

Job Displacement, Families and Redistribution

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Do displaced workers' families bear the cost of labor reallocation?

- ▶ **Labor reallocation** = necessary condition for economic growth (Aghion and Howitt 1994)
 - (potentially) **costly externality for displaced workers**
 - safety nets and social insurance systems
- ▶ Other **insurance channel: families!** Literature review
 1. pooling of resources
 2. within-family reallocation of time and effort → added worker effect (Lundberg 1985)
- ▶ Ambiguous effect of income shocks on **heterosexual couples**:
 - ▶ Value of the match increases (decreases) for the displaced (non-displaced) partner
 - ▶ New allocation of time and effort may conflict gender norms (depends on the gender of the displaced worker)

This paper

- ▶ Leverages a combination of **French administrative records** to investigate this issue based on the canonical job displacement framework (Jacobson et al. 1993) as extended by Halla et al. 2020
- ▶ **Compares displaced and non-displaced workers over time** on a variety of dimensions:
 - ▶ Couple formation and dissolution
 - ▶ Fertility decisions
 - ▶ Own earnings and labor supply
 - ▶ Spousal earnings and labor supply
 - ▶ Household-level income

⇒ **How much do social and family insurance matter?**

Preview of results

- ▶ Does not affect the probability of being in a **cohabiting heterosexual relationship**
- ▶ Has close to 0 effect on **fertility decisions**
- ▶ Does not induce spouses to increase their labor supply → **no evidence of an added worker effect**
- ▶ **Unemployment insurance** seems quite effective in the short run but not in the long run
- ▶ Workers are only **partially insured** against the long-run component of the shock, insurance = combination of capital markets, self-employment and the progressivity of the taxes and transfers system

Data overview

- ▶ **Comprehensive payroll tax data** (DADS) → sharp decreases in plant size \sim mass layoffs DADS data
- ▶ **Combination of individual-level administrative records** (EDP), representative sample at rate 4.4% → track displaced (control) workers and their families over time
 - ▶ individual-level extract of payroll tax data
 - ▶ housing and **income tax returns** (\triangle missing data) Tax returns Missing data
 - ▶ **birth registers** Birth registers
- ▶ Linked thanks to plant and individual identifiers

Mass layoffs identification

- ▶ We delineate plausible mass layoffs based on **plant-level in- and outflows**:
 - ▶ Plant size decreases by more than 25% over one year
 - ▶ No more than 25% of workers who left work in the same plant afterwards → excludes spin-offs and changes in plant identifier
- ▶ We exclude multiple events that affect that same plant → sharp decreases \neq continuous decay over time

Sample construction

▶ **Displaced workers:**

- ▶ Leave an affected plant within a time-period that spans between one year before and one year after the plant-level event
- ▶ Have tenure ≥ 3 years when she leaves
- ▶ Between 25 and 50 when she leaves

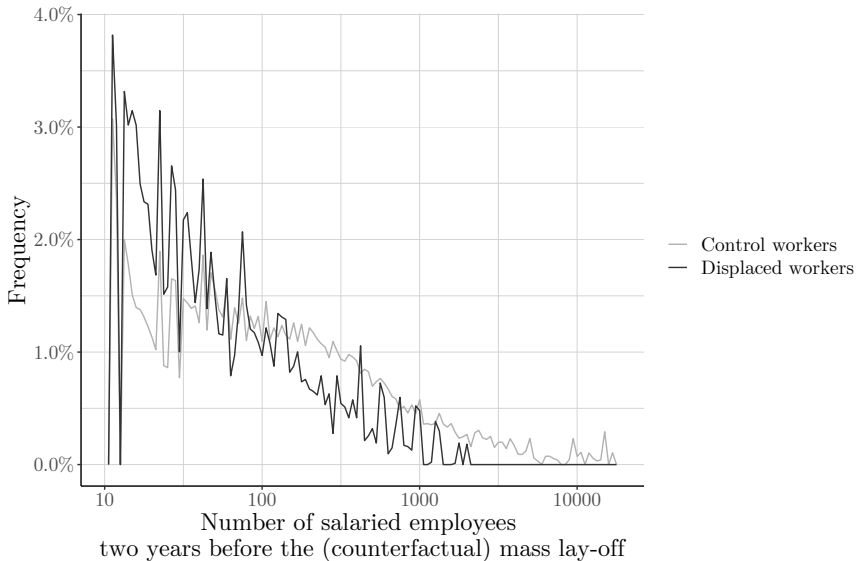
▶ **Non-displaced control workers:**

- ▶ Same age and tenure requirements
- ▶ Work in the same detailed (5-digits) industry at the same time as displaced workers
- ▶ Never worked in an affected plant

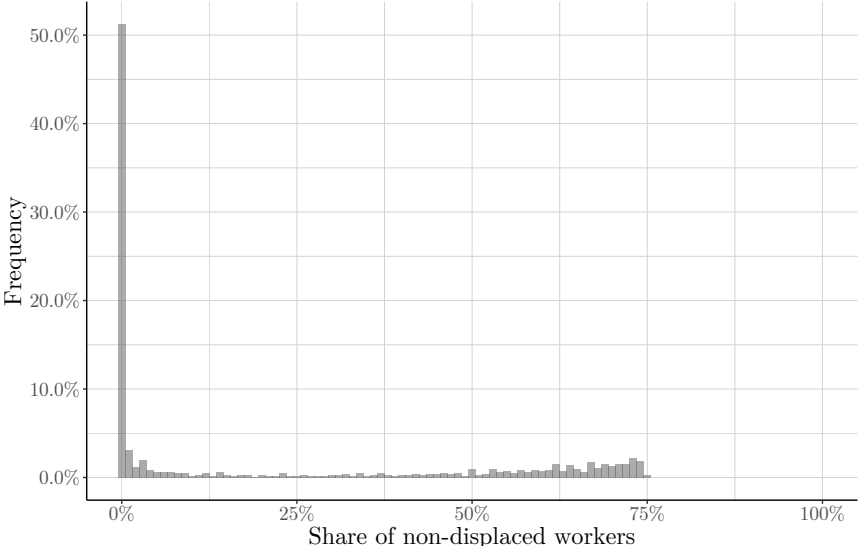
▶ Focus on workers who are affected by a (counterfactual) **shock between 2012 and 2016**

▶ 315,000 individuals who we follow from 2010 to 2016

Plant size and share of non-displaced workers



Plant size and share of non-displaced workers



Summary statistics

- ▶ Displaced and control workers are **very similar in terms of initial outcomes**
- ▶ Average age: 37
- ▶ 70% heterosexual cohabiting relationship, 60% live with children Family structure
- ▶ Average salaried earnings \sim average salaried earnings for employees (women: €19,000; men: €24,000) Own earnings
- ▶ Participation rate of spouses matches aggregate employment rate over the relevant time-period (displaced women's husband: 96%; displaced men's wives: 85%) Spousal earnings
- ▶ Average household disposable income \sim €45,000, driven by wage income (88%) Household income

Rewighted difference-in-difference: assumptions and identification

Detailed framework

Assumption (Common support)

*Every worker affected by job displacement has **at least one non-affected surrogate worker** with the exact same observable characteristics (initial industry and occupation, year of birth, initial family structure and rank in the equivalent income distribution).*

Assumption (Conditional parallel trends)

*Absent job displacement, affected workers' average outcomes **would have evolved the same** as their non-affected surrogates' average outcomes.*

Assumption (Limited anticipation)

*The average effect of job displacement equals **0 up until two years before the shock**.*

Proposition (Difference-in-difference estimand)

*It is possible to **reweight the data** so that the distribution of covariates in the control group matches that of the treated group. As long as both the pre-treatment period and the post-treatment period are observed, **usual difference-in-difference techniques** on the reweighted data identify the ATT.*

Aggregation and estimation

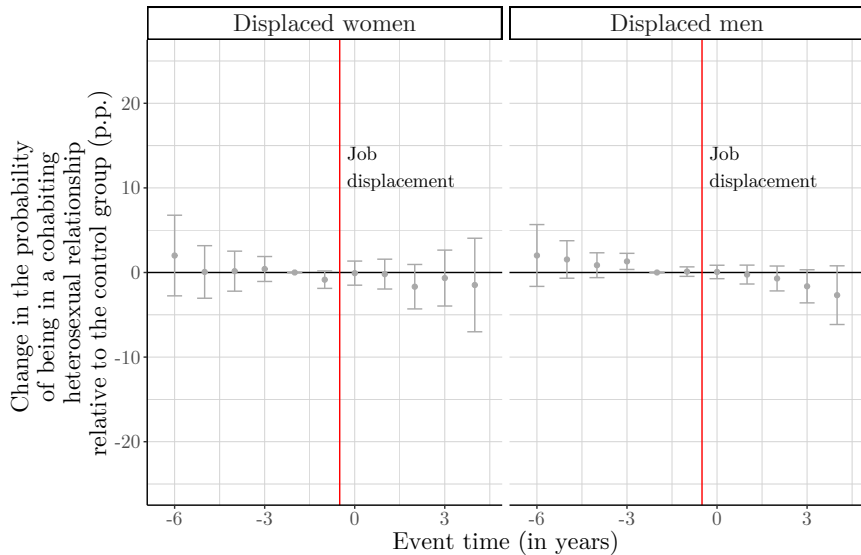
- ▶ One ATT for each cohort (year of job displacement)
- ▶ **Aggregation at the years-since-treatment** level to recover the dynamic effect of job loss
- ▶ Weights proportional to sample size
- ▶ Each time-specific estimand corresponds to the ATT for a certain subpopulation which depends on the time-period at stake
- ▶ Estimation: plug-in estimator with propensity score estimated by probit
- ▶ Inference: bootstrap, **clustered at the plant level**

Quantifying the discouraged worker effect DWE: details

- ▶ Couples may be affected by **correlated employment shocks**
 - ▶ We only observe one of the two spouses in the payroll tax data!
- ⇒ Violation of the parallel trends assumptions
- ▶ Added worker effect = spousal labor supply decision \neq changes in the labor demand for the work of displaced workers' spouses → **discouraged worker effect**
 - ▶ Especially salient in settings in which a non-negligible share of couples meet at work ($\sim 10\text{-}20\%$)
 - ▶ We propose a **correction for this bias**
 - ▶ Under reasonable approximations
discouraged worker effect = direct effect \times share of couples who work in the same plant

