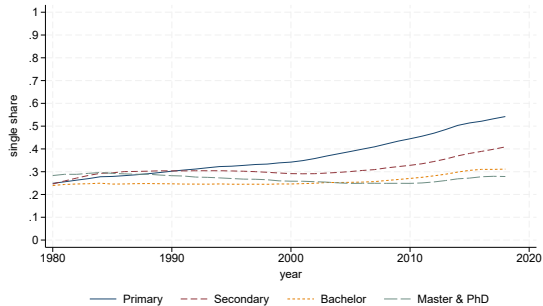




# Singles by Education Level

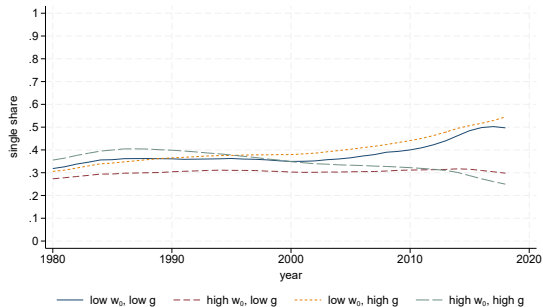


Male Single Shares

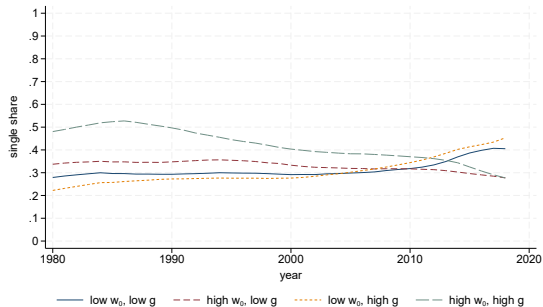


Female Single Shares

# Singles by Ambition



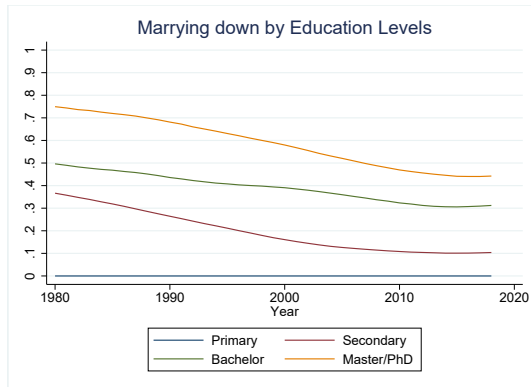
Male Single Shares



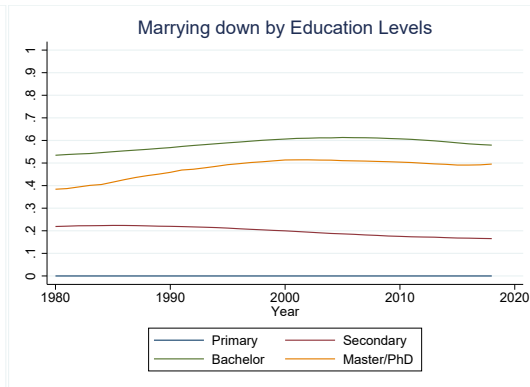
Female Single Shares

# Hypogamy

Men

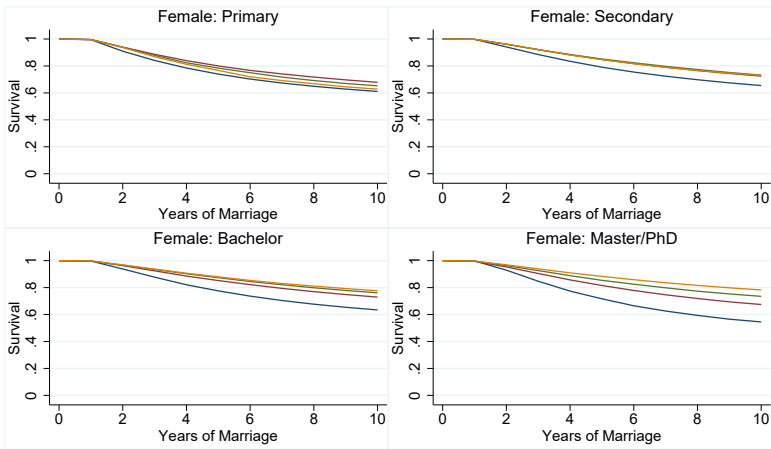


Women



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# Survival Functions, First Marriage

