Online Appendix

The Gender Gap in Earnings Losses after Job Displacement

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Contents

\mathbf{A}	Data	2
	A.1 Identifying Couples	2
	A.2 Main Analysis Sample	2
	A.3 Job Search and Job Preferences Data: ASU and SMS	4
В	Additional Analysis: The Added Worker Effect	5

9

C Appendix Tables and Figures

List of Tables

1	Summary Table of Displaced Workers in the Year Before Displacement -Detailed	9
2	Summary Statistics for Displaced Workers and Matched Controls in t=c-1 \therefore	10
3	Industry Distribution for Displaced Workers and Matched Controls in t=c-1 \therefore	11
4	The Gender Gap in Earnings Losses and Other Characteristics After Displace-	
	ment -Detailed	12
5	Household Outcomes and Added Worker Effect	13
6	Household Outcomes and Added Worker Effect: Alternative Sample Splits	14
7	Summary Statistics for Displaced Workers in ASU Sample in t=c-1 \ldots	15
8	Summary Statistics for Nonemployed Workers in SMS Data	16
9	Explaining the Gender Gap in Wage Losses After Displacement: Job Search Info	17
10	The Impact of Individual Control and Reweighting Variables on the Gender	
	Gap in Earnings	18
11	Robustness to Alternative Matching Specifications	19
12	Robustness of Using Additional Reweighting Variables	20
13	The Gender Gap in Earnings Losses - Varying Estimation Samples	21
14	Explaining the Gender Gap in Wage Losses After Displacement: Separate Re-	
	gressions	22
15	Explaining the Gender Gap in Wage Losses After Displacement: Wage Premia	23
16	Top 10 3-Digit Occupations in the Five Years Before vs. After Displacement $\ .$	24
17	2-digit Industry Switches - Women vs. Men	25

List of Figures

1	Binscatter Plots	26
2	The Gender Gap and Children	27
3	Distribution of Share in Household Income by Gender	28
4	Costs of Job Loss by Displaced Worker's Share in Household Income in t=c-1 .	29
5	The Gender Gap in Earnings Losses - Additional Outcomes	30
6	Job Loss on the Household Level - The Added Worker Effect	31
7	Long Run Effects of the Gender Gap in Earnings, Wage and Employment Losses	32
8	Long Run Effects of Changes in Job Characteristics after Displacement	33
9	Robustness Checks: Shorter Tenure, Mahalanobis Matching	34

10	Robustness Checks: Occupational Reweighting, Displ. Estab. Fixed Effects,	
	Matching without Wages	35
11	Robustness Checks: Reweighting Men to Women, Non-Couples, Couples and	
	Non-Couples	36
12	Comparing Outflows and Employment Changes of Establishments with Mass-	
	layoff with Matched Control Establishments	37
13	Main Outcomes when Including Pre-layoff Leavers (1 year before mass-layoff)	
	in Displaced Worker Sample	38
14	Log Target Wage Ratio	39

A Data

A.1 Identifying Couples

Goldschmidt et al. (2017) (henceforth: GKS) developed a method to identify likely married, mixed-sex couples in German administrative data. The procedure relies on identifying likely married couples by selecting pairs of individuals that a) share the same last name, b) live at the exact same address, c) there are exactly two persons with the same last name at a given location. In addition, it restricts to mixed-sex name-pairs with an absolute age difference of less than 15 years. GKS provide evidence that this procedure is effective in identifying couples, with an estimated rate of false positives of less than 5%. At the same time, not all couples can be identified with this method. As a direct result of the data restrictions, only mixed-sex couples sharing a last name and an age difference of less than 15 years are selected.¹

An additional restriction is that to be identified as a couple, both individuals of that couple have to appear in the administrative data at the same time. This requires that each of the individuals of a couple have to be in either dependent, social security liable employment (including marginal employment) or a recorded unemployment spell (including any UI, UI-II receipt, registered unemployment, or registered job search status). The procedure thus selects more conservative and older (but not yet retired) couples with some (but potentially weak) attachment to the labor force. In this paper we rely on a recent data update of GKS for the years 2001-2014 (Bächmann et al. (2021)). This yields a yearly panel dataset of more than 8 million couples for the years 2001-2014.