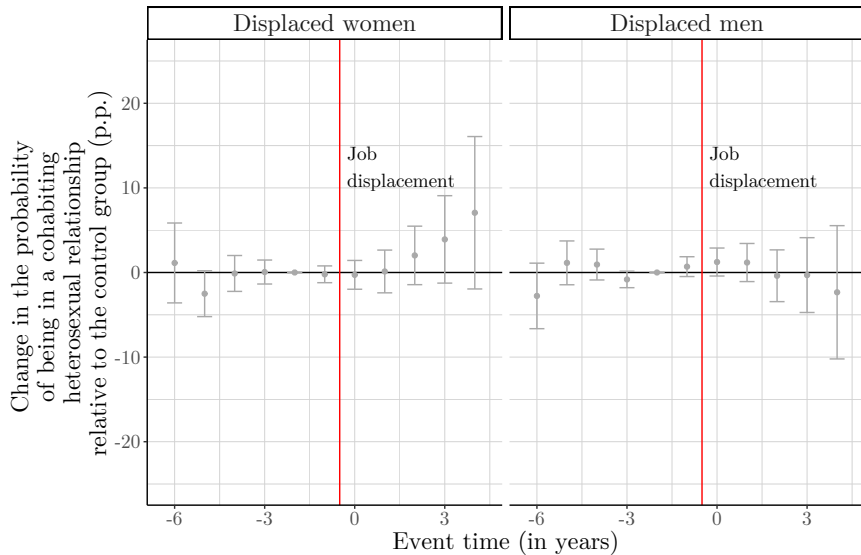
Couple dissolution

Balanced panel

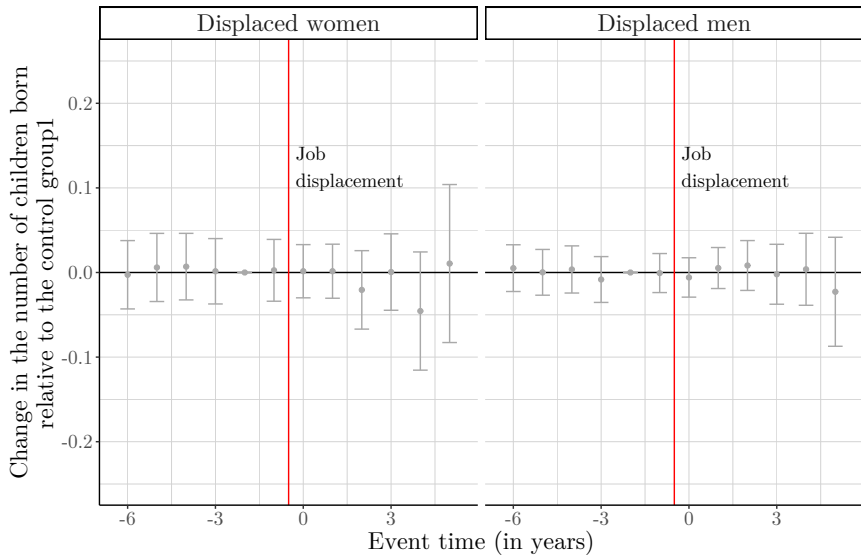


Couple formation

Balanced panel



Fertility decisions

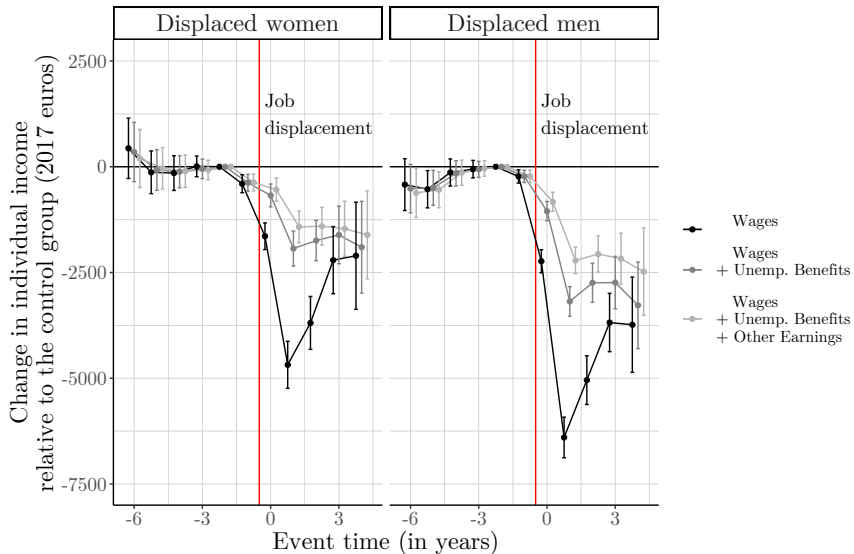


Own earnings and labor supply

Payroll tax data

With spouse

Balanced panel

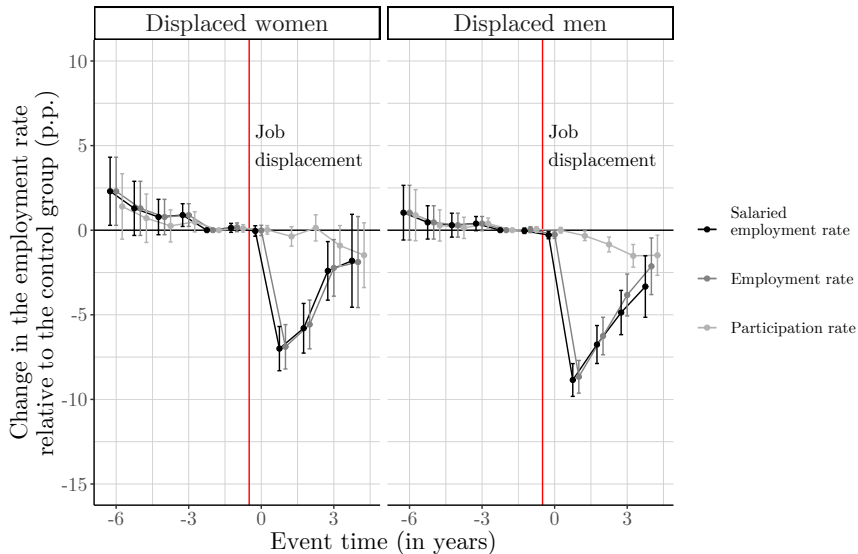


Own earnings and labor supply

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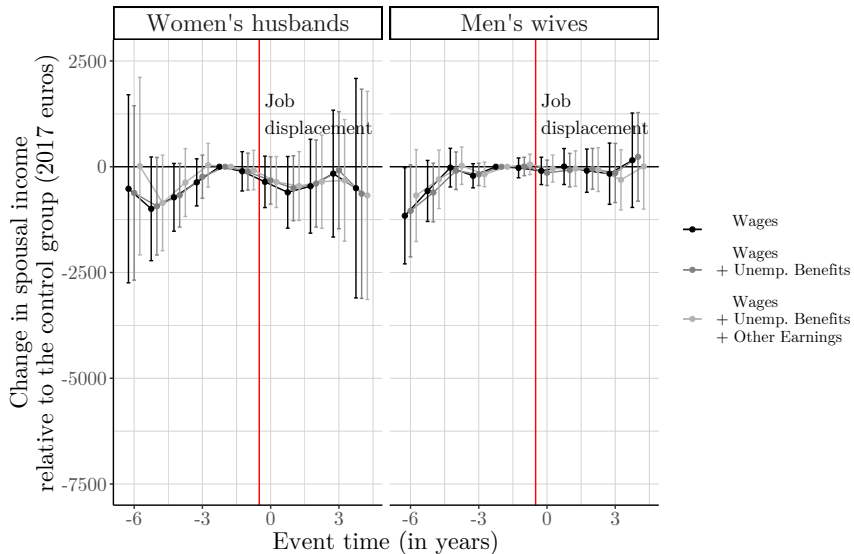
Spousal earnings and labor supply