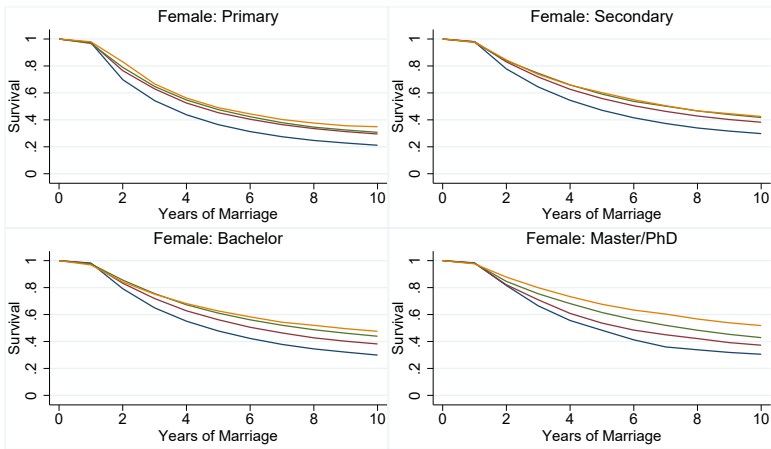


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Male Education

# Survival Functions, Later Marriages

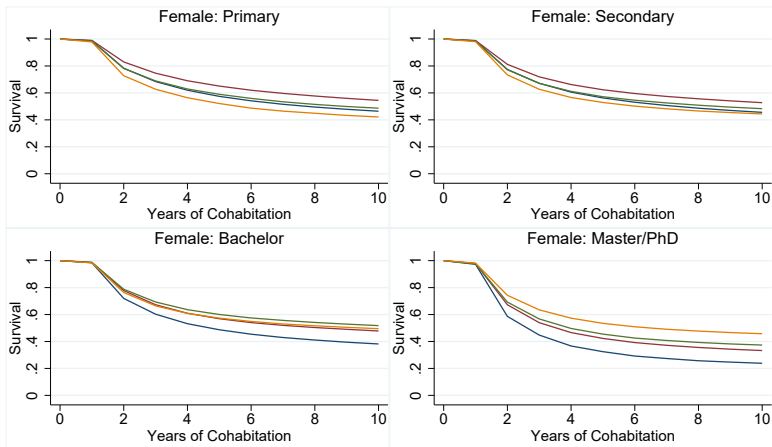


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Male Education

# Survival Functions, First Cohabitation

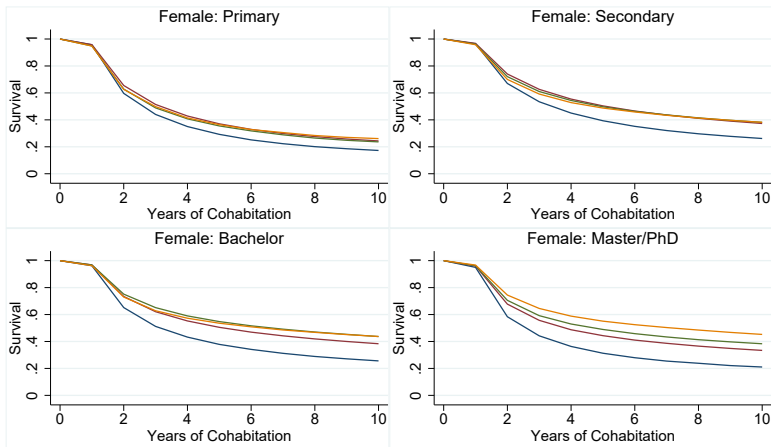


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Male Education

# Survival Functions, Later Cohabitation



► Go back



Male Education

## Household specialization - Time Inputs

- Labor market work hours per day

	single		married			
	U	E	UU	UE	EU	EE
male	0.57	9.68	0.25	0.66	10.23	10.32
female	0.67	8.50	0.21	8.02	0.67	7.64



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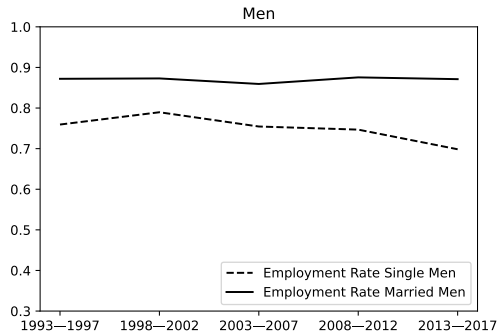
	single		married			
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male	0.57	9.68	0.25	0.66	10.23	10.32
female	0.67	8.50	0.21	8.02	0.67	7.64

- Domestic work hours per day (childcare, errands, repairs, routine chores):

	single		married			
	U	E	UU	UE	EU	EE
male	3.21	2.62	4.99	5.42	3.08	3.13
female	6.00	3.97	7.39	4.57	9.89	5.90