A.2 Main Analysis Sample

Sample Construction

We construct a sample of workers laid off in 2002 through 2012 from the Integrated Employment Biographies (IEB) provided by the IAB. We start with the universe of all social security liable employment in the IEB and subsequently add the following restrictions to arrive at our baseline sample of laid off workers.

• Mass layoff or plant closure: We define an individual as being laid off during a mass layoff if they fulfill the following conditions:

¹This restriction aims at reducing measurement error as age differences of more than 15 years might also stem from parent-child links and same-sex pairs might importantly reflect borther-sister pairs.

- They leave the establishment between June 30 in t = c 1 and June 30 in t = c, where $c \in \{2002..., 2012\}$ and do not return to the establishment in the 5 subsequent years.
- The displacing establishment exhibits low employment fluctuations in the two years before the layoff, i.e., the workforce did not increase by more than 30% in at least one of the two years preceding the layoff.
- The workforce of the displacing establishment declines by at least 30% between t = c 1 and t = c.
- The employment outflows at that establishment between t = c 1 and t = c are "dispersed". I.e., following Hethey-Maier and Schmieder (2013), we require that no more than 30% of the outflow go to one particular establishment to exclude mergers, takeovers, or changes in employer identification numbers.
- The establishment empoyed at least 30 individuals in the year prior to layoff t = c 1.
- Married couples: We restrict our baseline sample to married couples. This requires that the individual has to be observed as being in a couple (as defined in A.1) in one of the five years prior to layoff.
- Age and tenure: To ensure that workers in our baseline sample are highly attached to the labor force, we consider only workers aged 24-50 (at t = c 1), workers with at least two years of tenure (at t = c 1), and workers who were not in marginal employment in the four years preceding displacement.

Comparison to Schmieder, von Wachter, and Heining (2020)

Our sample construction closely follows Schmieder et al. (2023) (henceforth SvWH). As in SvWH, we consider only workers aged 24-50 in t = c - 1. However, our baseline restrictions are less strict when it comes to tenure, full-time employment, and establishment size. This is because otherwise, we would exclude many women from our sample. In particular, we deviate form SvWH in the following ways:

- While SvWH restrict their baseline sample to workers with three years of tenure in in t = c 1, we relax this restriction to two years.
- In contrast to SvWH, we allow for part-time employment of workers before displacement.
- We consider establishments with a workforce of at least 30 employees in t = c 1, and thus allow for slightly smaller establishments (at least 50 employees in SvWH).

Another important difference is that for our main analysis, we focus on individuals who were part of a couple in at least one of the five years before displacement. In addition, while SvWH focus on West Germany only, we consider (non-)displaced workers both in East and West Germany.

A.3 Job Search and Job Preferences Data: ASU and SMS

(X)ASU

The (X)ASU (or *Jobseeker History Panel*) is an administrative dataset provided by the IAB (see Antoni et al. (2019) for an overview on individual-level data at the IAB).² It contains information on individuals who are registered as unemployed and stems from the Federal Employment Agency's (BA) job placement software "VerBIS". Everyone who receives unemployment benefits is part of this database. It is possible to link job seekers from this database to the employment data via a unique person ID.

Caseworkers collect the information on job preferences during the first consultation with the job seeker and enter it into the software. For example, the caseworker asks the job seeker whether they are looking for a i) full-time job, ii) part-time job, or iii) either and then adds this information to the job seeker's profile in the BA system. In another question, job seekers have to indicate whether they are looking for i) a permanent contract, ii) a fixed-term contract, or iii) any contract.

For the scope of geographic search, the job seeker has to indicate whether they would be willing to accept a job anywhere in Germany or whether they are limited in their regional scope of search. Job seekers can also indicate in which regions (out of the 16 German federal state or out of the 155 job agency regions) they would preferably accept a job in (though this information is, unfortunately, not part of the data). As soon as the job seeker indicates that they would also be willing to accept offers non-prefered regions (on a federal, state, or job agency level), the caseworker classifies them as searching with "broader geographic scope". Note that the information on the geographic scope of search is only available for spells starting before July 2006.

Table 7, Columns (1) vs. (2), shows how our baseline sample of displaced workers (Column (1)) differs form individuals who appear in the (X)ASU data (Column (2)). Column (2) shows that individuals in the (X)ASU are somewhat negatively selected: They have lower earnings (31,000 vs. 33,000, t=c-2), work fewer full-time days (290 vs. 293, t=c-1), and spent slightly less time in education (11.1 vs. 11.3 years). Individuals in the (X)ASU data are also 4 percentage points less likely to be female. This could be either because women find new jobs more quickly, or because they are more likely to completely drop out of the workforce after job displacement.