Own earnings

Balanced panel

Spouses balanced panel

Plant-level correction



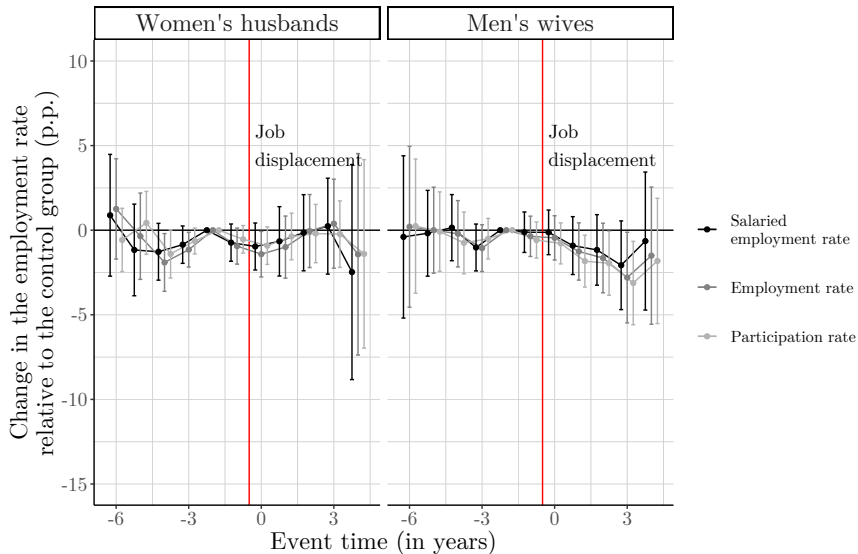
Spousal earnings and labor supply

Own earnings

Balanced panel

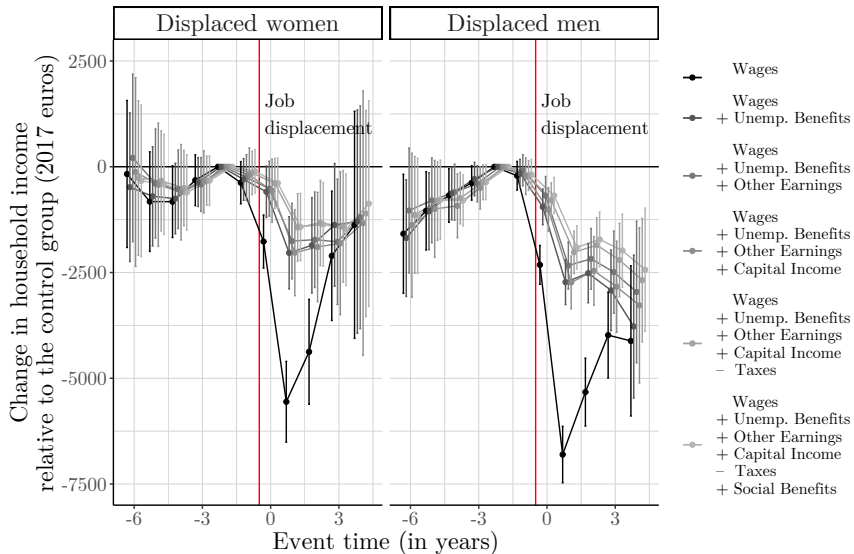
Spouses balanced panel

Plant-level correction



Disposable household income

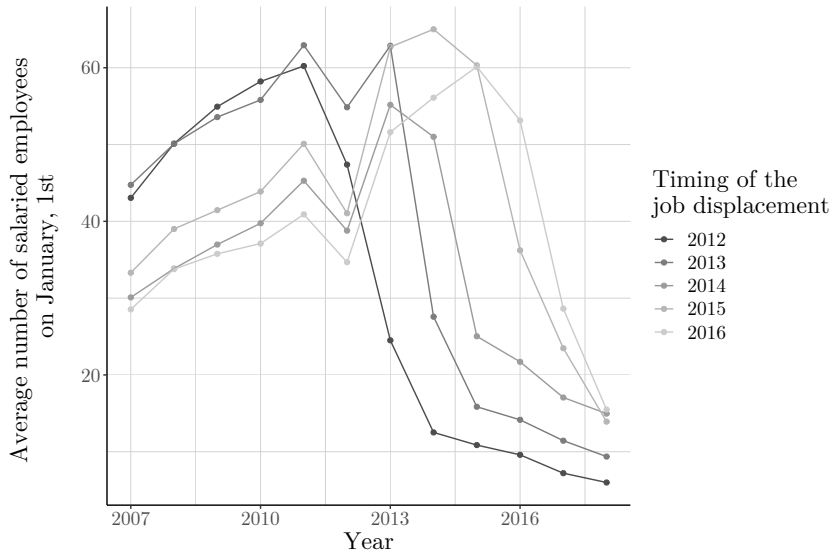
Balanced panel



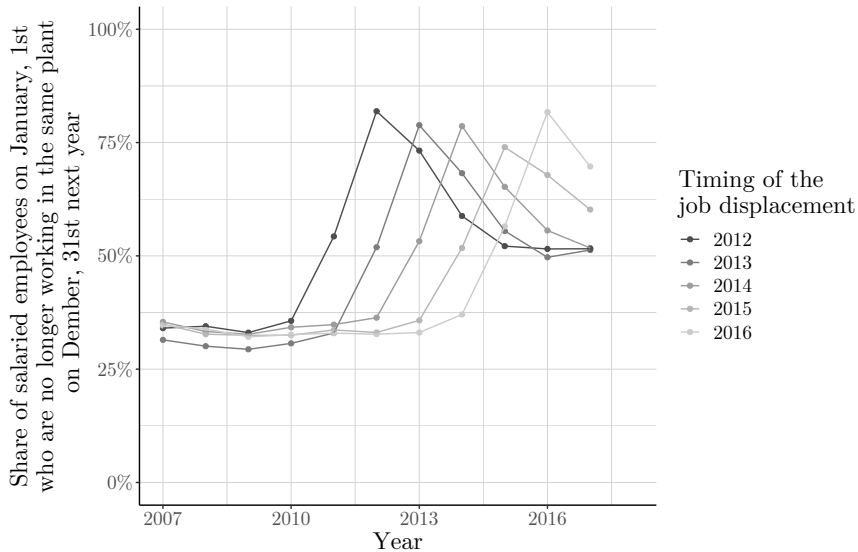
Selection into job displacement

- ▶ Two-way selection into treatment:
 - ▶ Employers choose the employees they terminate
 - ▶ By law they have to take into account their family life and employment prospects
 - ▶ Displaced workers are those who did not move up until the shock
 - ▶ Different opportunities than those who moved prior to this shock
- ▶ Does this drive our results?
 - ▶ Replication on plant-closure events only: shuts down employers decisions **Plant-closure events**
 - ▶ Comparison between displaced and non-displaced workers of affected but continuing plants **Non-displaced workers**
 - ▶ Track in- and outflows over time → no sign of anticipated departures

Plant size and outflows



Plant size and outflows



Conclusion

- ▶ **Regardless of the gender of the displaced worker:**
 - ▶ Job displacement does not seem to affect family structure
 - ▶ The added worker effect does not seem to be active
 - ▶ Unemployment benefits provide **effective insurance in the short run**
 - ▶ Workers are only **partially insured in the long run**
- ▶ **Empirical puzzle:**
 - ▶ Partial insurance → incomplete markets → added worker effect
 - ▶ If gender norms constrain the allocation of time and effort away from positive added worker effects, we should observe very asymmetrical responses to job displacement, which is not the case

- ▶ Job displacement and family structure: divorce (Charles and Stephens 2004; Eliason 2012; Solaz et al. 2020) and fertility (Huttunen and Kellokumpu 2016)
- ▶ Family insurance and added worker effect: Lundberg 1985; Blundell et al. 2016; Halla et al. 2020
- ▶ Family insurance crowding-out by social insurance: Cullen and Gruber 2000; Autor et al. 2019
- ▶ Methods: closest papers = Stepner 2019; Halla et al. 2020

Payroll tax registers

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- ▶ Administrative records filled each year by the employer
- ▶ Plants are identified by the Siret
- ▶ Individuals can be tracked thanks to an anonymized identifier based on a Social security number (NIR)

- ▶ Combine housing and tax returns
- ▶ Delineate household and family relationships based on the pairing of tax returns → important as we do not restrict ourselves to married couples (taxed jointly) but also include cohabiting couples (taxed separately)
- ▶ Income variables:
 - ▶ Individual-level earnings = wage income + self-employed earnings + unemployment benefits + pensions + alimonies
 - ▶ Household-level disposable income = individual earnings + capital income - housing, property and income taxes + social benefits
- ▶ We winsorize at the 99.5th percentile level and drop households with negative income

Birth registers

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- ▶ Cover the 1968 (2004)-2017 time-period
- ▶ We include still births
- ▶ Left-censoring → we focus on the yearly probability of having another child \neq number of children (includes children born before they can be observed)

Summary statistics: initial family structure and occupation

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Gender	Women		Men	
	Control	Displaced	Control	Displaced
<i># Individuals</i>	119,187	4,609	154,541	8,485
<i>a. Occupational shares (in %)*</i>				
Managers and professionals	13.6	17.6	18.6	18.6
Intermediate occupations	20.9	15.9	19.9	16.5
Non-manual workers	53.8	53.4	15.7	16.2
Manual workers	11.8	13.2	45.8	48.7
<i>b. Family structure (in %)*</i>				
With spouse	71.0	66.6	71.8	71.7
With child	66.8	63.1	63	64.2
<i>c. Yearly number of childbirths*</i>				
Mean	0.15	0.13	0.15	0.14
St.D.	0.40	0.38	0.39	0.40

* As observed two years before job displacement. *Source.* Insee, DADS comprehensive files; Insee and Ministry of Finance (DGFIP), EDP sample.

Summary statistics: initial salaried earnings and labor supply

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Gender	Women		Men	
	Control	Displaced	Control	Displaced
<i>a. Wages (in 2017€)</i>				
Mean	18,600	19,500	24,400	24,200
St.D.	11,500	12,400	14,500	14,800
<i>a. Days worked</i>				
Mean	330	330	340	340
St.D.	70	70	50	60
<i>a. Hours worked</i>				
Mean	1,520	1,570	1,720	1,750
St.D.	510	520	450	490

Source. Insee, DADS comprehensive files; Insee and Ministry of Finance (DGFIP), EDP sample.

Summary statistics: initial own earnings and labor supply

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Gender	Women		Men	
	Control	Displaced	Control	Displaced
<i>a. Individual earnings (in 2017€)</i>				
Mean	20,700	21,700	26,500	26,400
St.D.	12,000	13,000	15,600	16,100
<i>b. Wages (in 2017€)</i>				
Mean	19,800	20,800	25,700	25,700
St.D.	12,100	13,100	15,600	16,000
<i>c. Unemployment benefits (in 2017€)</i>				
Mean	500	500	500	500
St.D.	1,800	1,900	1,900	2,000
<i>d. Other earnings (in 2017€)</i>				
Other earnings (mean)	400	300	300	300
Other earnings (std)	2,600	1,600	3,000	2,300

Source. Insee, DADS comprehensive files; Insee and Ministry of Finance (DGFIP), EDP sample.

Summary statistics: initial spousal earnings and labor supply [Back to Data](#)

Gender	Women's male spouse		Men's female spouse	
	Control	Displaced	Control	Displaced
<i>a. Individual earnings (in 2017€)</i>				
Mean	30,900	31,100	17,100	16,000
St.D.	21,600	21,200	14,400	14,400
<i>b. Wages (in 2017€)</i>				
Mean	27,500	28,200	15,400	14,600
St.D.	20,500	20,800	13,900	14,200
<i>c. Unemployment benefits (in 2017€)</i>				
Mean	700	600	600	700
St.D.	2,700	2,600	2,300	2,200
<i>d. Other earnings (in 2017€)</i>				
Mean	2,800	2,200	1,000	800
St.D.	12,600	10,300	6,600	5,200
<i>e. Employment and participation rates (in %)</i>				
Employment	95.5	95.8	82.8	79.7
Participation	96.7	96.6	84.7	81.9

Summary statistics: initial household income [Back to Data](#)

Gender	Women		Men	
	Control	Displaced	Control	Displaced
<i>a. Disposable income (in 2017€)</i>				
Mean	45,800	45,600	44,800	44,200
St.D.	26,100	27,000	24,400	24,300
<i>b. Wages (in 2017€)</i>				
Mean	40,900	41,900	40,700	40,200
St.D.	26,400	28,200	24,800	25,400
<i>d. Capital income (in 2017€)</i>				
Mean	4,700	4,400	4,000	3,700
St.D.	33,500	24,000	27,800	25,500
<i>e. Taxes (in 2017€)</i>				
Mean	-7,500	-7,700	-7,100	-7,000
St.D.	17,000	13,800	13,200	14,200
<i>f. Social benefits (in 2017€)</i>				
Mean	3,000	3,000	3,100	3,400
St.D.	17,700	11,100	16,000	12,400

Source. Insee, DADS comprehensive files; Insee and Ministry of Finance (DGFIP), EDP sample.