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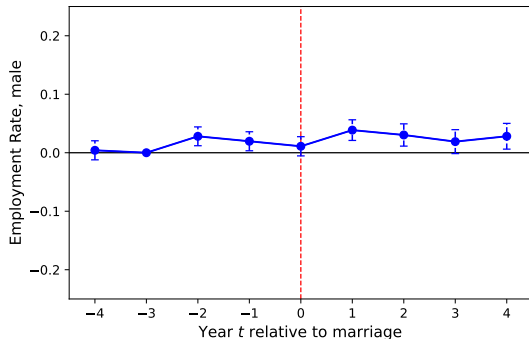
# Employment Rates



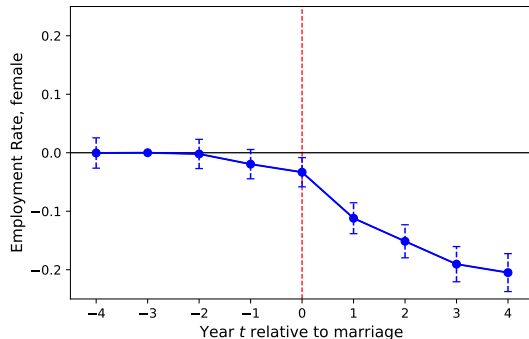
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# Event Study: Employment Rate around Marriage

Male



Female

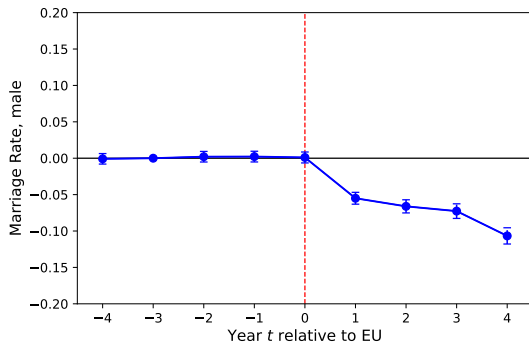


- Relative to matched control group: no marriage, matched in  $t - 3$ .

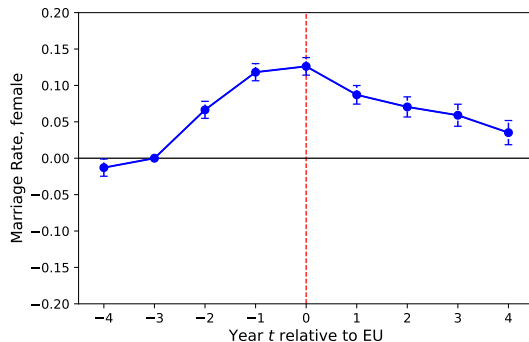
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# Event Study: Marriage Rate around EU Transition

Male



Female

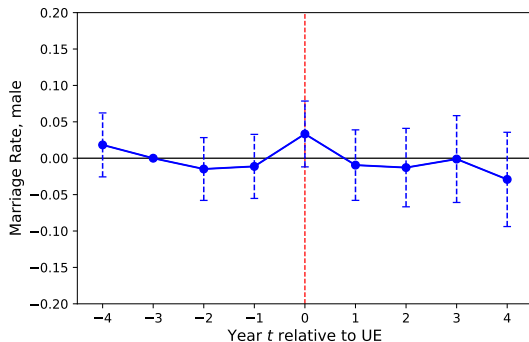


- Relative to matched control group: no EU Transition, matched in  $t - 3$ .

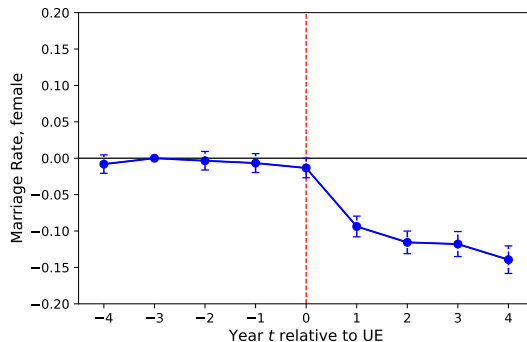
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Male



Female

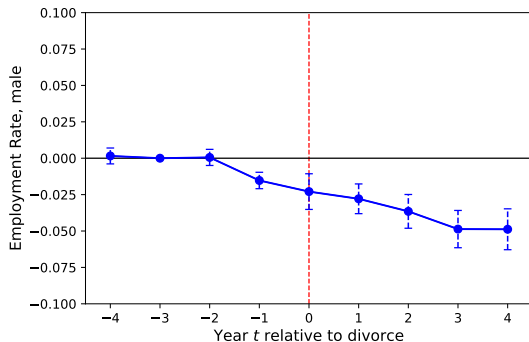


- Relative to matched control group: no UE Transition, matched in  $t - 3$ .