SMS

The SMS-data constitutes a novel, high frequency data set on job search effort and has been collected by DellaVigna et al. (2022) to describe within-individual job search effort overt the unemployment spell and around benefit exhaustion. The targeting sample consists of a random sample of individual UI recipients between age 25 and 55, with stratifications by eligibility duration and current unemployment durations (see DellaVigna et al. 2022 for details). The survey was conducted between 2018 and 2019 and contains information on search effort, target wage, life-satisfaction and job-found information. A question on search effort was asked twice a week, while each of the other questions was asked effectively every third week (each week, one of the additional questions was asked on a rotating basis).

²Note that we use "ASU" version V06.11.00 and "XASU" version V02.03.00-201904.

B Additional Analysis: The Added Worker Effect

A long-standing hypothesis in labor economics is that married women increase their labor supply in response to their husbands' unemployment (e.g. Cain, 1966, Lundberg, 1985). Our newly created link of married couples allows us for the first time to study this effect in German administrative data. As a departure from the long-standing focus of this literature on the labor force participation of wives only, we look at labor supply responses of both husbands and wives of displaced workers. This allows us to examine whether there are gender differences in spousal labor supply which could either mitigate or amplify the individual-level gender gap in the costs of job loss.

Our main results are shown in Figure 6 and Table 5. Panel (a) of Figure 6 reports the impact of job loss on the partner's earnings relative to t=c-2 by gender of the displaced worker.³ The blue line shows that if a man loses his job there is a small decline in the wife's earnings in the order of about 2% of the displaced workers' earnings. There is also a negative effect on the days worked on the wives of displaced men (Panel (b)), which fall by around 18 days. For women, the unweighted pattern is stronger in that it appears that husbands of displaced women do have a sizable negative earnings shock in the subsequent years of around 4-5%. Similarly, days worked and even more so days worked full-time (Panel (c)) decline for the partners of displaced women. While reweighting women to men makes these estimates noisier, the basic pattern is similar.

These graphical results are confirmed by regression estimates in Table 5. Column (1) Panel A shows that the added worker effect is negative for men and women. When a man loses his job, his wife's earnings decline in the following years by about 2% of earnings of the job loser at baseline. On the flip side, if a woman loses her job, her husband's earnings decline by an additional 4.5 percentage points. The gender gap is similar when using either reweighting or regression adjustment to hold other characteristics constant (Panels B and C), though somewhat noisy in the first case. Column (2) shows that the negative added worker effect does not operate through log wages, which are unchanged, but instead through days worked: both partners of men and women work fewer days and partners of female job losers lose more days working full-time.

To examine gender differences in individual and spousal responses jointly, we look at earnings at the household level. In Figure 6 (d), we show the effect of displacement on household income relative to t = c - 1. Given that partner's earnings only mildly respond to job displacement, the picture on the household level is very similar to the individual level. Women's job loss leads to smaller household earnings losses in the overall sample than when men lose their job. However, once we reweight the sample so that we compare similar men and women, the losses are significantly larger if women lose their job.

Table 5 Column (5) confirms that the gender gap persists on the household level when looking at relative household earnings (i.e. relative to household earnings in t = c - 1): after controlling for observable characteristics, a household where the female worker is laid

³Our outcome variable is the change in earnings divided by the earnings of the jobloser in the baseline year (t = c - 1): $\frac{\Delta y_{partner}}{y_{jobloser,t=c-1}}$. Scaling by the earnings of the jobloser, rather than the earnings of the parter at baseline, has the advantage that $y_{jobloser,t=c-1}$ is always a positive and reasonably large number, while $y_{partner,t=c-1}$ can be small or zero which would lead to relative wage changes that go to infinity creating huge outliers.

off experiences a significant 3.5% higher earnings loss than a household where a man loses his job (Panel B). The fact that the gender gap for household earnings is positive in the unweighted sample (Panel A) is consistent with the smaller absolute earnings losses of women in conjunction with the fact that men tend to contribute a higher share of total household income in our data (see Table 1 in the paper).