Rewighted difference-in-difference: notations [Back to Method](#)

- ▶ Observed variables:
 - ▶ $Y_{i,t}$ worker i 's family structure / labor supply / income measure t years after she is displaced
 - ▶ D_i job displacement dummy variable
 - ▶ C_i cohort (year of job displacement)
 - ▶ X_i vector of time-constant covariates: year of birth, initial occupation and industry, initial family structure and position in the disposable income distribution
- ▶ Potential outcomes: $Y_{i,t}(d)$ worker i 's outcome had she been displaced ($d = 1$) or not ($d = 0$)
- ▶ Cohort-specific Average Treatment Effect on the Treated:
 $CATT(c, t) = \mathbb{E}[Y_{i,t}(1) - Y_{i,t}(0) \mid C_i = c, D_i = 1]$

Rewighted difference-in-difference: assumptions [Back to Method](#)

Assumption (Common support)

For all c , for all x :

$$0 < \mathbb{P}(D_i = 1 \mid C_i = c, X_i = x) < 1 \quad (1)$$

Assumption (Parallel trends in baseline outcome)

For all c , for all x , for all t, t' :

$$\begin{aligned} & \mathbb{E}[Y_{i,t'}(0) - Y_{i,t}(0) \mid C_i = c, X_i = x, D_i = 1] \\ = & \mathbb{E}[Y_{i,t'}(0) - Y_{i,t}(0) \mid C_i = c, X_i = x, D_i = 0] \end{aligned} \quad (2)$$

Assumption (Limited anticipation)

For all c , for all x , for all t , if $t < -1$, then:

$$\mathbb{E}[Y_{i,t}(1) - Y_{i,t}(0) \mid C_i = c, X_i = x, D_i = 1] = 0 \quad (3)$$

Proposition (Difference-in-difference estimand)

Let $\{\underline{T}, \underline{T}+1, \dots, \bar{T}-1, \bar{T}\}$ denote the set of years that can be observed in the data. For c and t such that $\underline{T}+1 < c < \bar{T}+1$ and $\underline{T}-1 < c+t < \bar{T}+1$, $CATT(c, t)$ can be identified from the data and:

$$\begin{aligned} CATT(c, t) &= \mathbb{E}[Y_{i,t} \mid C_i = c, D_i = 1] \\ &\quad - \mathbb{E}[Y_{i,c-2} \mid C_i = c, D_i = 1] \\ &\quad - \mathbb{E}[\pi(c, X_i) Y_{i,t} \mid C_i = c, D_1 = 0] \\ &\quad + \mathbb{E}[\pi(c, X_i) Y_{i,c-2} \mid C_i = c, D_1 = 0] \end{aligned} \tag{4}$$

where $\pi(c, x) = \frac{\mathbb{P}(D_i=1 \mid C_i=c, X_i=x)}{1-\mathbb{P}(D_i=1 \mid C_i=c, X_i=x)} \frac{1-\mathbb{P}(D_i=1 \mid C_i=c)}{\mathbb{P}(D_i=1 \mid C_i=c)}$

Discouraged worker effect: notations

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- ▶ Population of heterosexual couples indexed by i
 - ▶ composed of a woman $f(i)$ and a man $m(i)$
 - ▶ with outcomes $Y_{f(i)}$ and $Y_{m(i)}$
 - ▶ exposed to employment shocks $D_{f(i)}$ and $D_{m(i)}$
- ▶ Potential outcomes for partner of gender g depend on both own and spouse's exposure to the employment shock $Y_{g(i)}(d_{g(i)}, d_{-g(i)})$

- ▶ Average joint treatment effect

$$\Delta_{(d_{f(i)}, d_{m(i)}) \rightarrow (d'_{f(i)}, d'_{m(i)})}^g = \mathbb{E}[Y_{g(i)}(d'_{f(i)}, d'_{m(i)}) - Y_{g(i)}(d_{f(i)}, d_{m(i)})]$$

- ▶ Average partial treatment effect

$$\Delta^{(g, g')} = \mathbb{E}[Y_{g(i)}(d_{g'(i)} = 1, D_{-g'(i)}) - Y_{g(i)}(d_{g'(i)} = 0, D_{-g'(i)})]$$

Assumption (Exogeneity)

Couples' potential outcomes are mean independent of couples employment shocks: for all g in $\{f, m\}$, for all $(d_{f(i)}, d_{m(i)})$ and $(d'_{f(i)}, d'_{m(i)})$ in $\{0, 1\}^2$:

$$\mathbb{E}[Y_{g(i)}(d_{f(i)}, d_{m(i)}) \mid D_{f(i)} = d'_{f(i)}, D_{m(i)} = d'_{m(i)}] = \mathbb{E}[Y_{g(i)}(d_{f(i)}, d_{m(i)})] \quad (5)$$

Discouraged worker effect: bias [Back to Method](#)

Proposition

The difference in expected outcomes the g' -treated and the g' -control group does not identify the partial treatment effect, unless (i) the other partner's employment shocks have no effect on the outcome, or (ii) there is no within couple correlation in employment shocks.

Proof.

$$\begin{aligned} & \mathbb{E}[Y_{g(i)} \mid D_{f(i)} = 1] - \mathbb{E}[Y_{g(i)} \mid D_{f(i)} = 0] \\ = & \Delta^{(g,f)} \\ & + \Delta_{(0,0) \rightarrow (0,1)}^g \{ \mathbb{P}(D_{m(i)} = 1 \mid D_{f(i)} = 1) - \mathbb{P}(D_{m(i)} = 1 \mid D_{f(i)} = 0) \} \end{aligned}$$



Discouraged worker effect: approximations [Back to Method](#)

Assumption (Direct effects)

Direct effects are much larger than indirect effects, i.e.:

$$\left\{ \begin{array}{l} \Delta_{(0,0) \rightarrow (0,1)}^m, \Delta_{(1,0) \rightarrow (1,1)}^m \gg \Delta_{(0,0) \rightarrow (1,0)}^m \\ \Delta_{(0,0) \rightarrow (1,0)}^f, \Delta_{(0,1) \rightarrow (1,1)}^f \gg \Delta_{(0,0) \rightarrow (0,1)}^f \end{array} \right. \quad (6)$$

Assumption (Limited correlation)

The within couple correlation in employment shocks is limited, i.e. for all g in $\{m, f\}$;

$$\mathbb{P}(D_{-g(i)} = 1 \mid D_{g(i)} = 1) - \mathbb{P}(D_{-g(i)} = 1 \mid D_{g(i)} = 0) \ll 1 \quad (7)$$

Discouraged worker effect: approximations [Back to Method](#)

Assumption (Limited treatment effect heterogeneity)

Direct effects depend very little on whether the spouse is affected by a shock:

$$\begin{cases} \Delta_{(0,0) \rightarrow (0,1)}^m \simeq \Delta_{(1,0) \rightarrow (1,1)}^m \\ \Delta_{(0,0) \rightarrow (1,0)}^f \simeq \Delta_{(0,1) \rightarrow (1,1)}^f \end{cases} \quad (6)$$

Assumption (Predicted correlation)

There exists an observable subset of couples \mathcal{J} such that (i) if i belongs to \mathcal{J} , then spouses' employment shocks are perfectly correlated: $D_{f(i)} = D_{m(i)}$; and (ii) otherwise spouses' employment shocks are independent: $D_{f(i)} \perp\!\!\!\perp D_{m(i)}$.

Assumption (Limited treatment probability heterogeneity)

The probability than one spouse is affected by an employment shock depends very little on whether shocks are correlated or not between spouses: for all g in $\{f, m\}$

$$\mathbb{P}(D_{g(i)} = 1 \mid i \in \mathcal{J}) \simeq \mathbb{P}(D_{g(i)} = 1 \mid i \notin \mathcal{J}) \quad (7)$$

Discouraged worker effect: bias correction

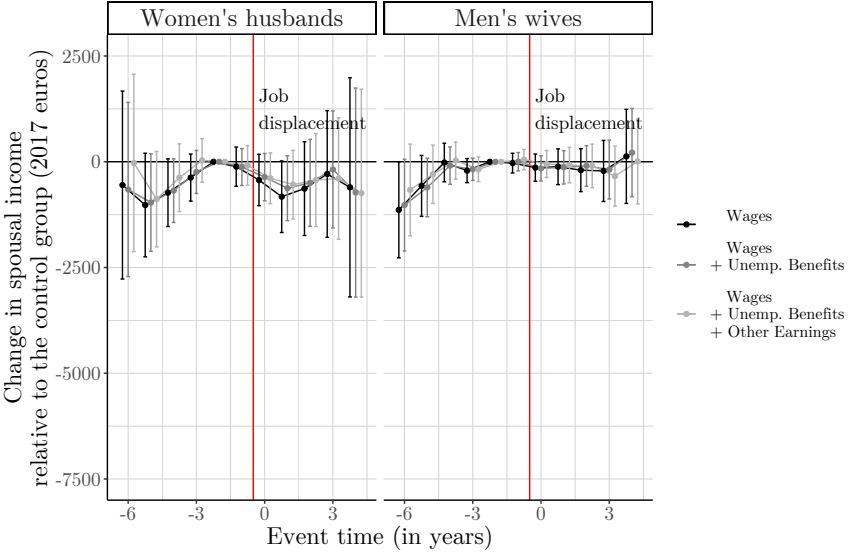
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Proposition (Bias approximation)

The bias that results from correlated employment shocks between spouses in the estimation of indirect effects is approximately equal to the direct effect multiplied by the share of couples that belong to \mathcal{J} .