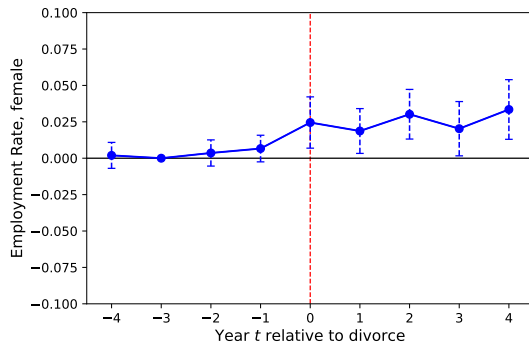
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# Event Study: Employment Rate around Divorce

Male



Female

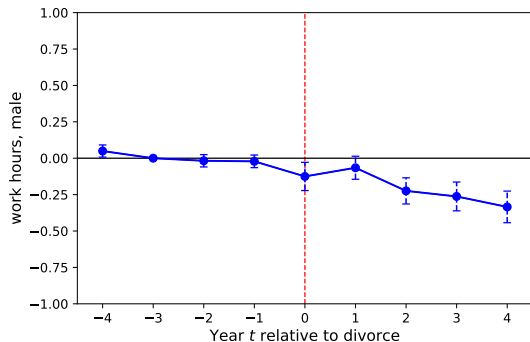


- Relative to matched control group: no divorce, matched in  $t - 3$ .

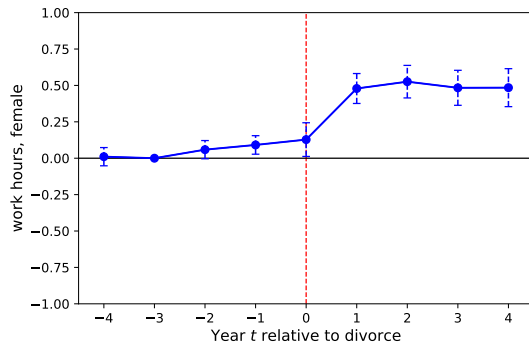
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# Event Study: Work Hours around Divorce

Male



Female

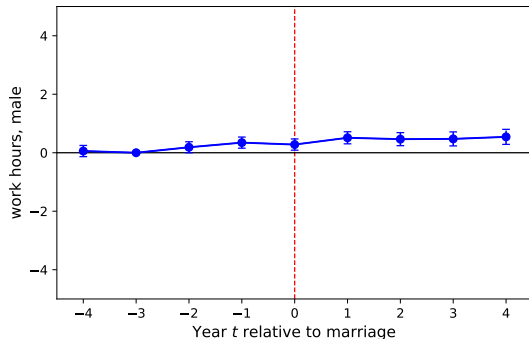


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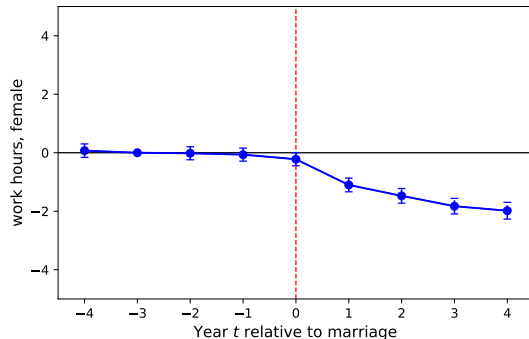
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# Event Study: Work Hours around Marriage

Male



Female



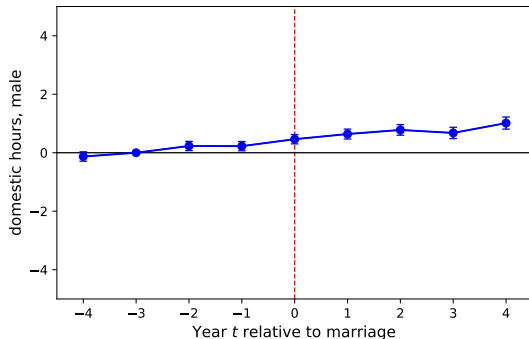
- Relative to matched control group: no divorce, matched in  $t - 3$ .