Why do we observe a negative added worker effect for both male and female job losers? One caveat is that we can only identify married couples where both partners are in the social security data, either by working a social security liable job or by receiving UI benefits. In particular, we miss couples where one spouse is not in the labor force at all or is self-employed. It may well be the case that spouses who are not working or self-employed are the most likely to respond by increasing their labor supply, which would lead us to underestimate the added worker effect in the overall population.

Within our sample, we can get at the role of opportunities to increase labor supply by comparing job losers where the partner is working full-time or part-time. In Panels D and E we split our sample by whether or not the partner is working full-time or part-time prior to displacement.⁴ The results partially confirm the importance of the partner's opportunity to increase labor supply. Among full-time working partners of displaced men, the added worker effect is clearly negative: about a 4% loss in earnings and a decrease of about 16 days of full-time work (and 19 days in days worked overall). The pattern for women is very similar for days worked but earnings losses are even larger. On the other hand when looking at partners who are working part-time or are unemployed the added worker effect is less negative. Earnings decrease only by about 1.3% for partners of male displaced workers and are unchanged for partners of female displaced workers. Similarly partner days worked decline somewhat for men but remain the same for women.

A plausible reason for observing a **negative** added worker effect is likely that there are correlated shocks on the household level (Huber and Winkler (2019)). Spouses tend to work in similar regions, firms, and industries. Thus, if one spouse is displaced, the other spouse might also face a negative labor demand shock in the form of job loss or cuts in hours. Table 5, Panels F and G split the sample by whether or not both partners work in the same or different industry at baseline. Looking at the differences for men (mean of dependent variable), the earnings losses of the partner are almost 10 times larger when both partners work in the same industry (10.4% vs 1.2%). Similarly, losses in days worked (58.6 vs. 12.4 days) and days worked full-time (27.7 vs. 2.0 days) are much larger if both work in the same industry. The gender gap estimates in Panel G and F, suggest even larger negative effects for partners of

$$\Delta_d y_{ic} = \beta \, Female_{ic} * Displaced_{ic} + \delta \, Female_{ic} + X_{ic}\theta + \varepsilon_{ic} \tag{1}$$

and then apply baseline restrictions to both displaced and non-displaced workers.

⁴When splitting the sample a technical issue arises: In our matching procedure to generate a suitable control group we do not match on characteristics of the partner. This means that within the matched displaced/nondisplaced pairs the full-time status of the partner is often different. If we then condition only on the partner of the displaced worker to be working full-time, the control group will include workers working full-time or part-time leading to very different pre-trends and a bias from regression to the mean. For this reason, rather than estimating Equation (7), we instead estimate the effect in first differences:

This is identical to estimating Equation (7) in the full sample but avoids the regression to the mean bias in split sample regressions. Since non-displaced workers are treated as distinct observations, the number of observations is twice as large as in the previous analysis.

displaced women when both partners work in the same industry. Similarly, Appendix Table 5 shows that partners' earnings and employment losses are also much larger when both partners work in the same establishment (while same occupations are less predictive). Our results point thus to an important role of correlated demand shocks negatively affecting earnings of both spouses.

Our finding that spousal labor supply responses are negative and not able to mitigate the costs of job loss is somewhat in contrast to Halla et al. (2020) who study the added worker effect in the Austrian context. Halla et al. (2020) find a slightly positive employment response of married women to the job loss of their husbands. A key data difference is that they have access to the marriage and divorce register, and thus can include couples where the wife is not working prior to the displacement event of the husband. In fact, when they restrict the sample to women who were employed at baseline they also find a clear negative added worker effect (see Halla et al., 2020, Table 3).

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C Appendix Tables and Figures