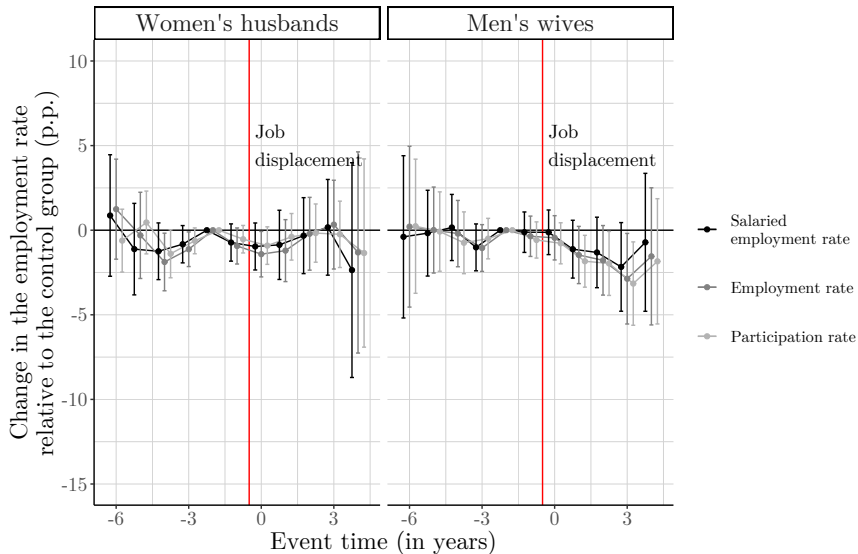
Spousal earnings and labor supply: plant-level correction

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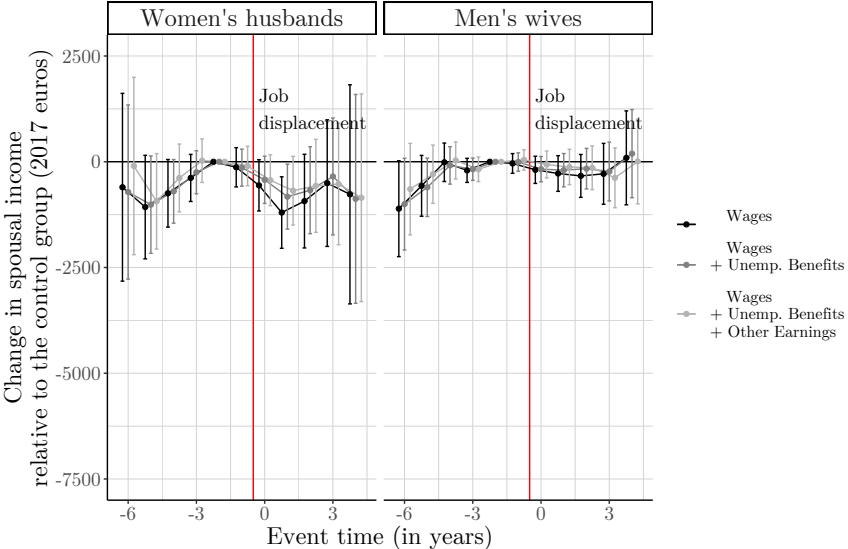
Spousal earnings and labor supply: plant-level correction

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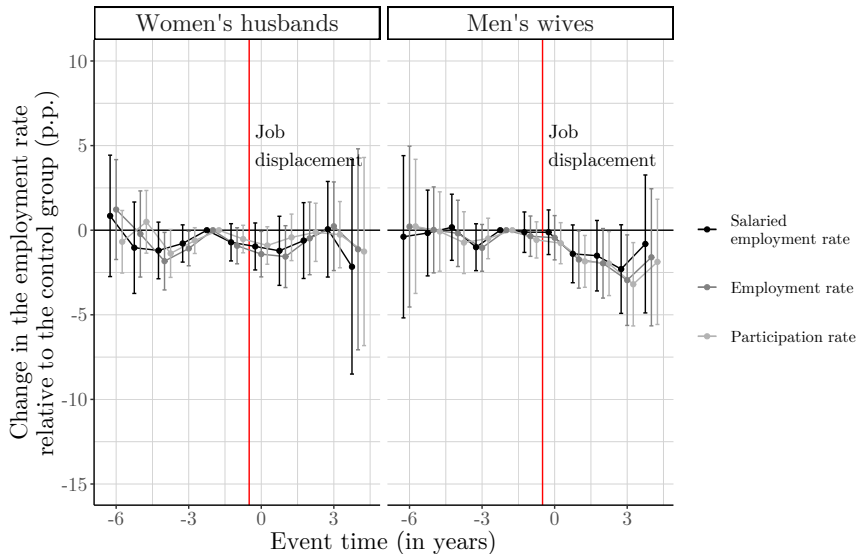
Spousal earnings and labor supply: no correction

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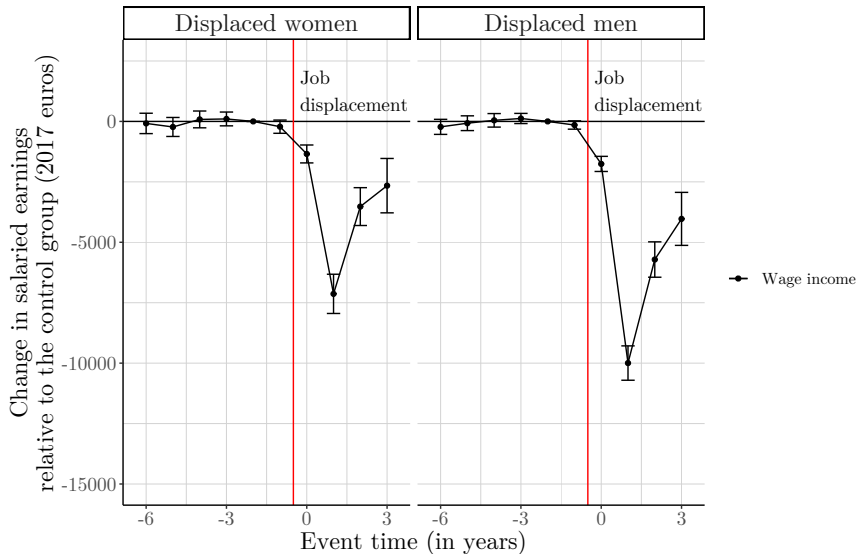


Spousal earnings and labor supply: no correction

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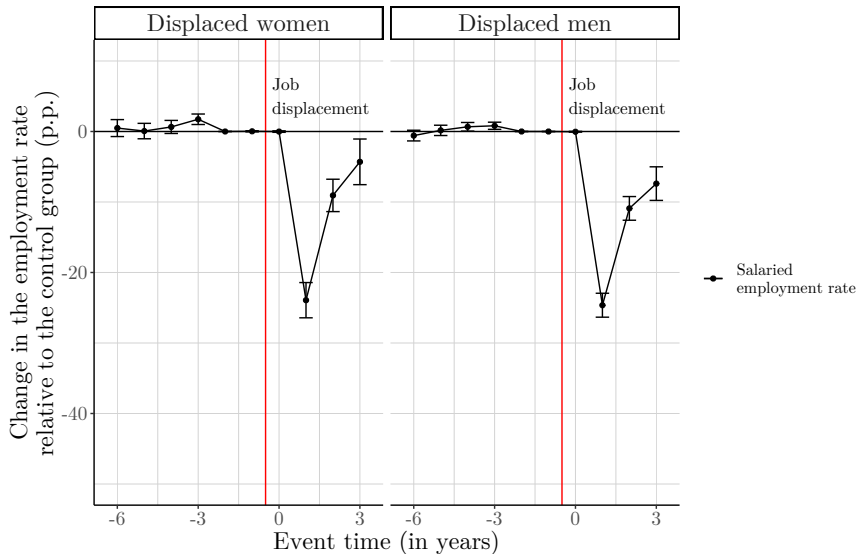


Own earnings and labor supply: DADS panel

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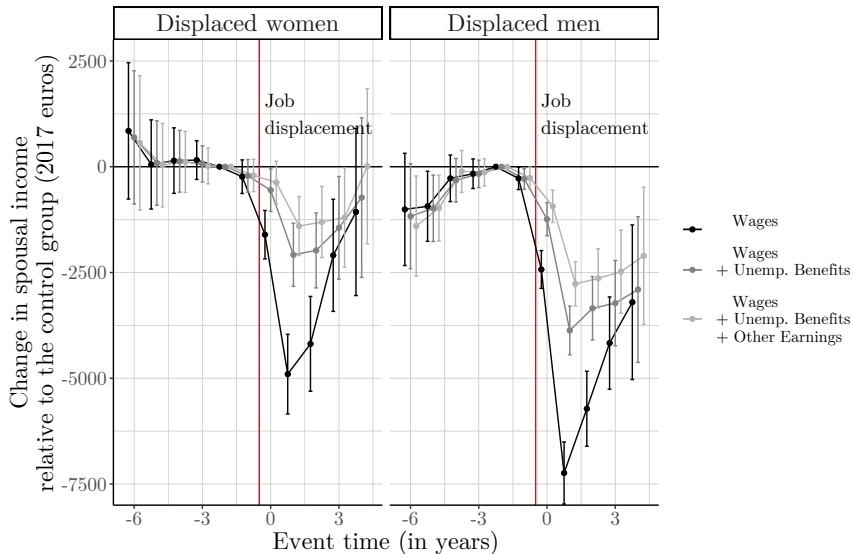
Own earnings and labor supply: DADS panel

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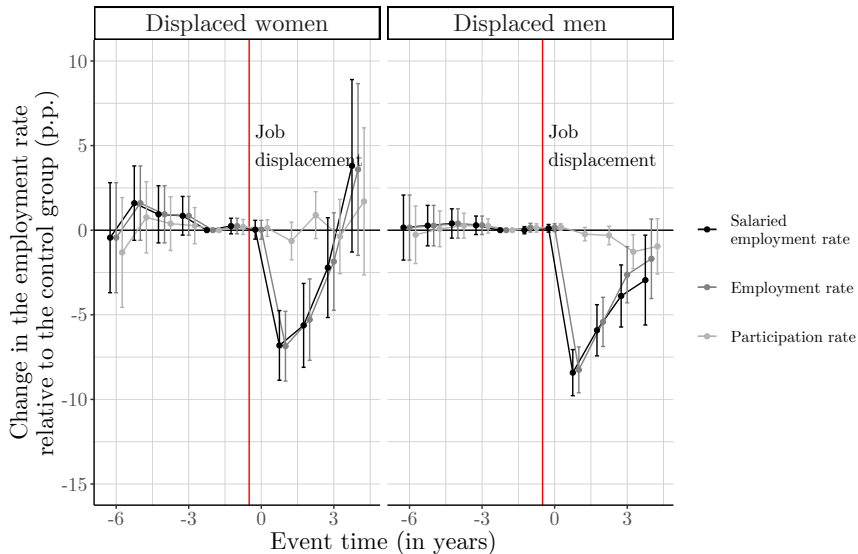
Own earnings and labor supply: workers with spouse

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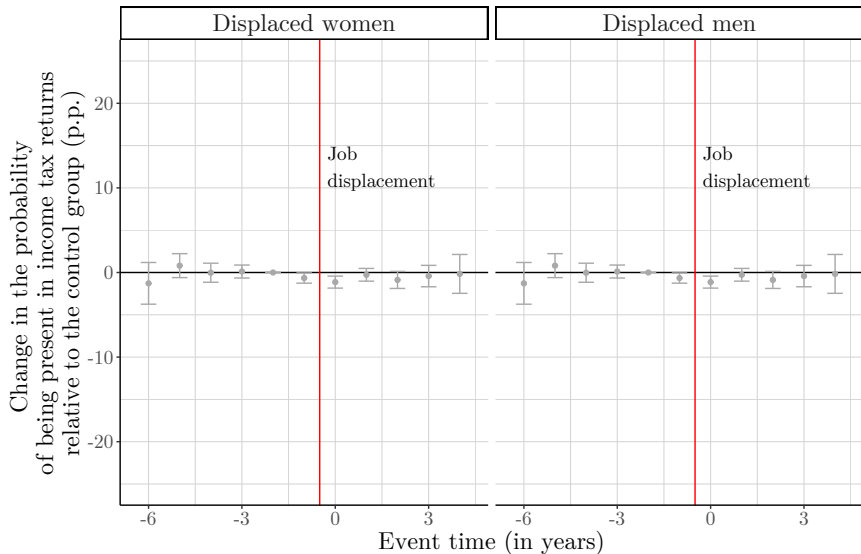
Own earnings and labor supply: workers with spouse