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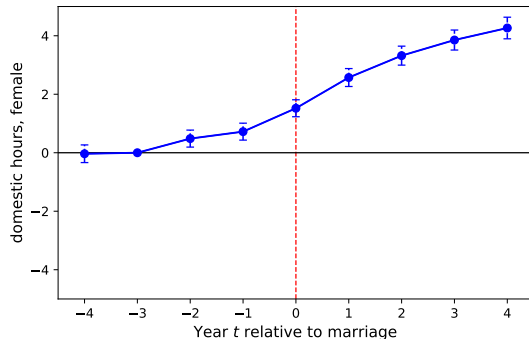


# Event Study: Domestic Hours around Marriage

Male



Female

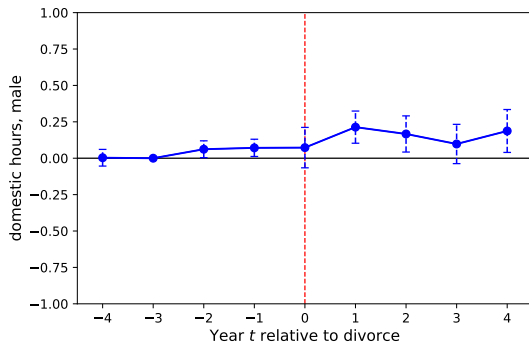


- Relative to matched control group: no divorce, matched in  $t - 3$ .

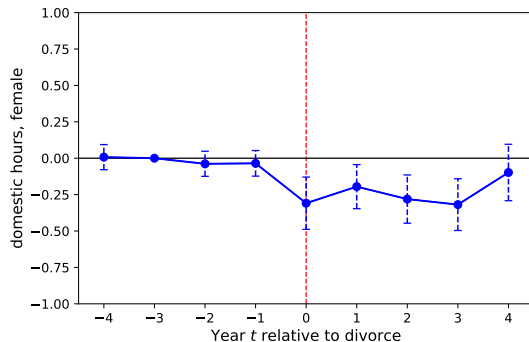
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# Event Study: Domestic Hours around Divorce

Male



Female

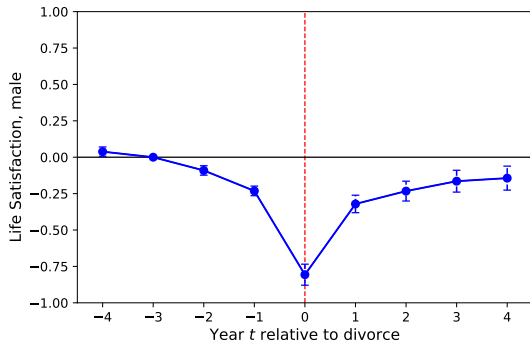


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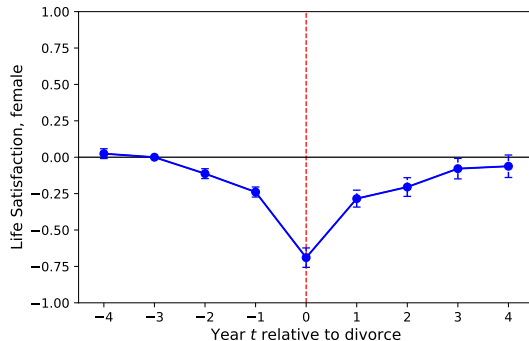
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# Event Study: Life Satisfaction around Divorce

Male



Female

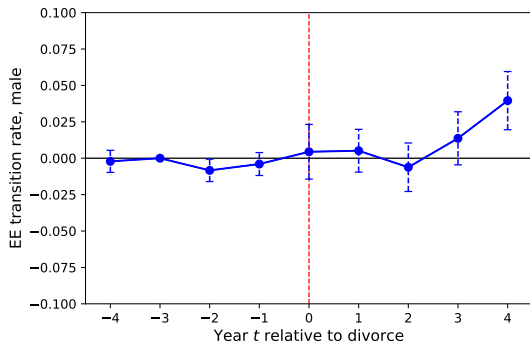


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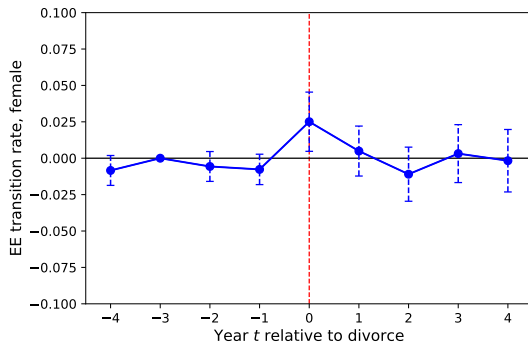
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# Event Study: EE Rate around Divorce

Male



Female



- Relative to matched control group: no divorce, matched in  $t - 3$ .

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