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	(1) All Workers Women	(2) Baseline Sample Women	(3) Reweighted Women	(4) All Workers Men	(5) Baseline Sample Men
Panel A. Individual Character	istics				
		1.10	1.00	4 1 1	1 - 1
Log Wage in $t=c-2^*$	3.54	4.18	4.60	4.11	4.54
	[1.06]	[0.471]	[0.370]	[1.02]	[0.356]
Earnings in $t=c-1$	15320.9	26623.3	38498.4	24695.4	36677.8
0	[15273.2]	[11881.2]	[13403.6]	[20570.7]	[12881.5]
Days per Year Working Fulltime	122.0	226.9	325.0	218.8	335.5
Days per rear working runtime	[165.0]	[162.0]	[82.0]	[168 7]	[64, 4]
Down was Voor Warling Doutting	[105.0] 76.4	[102.0]	[02.9]	11.0	04.4]
Days per Year working Partiline	10.4	114.0	10.7	11.9	0.20
	[142.8]	[160.7]	[69.9]	[60.1]	[50.2]
Years of Education [*]	11.9	11.4	11.4	12.1	11.3
	[1.92]	[1.45]	[1.63]	[2.11]	[1.58]
Tenure*	3 25	7 54	7 32	3 35	7 74
1 on all o	[2.61]	[4.06]	[4 12]	[2.67]	[4.45]
A	205	41 7	40.4	20.5	[4.45]
Age	39.0	41.1	40.4	59.5	41.0
	[13.2]	[5.87]	[0.33]	[13.4]	[5.93]
Commuting Distance		29.4	36.3		39.4
		[71.8]	[89.0]		[88.4]
Has child under 7		0.031	0.038		0.119
		$[0\ 173]$	$[0\ 192]$		[0, 324]
Has child aged 7 or older		0.214	0.126		0.245
mas china aged 7 of older	·	[0 410]	[0.220]	•	[0,420]
		[0.410]	[0.552]		[0.430]
Panel B: Establishment Chara	cteristics	- 10			
Log Estab. Size*	4.07	5.19	4.70	4.58	4.77
	[2.11]	[1.37]	[1.07]	[2.14]	[1.10]
AKM Estab FE, 2003-2010	-0.331	-0.265	-0.164	-0.254	-0.193
,	[0.288]	[0.222]	[0.210]	[0.264]	[0.230]
Panel C: Household Character	istics	[0]	[0.=10]	[0.=01]	[0.200]
Total Voarly Household Farnings	150105	61018 3	60234 7		54330 4
Total Tearry Household Darnings	·	[01140.9]	[04101.0]	•	[000C1 0]
		[21149.3]			[20061.8]
Total Yearly Earnings - Partner	•	34245.6	36777.8	•	17727.0
		[15300.5]	[15847.2]		[13892.7]
Share of Household Income		45.0	47.6		69.9
		[16.9]	[15.7]		[18.0]
Same Establishment as Spouse		0.059	0.068		0.040
Same Estastistiment as spouse	·	[0.235]	[0.252]	•	[0, 107]
Sama Industry as Spausa		0.000	0.116		0.075
same muustry as spouse	•	0.099	[0 220]	•	0.070
		[0.298]	[0.320]		[0.203]
Number of Individuals	300615	21806	31806	418197	48840
Number of multiduals	099010	91000	31000	410121	40049

Table 1:	Summary	Table of Displaced	Workers in the	Year Before	Displacement	-Detailed
		1			1	

Notes: This table summarizes characteristics of different samples of (displaced) men and women. Columns (1) and (4) show characteristics of a random sample of workers in Germany 2003-2012. Columns (2) and (5) represent all displaced workers in the couple dataset fulfilling our baseline restrictions. We measure characteristics in t=c. We exclude individuals working in the construction and mining sectors. Column (3) contains women in the couple dataset reweighted to men. In Panel C, we refer to the 2-digit industry. Partner earnings are missing if the partner is not working. Variables with * are used in reweighting. Additional reweighting variables are the following: Log wage in t=c-3 and fulltime employment on June 30 in t=c-2. Standard deviations in brackets.

	(1) Non-Displaced Women	(2) Displaced Women	(3) Non-Displaced Men	(4) Displaced Men
Danal A. Individual Charge	storistics			
Vears of education		11 /	11.3	11.3
rears of education	[1.5]	[1.5]	[1.6]	[1.6]
Potential experience	22.4	22.8	21.8	21.0
	$[6\ 2]$	$[6\ 1]$	$[6\ 2]$	$[6\ 2]$
Tenure with current employer	7.5	7.5	7.7	7.7
ienare with carrent employer	[4.1]	[4.1]	[4.4]	[4.5]
Log wage in $t=c-2$	4.2	4.2	4.5	4.5
	[0.485]	[0.471]	[0.360]	[0.356]
Earnings in $t=c-1$	26999.8	26623.3	37167.9	36677.8
C	[12004.7]	[11881.2]	[12715.9]	[12881.5]
Total yearly income	25675.6	24451.5	35585.8	`33729.2 [`]
	[11834.4]	[11831.6]	[13077.3]	[13388.0]
Days Worked in Year	363.2	343.0	363.1	343.2
	[14.0]	[48.2]	[13.2]	[46.7]
Days Worked in Fulltime Job	239.4	226.9	356.3	335.5
	[172.2]	[162.0]	[50.3]	[64.4]
Couple	1	1	1	1
	[0]	[0]	[0]	[0]
Panel B: Establishment Ch	aracteristics			
Firmsize	572.4	513.1	277.4	281.3
	[1177.0]	[867.8]	[714.4]	[616.4]
Share female workers	0.602	0.616	0.287	0.279
	[0.240]	[0.239]	[0.212]	[0.212]
Share fulltime workers	0.636	0.649	0.806	0.829
	[0.269]	[0.278]	[0.183]	[0.180]
Number of Observations	31806	31806	48849	48849