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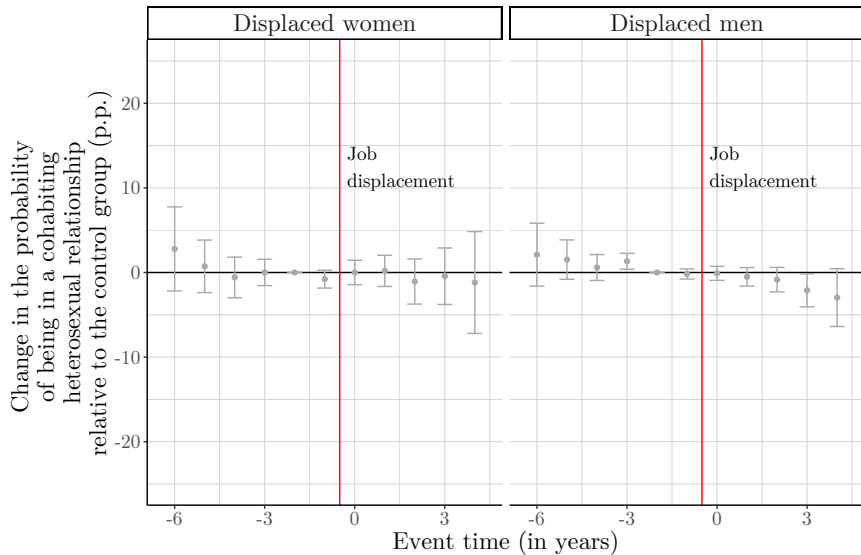
Impact of job displacement on sample inclusion

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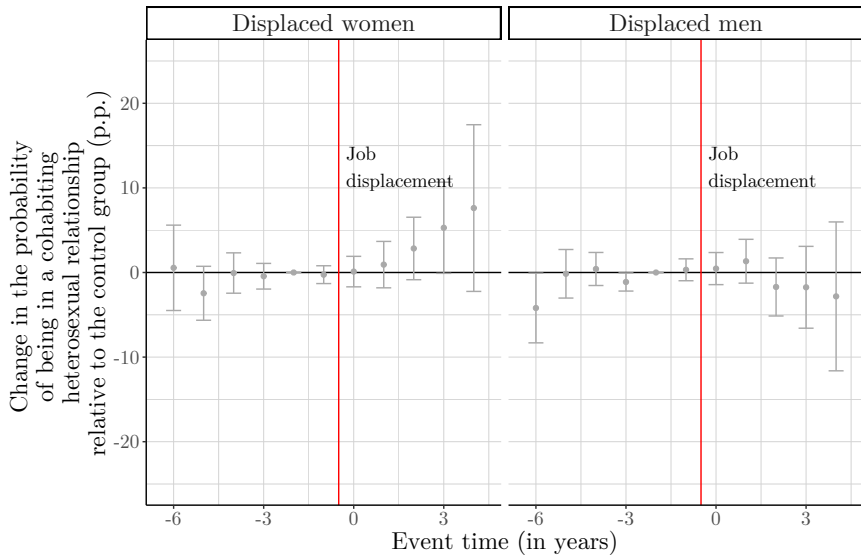
Couple dissolution: balanced panel

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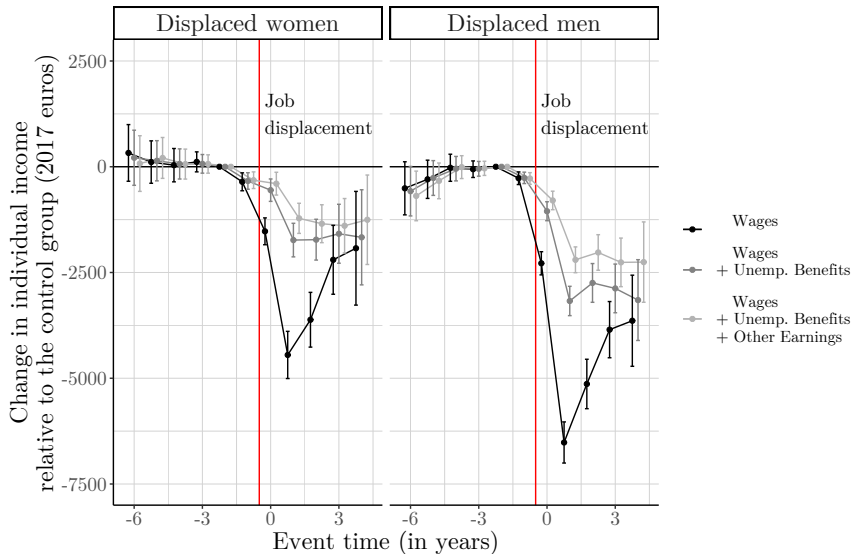


Couple formation: balanced panel

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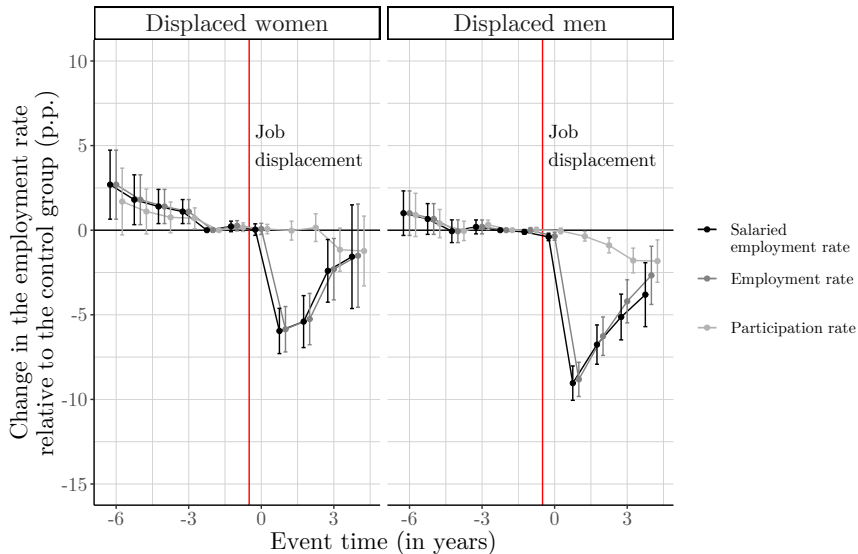


Own earnings and labor supply: balanced panel

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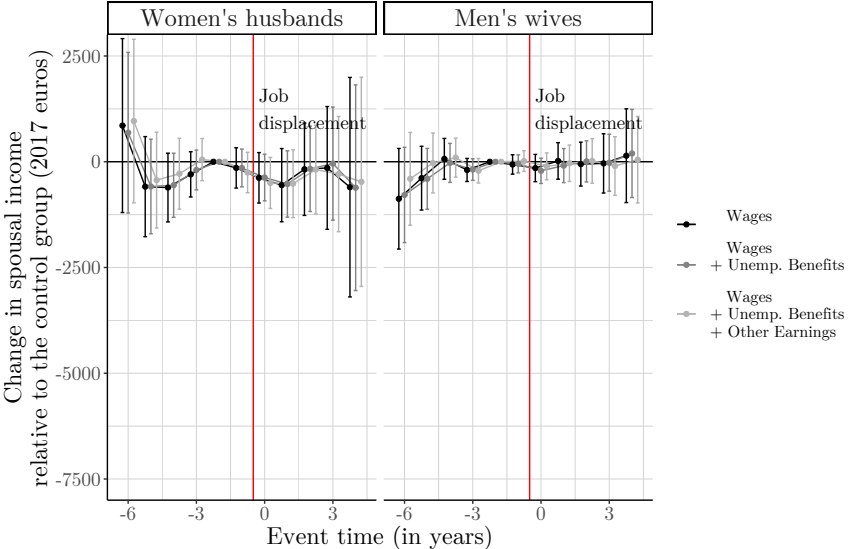
Own earnings and labor supply: balanced panel

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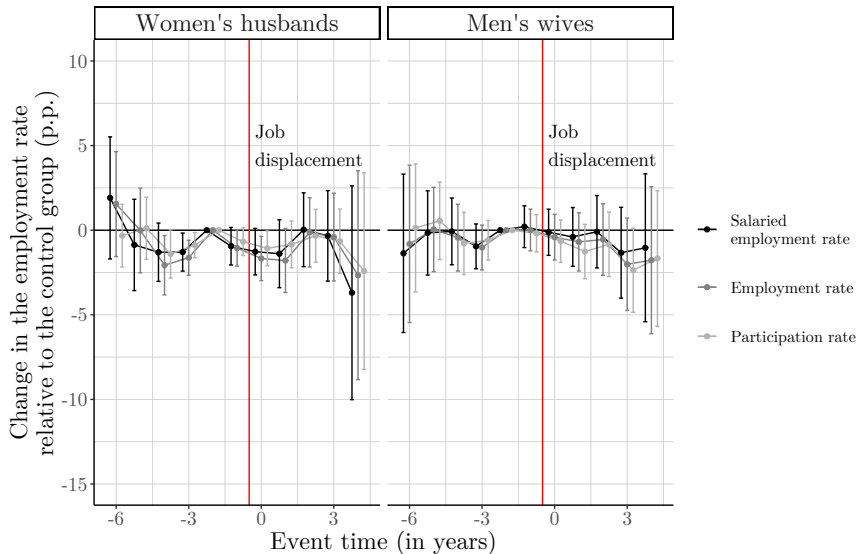
Spousal earnings and labor supply: balanced panel