Table 2: Summary Statistics for Displaced Workers and Matched Controls in t=c-1

Notes: Characteristics of displaced and non-displaced workers in year prior to displacement year. Workers satisfy the following baseline restrictions: The individual is aged 24 to 50, has at least two years of tenure, she was not in marginal employment in the four years preceding displacement, and she works in an establishment which has at least 30 employees. Each displaced worker is assigned a non-displaced worker via 1:1 propensity score matching within gender, year and industry cells. Non-displaced workers come from a random sample of couples who satisfy the same baseline restrictions. Standard deviations in brackets.

	(1) All Workers	(2) Baseline Sample	(3) Reweighted	(4) All Workers	(5) Baseline Sample
	Women	Women	Women	Men	Men
Agriculture	0.0074	0.0020	0.00097	0.012	0.0015
Ŭ,	[0.086]	[0.045]	[0.031]	[0.108]	[0.039]
Mining, Energy	0.0050	0	0	0.017	0
	[0.070]	[0]	[0]	[0.131]	[0]
Food Manufacturing	0.027	0.050	0.028	0.022	0.039
	[0.162]	[0.218]	[0.166]	[0.148]	[0.194]
Consumption Goods	0.031	0.086	0.069	0.038	0.084
	[0.174]	[0.281]	[0.253]	[0.192]	[0.278]
Production Goods	0.023	0.038	0.083	0.069	0.096
	[0.151]	[0.191]	[0.276]	[0.253]	[0.294]
Investment Goods	0.046	0.073	0.138	0.166	0.171
	[0.210]	[0.260]	[0.345]	[0.372]	[0.377]
Construction	0.016	0	0	0.075	0
	[0.124]	[0]	[0]	[0.263]	[0]
Retail	0.180	0.215	0.123	0.136	0.148
	[0.384]	[0.411]	[0.329]	[0.343]	[0.355]
Traffic, Telecommunication	0.035	0.043	0.102	0.077	0.088
	[0.184]	[0.203]	[0.302]	[0.267]	[0.284]
Credit, Insurance	0.038	0.023	0.013	0.028	0.015
	[0.190]	[0.150]	[0.114]	[0.164]	[0.122]
Restaurants	0.055	0.019	0.0088	0.032	0.0082
	[0.228]	[0.137]	[0.094]	[0.176]	[0.090]
Education	0.052	0.126	0.025	0.026	0.026
	[0.221]	[0.332]	[0.155]	[0.160]	[0.160]
Health	0.191	0.060	0.012	0.045	0.012
	[0.393]	[0.238]	[0.108]	[0.207]	[0.109]
Commercial Services	0.150	0.151	0.337	0.169	0.251
	[0.358]	[0.358]	[0.473]	[0.374]	[0.434]
Other Services	0.053	0.024	0.032	0.035	0.029
	[0.223]	[0.154]	[0.176]	[0.184]	[0.169]
Non-Profit	0.024	0.025	0.015	0.013	0.015
	[0.153]	[0.155]	[0.123]	[0.113]	[0.121]
Public Administration	0.067	0.064	0.014	0.040	0.014
	[0.250]	[0.245]	[0.116]	[0.197]	[0.119]
Number of Observations	3939514	31806	31806	4178728	48849

Table 3: Industry Distribution for Displaced Workers and Matched Controls in t=c-1

This table summarizes the industry distribution of different samples of (displaced) men and women. Columns (1) and (4) show characteristics of a random sample of workers in Germany 2003-2012. Columns (2) and (5) represent all displaced workers in the couple dataset fulfilling our baseline restrictions. We measure characteristics in t=c. We exclude individuals working in the construction and mining sectors. Column (3) contains women in the couple dataset reweighted to men. Variables with * are used in reweighting. Standard deviations in brackets.

	(Mean in Outcor for	(1) Change ne Variable Men	(2) Unadjusted Gender Gap		(3) Composition Adjusted Gender Gap Regression-Adj.		(4) Composition Adjusted Gender Gap Reweighted		(5) Number of Observations
	Change	Std. Err.	Gap	Std. Err.	Gap	Std. Err.	Gap	Std. Err.	
Panel A: Earnings, Wage	es, and Emp	oloyment							
Total Yearly Earnings	-9418.0	[313.8]	3214.6	[371.2]	-1115.8	[239.0]	-2491.1	[339.6]	80,655
Earnings r.t. $t=c-2$	-0.258	[0.0066]	0.014	[0.012]	-0.077	[0.0072]	-0.092	[0.012]	80,655
Log Earnings	-0.405	[0.0077]	-0.030	[0.020]	-0.155	[0.012]	-0.128	[0.017]	76,321
Sinh(Earnings)	-1.55	[0.064]	0.165	[0.079]	-0.193	[0.050]	-0.294	[0.060]	80,655
Log Wage Loss	-0.201	[0.0053]	-0.066	[0.013]	-0.166	[0.0098]	-0.133	[0.013]	73,598
Fulltime Log Wage	-0.094	[0.0029]	0.013	[0.0085]	-0.045	[0.0052]	-0.039	[0.0084]	52,996
Days Worked	-67.7	[2.01]	9.04	[2.97]	-2.97	[1.73]	-7.05	[2.13]	80,655
Days Worked Fulltime	-75.5	[2.11]	31.4	[3.24]	-24.9	[2.51]	-23.1	[2.84]	80,655
Days Worked Parttime	-0.154	[0.380]	-33.8	[1.72]	12.6	[1.49]	11.3	[1.66]	80,655
Days Worked in Minijob	1.09	[0.516]	14.3	[1.10]	10.6	[1.08]	4.88	[1.51]	80,655
Panel B: Job Characteris	stics								
Commuting Distance	2.59	[1.54]	-8.76	[1.62]	-0.505	[1.46]	-0.321	[2.11]	73,027
Log Establishment Size	-0.740	[0.029]	-0.571	[0.077]	-0.066	[0.023]	-0.041	[0.036]	72,811
Industry Change	0.536	[0.0066]	-0.061	[0.020]	0.034	[0.0086]	0.046	[0.011]	73,564
Occ. Change	0.417	[0.0067]	-0.105	[0.015]	-0.017	[0.0076]	-0.043	[0.012]	73,598
Estab Share Women	0.019	[0.0024]	0.019	[0.0032]	0.043	[0.0035]	0.042	[0.0049]	72,370
Temp Work	0.034	[0.0014]	-0.012	[0.0018]	-0.0099	[0.0021]	-0.0087	[0.0026]	72,811
Business Service Estab	0.064	[0.0023]	-0.019	[0.0032]	-0.024	[0.0033]	-0.028	[0.0040]	72,811
New Estab	0.195	[0.0067]	0.085	[0.018]	0.0086	[0.0075]	0.0063	[0.0087]	72,811
AKM Estab FE	-0.086	[0.0063]	0.011	[0.0066]	-0.024	[0.0043]	-0.0097	[0.0054]	$63,\!452$

Table 4: The Gender Gap in Earnings Losses and Other Characteristics After Displacement-Detailed

Notes: Each row represents a separate regression of the mean change in the outcome variable over a five year period after job loss on a constant and a dummy for female. The first column shows the constant, representing the mean effect for men. The second column presents the coefficient on a female dummy without any controls. The third column presents the coefficient on the female dummy controlling for all covariates. The fourth column uses reweighting. We cluster standard errors at the displacement establishment level (constant within matched worker pairs). Sinh(Earnings) refers to the inverse hyperbolic sine transformation of earnings. We measure commuting distance as the km distance between two municipality centroids. Industry and occupation changes are defined on the 2-digit and 3-digit levels, respectively, to a business service establishment, or to a new establishment (5 years old or younger), respectively. Workers in our sample are displaced in 2002-2012, and they are observed from 1996-2017. Coefficients in bold are statistically significant at the 5%-level.