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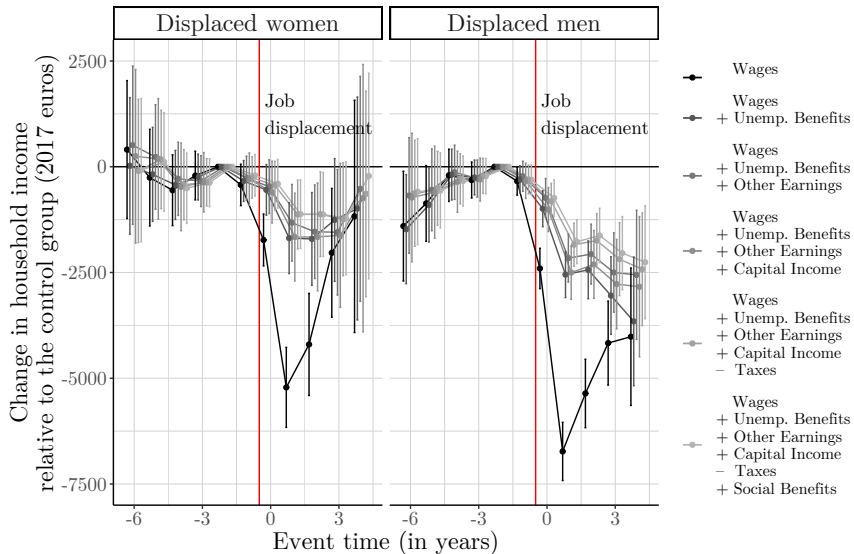
Spousal earnings and labor supply: balanced panel

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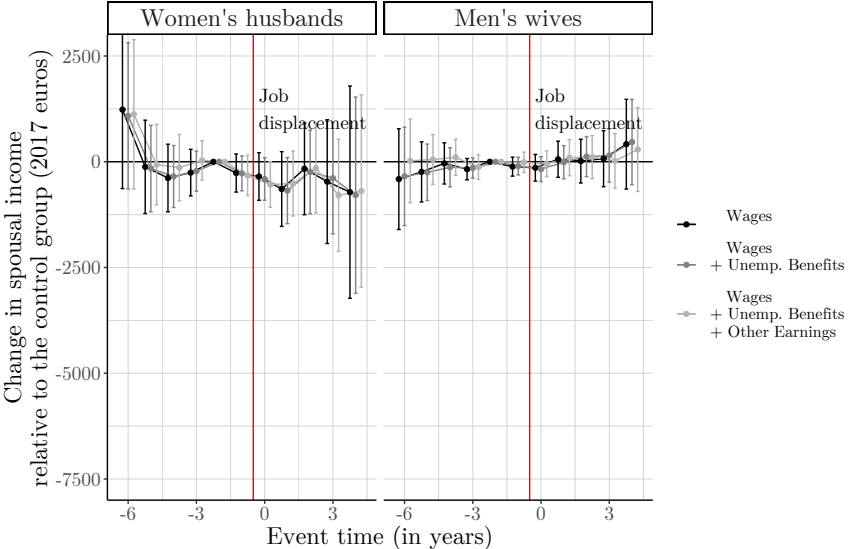
Household income: balanced panel

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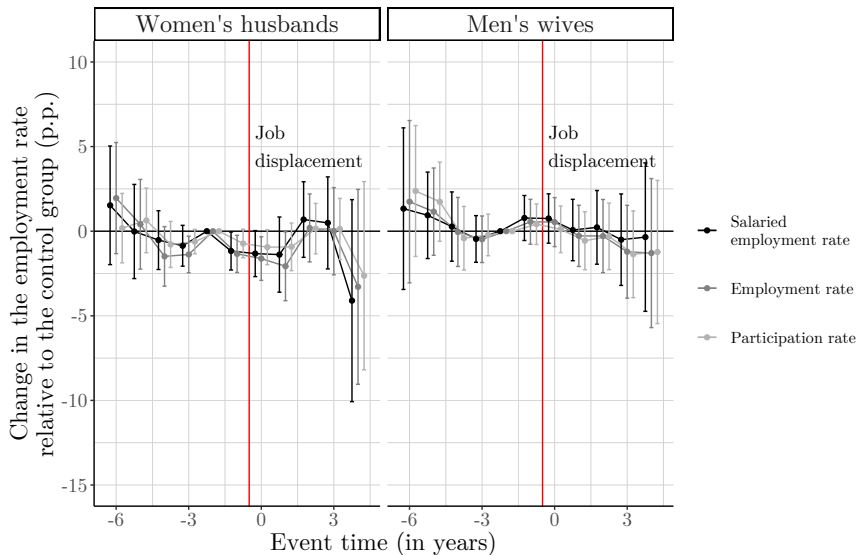
Spousal earnings and labor supply: balanced panel of spouses

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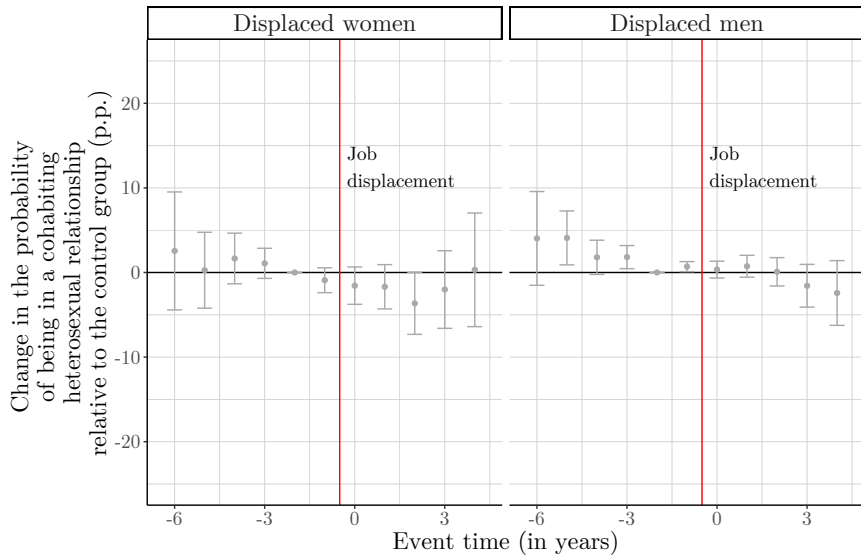
Spousal earnings and labor supply: balanced panel of spouses

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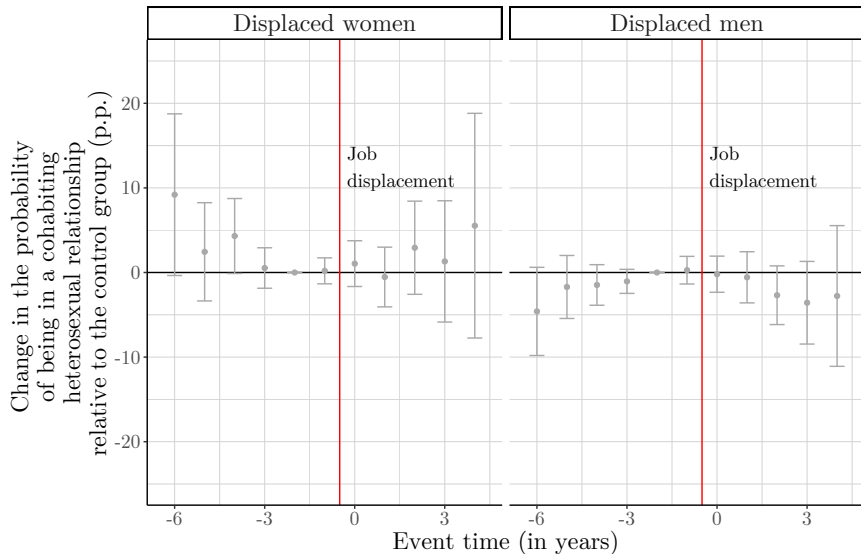
Couple dissolution

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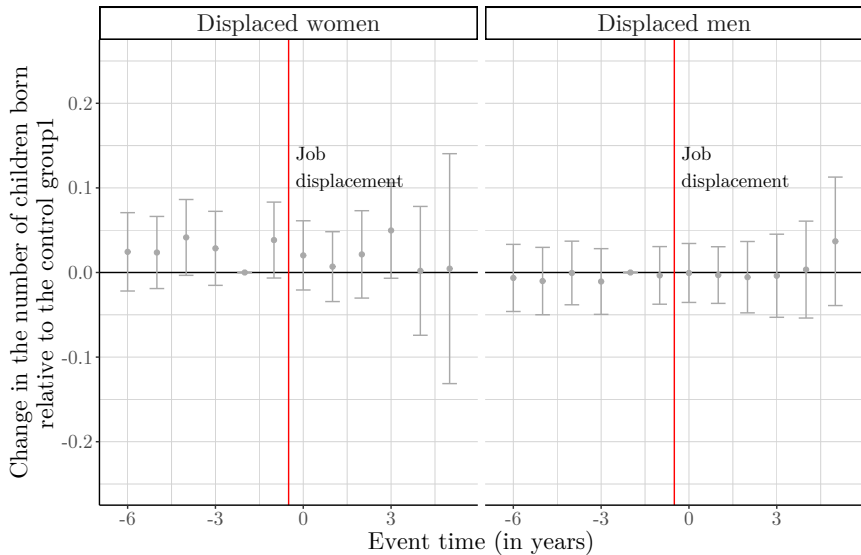
Couple formation

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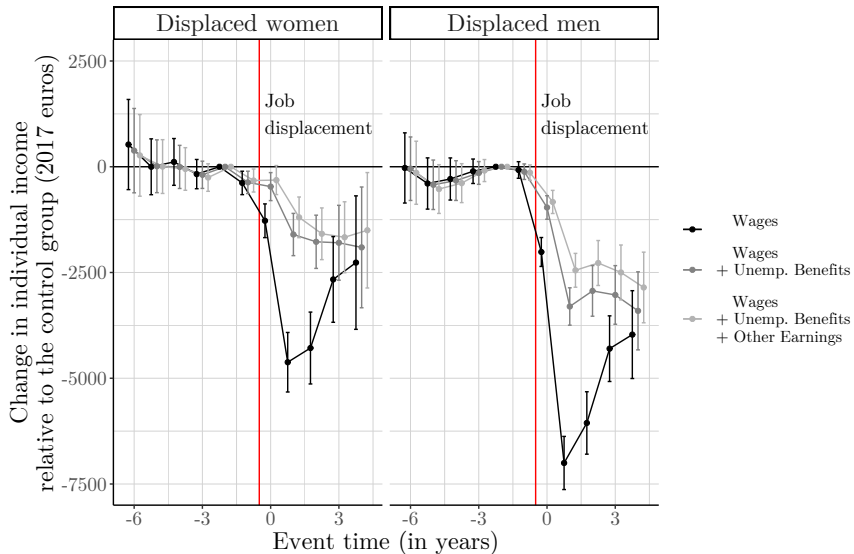


Fertility decisions

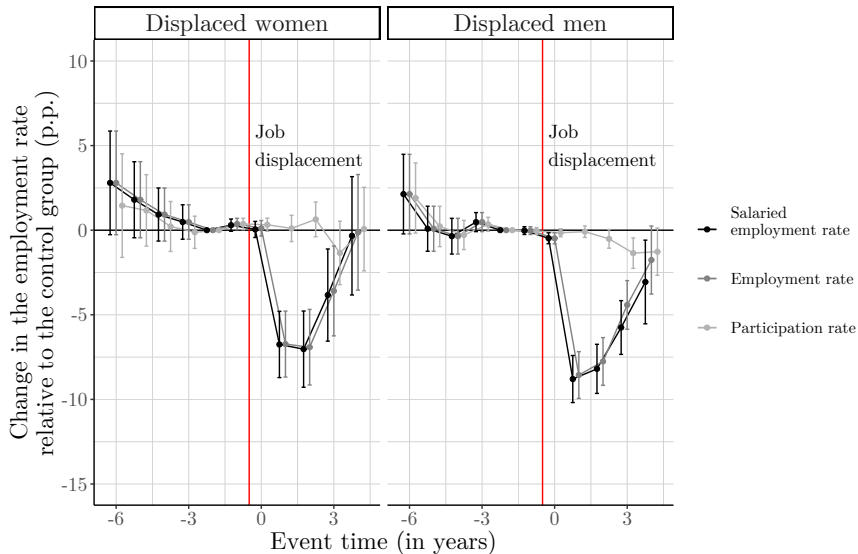
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Own earnings and labor supply [Back to Results](#)

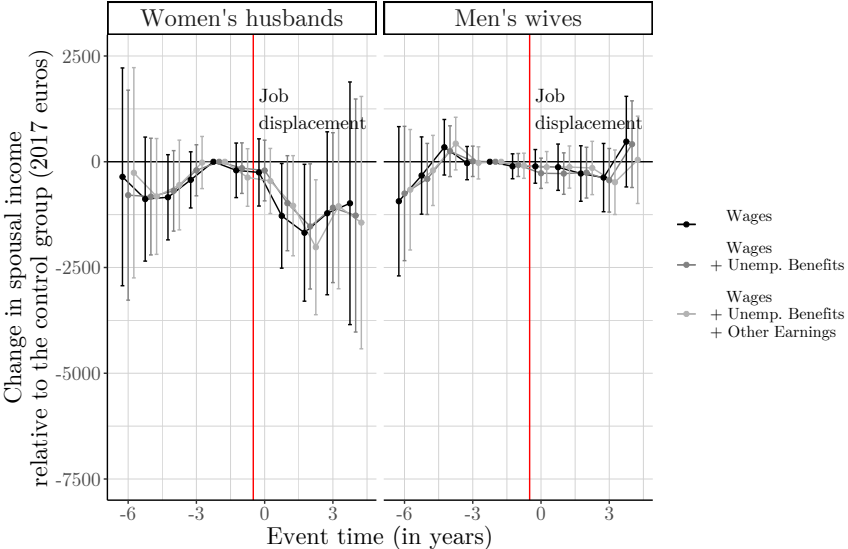


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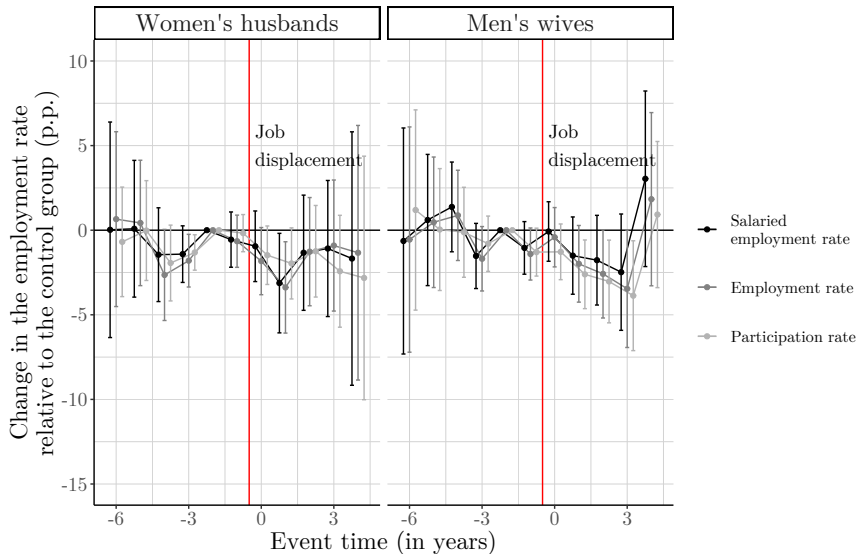
Spousal earnings and labor supply

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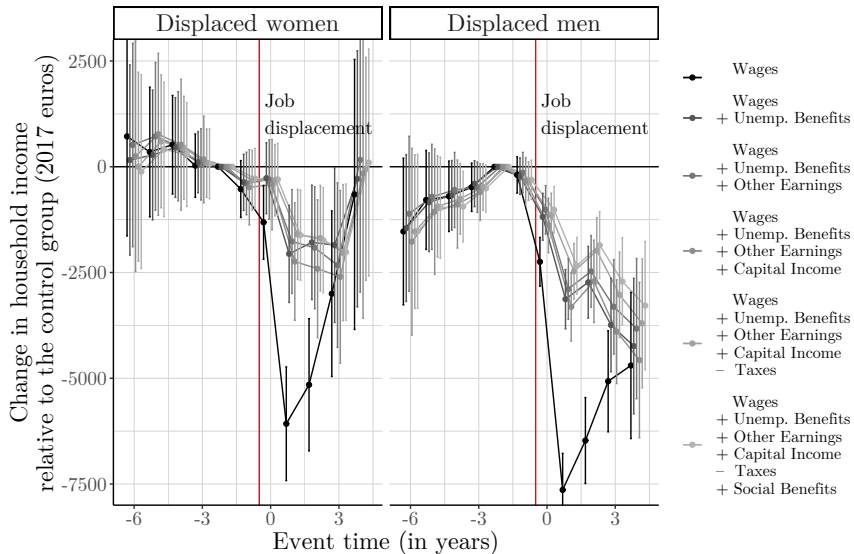
Spousal earnings and labor supply

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Disposable household income

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Summary statistics: initial family structure and occupation

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Gender	Women		Men	
	Non-displaced	Displaced	Non-displaced	Displaced
<i># Individuals</i>	578	1,702	1,068	3,001
<i>a. Occupational shares (in %)*</i>				
Managers and professionals	18.5	23.8	16.7	25.1
Intermediate occupations	15.4	17.3	17.7	17.8
Non-manual workers	52.2	45.9	15.3	17.1
Manual workers	13.8	12.9	50.4	40.1
<i>b. Family structure (in %)*</i>				
With spouse	73.6	64.1	72.7	71.1
With child	64.0	60.0	64.8	63.8
<i>c. Yearly number of childbirths*</i>				
Mean	0.2	0.2	0.2	0.2
St.D.	0.4	0.5	0.5	0.5

* As observed two years before job displacement. *Source.* Insee, DADS comprehensive files; Insee and Ministry of Finance (DGFIP), EDP sample.

Summary statistics: initial salaried earnings and labor supply

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Gender	Women		Men	
	Non-displaced	Displaced	Non-displaced	Displaced
<i>a. Wages (in 2017€)</i>				
Mean	19,900	20,400	26,100	25,200
St.D.	12,100	13,300	14,900	15,600
<i>b. Days worked</i>				
Mean	340	340	340	340
St.D.	70	70	50	60
<i>c. Hours worked</i>				
Mean	1,560	1,580	1,770	1,760
St.D.	500	520	400	500

Source. Insee, DADS comprehensive files; Insee and Ministry of Finance (DGFIP), EDP sample.

Summary statistics: initial own earnings and labor supply

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Gender	Women		Men	
	Non-displaced	Displaced	Non-displaced	Displaced
<i>a. Individual earnings (in 2017€)</i>				
Mean	23,500	23,600	25,900	28,700
St.D.	14,600	14,700	14,400	17,400
<i>b. Wages (in 2017€)</i>				
Mean	22,400	22,700	25,000	28,000
St.D.	14,300	14,700	14,000	17,500
<i>c. Unemployment benefits (in 2017€)</i>				
Mean	600	500	600	500
St.D.	2,100	1,900	2,200	1,900
<i>d. Other earnings (in 2017€)</i>				
Mean	400	300	200	300
St.D.	3,500	1,900	2,000	1,900

Source. Insee, DADS comprehensive files; Insee and Ministry of Finance (DGFIP), EDP sample.

Summary statistics: initial spousal earnings and labor supply

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Gender	Women's male spouse		Men's female spouse	
	Non-displaced	Displaced	Non-displaced	Displaced
<i>a. Individual earnings (in 2017€)</i>				
Mean	33,000	32,500	15,200	17,800
St.D.	21,000	19,900	12,700	15,200
<i>b. Wages (in 2017€)</i>				
Mean	29,100	30,300	13,700	16,300
St.D.	21,400	20,300	12,700	15,200
<i>c. Unemployment benefits (in 2017€)</i>				
Mean	600	500	600	600
St.D.	2,400	2,200	2,000	2,200
<i>d. Other earnings (in 2017€)</i>				
Mean	3,300	1,600	800	800
St.D.	12,000	7,000	4,900	5,000
<i>e. Employment and participation rates (in %)</i>				
Employment	95.0	95.5	77.2	82.0
Participation	96.2	96.2	79.1	83.9

Summary statistics: initial household income [Back to Results](#)

Gender	Women		Men	
	Non-displaced	Displaced	Non-displaced	Displaced
<i>a. Disposable income (in 2017€)</i>				
Mean	46,400	46,900	45,800	46,700
St.D.	24,500	27,200	23,300	25,500
<i>b. Wages (in 2017€)</i>				
Mean	42,000	43,400	41,900	42,800
St.D.	25,600	29,200	24,000	26,800
<i>d. Capital income (in 2017€)</i>				
Mean	4,600	4,500	4,400	4,500
St.D.	8,100	8,200	7,300	7,500
<i>e. Taxes (in 2017€)</i>				
Mean	-7,500	-8,100	-7,300	-7,800
St.D.	7,00	8,500	6,800	7,800
<i>f. Social benefits (in 2017€)</i>				
Mean	2,600	2,400	2,500	2,500
St.D.	3,700	3,500	3,800	3,800