	(1) Partner Earn. Rel. To Job Loser's in t=c-1	(2) Partner Log Wage	(3) Partner Days Worked	(4) Partner Days Worked Fulltime	(5) Household Earnings Rel. To t=c-1
Panel A: Unadjusted	Gender Gap				
Female*Displaced Observations Mean Dep. Var Men	$\begin{array}{c} -0.045 \\ (0.0087)^{**} \\ 161310 \\02 \\ (.003) \end{array}$	$\begin{array}{c} -0.018 \\ (0.0071)^* \\ 93392 \\ .005 \\ (.006) \end{array}$	$\begin{array}{c} 3.28 \\ (1.89) \\ 161310 \\ -15.949 \\ (1.843) \end{array}$	-8.07 (1.68)** 161310 -4.124 (.982)	$\begin{array}{c} 0.045 \\ (0.0098)^{**} \\ 161310 \\224 \\ (.007) \end{array}$
Panel B: Adjusted G	ender Gap, Reweighted	l			
Female*Displaced Observations Mean Dep. Var Men	$\begin{array}{c} -0.019 \\ (0.033) \\ 161310 \\02 \\ (.003) \end{array}$	$\begin{array}{c} 0.0016 \\ (0.013) \\ 93392 \\ .005 \\ (.006) \end{array}$	$8.85 \ (3.47)^* \ 161310 \ -15.949 \ (1.843)$	$\begin{array}{c} -2.63 \\ (3.36) \\ 161310 \\ -4.124 \\ (.982) \end{array}$	$\begin{array}{c} -0.025 \\ (0.025) \\ 161310 \\224 \\ (.007) \end{array}$
Panel C: Regression	Adjusted Gender Gap				
Female*Displaced Observations Mean Dep. Var Men	$\begin{array}{c} -0.042 \\ (0.0088)^{**} \\ 161310 \\02 \\ (.003) \end{array}$	$\begin{array}{c} -0.018 \\ (0.0071)^* \\ 93392 \\ .005 \\ (.006) \end{array}$	$\begin{array}{c} 4.20 \\ (1.93)^* \\ 161310 \\ -15.949 \\ (1.843) \end{array}$	-7.55 (1.71)** 161310 -4.124 (.982)	$0.048 \\ (0.0100)^{**} \\ 161310 \\224 \\ (.007)$
Panel D: Regression	Adjusted Gender Gap	If Partner Is	Full-time Worker		
Female*Displaced Observations Mean Dep. Var Men	$\begin{array}{c} -0.045 \\ (0.011)^{**} \\ 75097 \\039 \\ (.007) \end{array}$	$\begin{array}{c} -0.012 \\ (0.0082) \\ 54759 \\006 \\ (.008) \end{array}$	$\begin{array}{c} 3.61 \\ (2.52) \\ 75097 \\ -18.771 \\ (2.123) \end{array}$	$\begin{array}{c} -0.54 \\ (2.63) \\ 75097 \\ -15.778 \\ (2.164) \end{array}$	$0.027 \\ (0.0097)^{**} \\ 75097 \\189 \\ (.008)$
Panel E: Regression	Adjusted Gender Gap I	f Partner Is	Part-time Worker	or Unemployed	
Female*Displaced Observations Mean Dep. Var Men	$\begin{array}{c} 0.016 \\ (0.013) \\ 86213 \\013 \\ (.004) \end{array}$	$\begin{array}{c} 0.030 \\ (0.029) \\ 38633 \\ .012 \\ (.008) \end{array}$	$13.9 \\ (2.87)^{**} \\ 86213 \\ -15.138 \\ (1.372)$	2.60 (2.28) 86213 .245 (.789)	$0.033 \\ (0.013)^* \\ 86213 \\24 \\ (.004)$
Panel F: Regression	Adj. Gender Gap, Part	ners Working	in Different Ind	ustries	
Female*Displaced Observations Mean Dep. Var Men	$\begin{array}{c} -0.032 \\ (0.0091)^{**} \\ 147305 \\012 \\ (.005) \end{array}$	$\begin{array}{c} -0.017 \\ (0.0074)^* \\ 83540 \\ .015 \\ (.005) \end{array}$	$\begin{array}{c} 4.44 \\ (1.97)^* \\ 147305 \\ -12.16 \\ (1.241) \end{array}$	$^{-5.88}_{(1.77)^{**}}$ 147305 $^{-1.983}_{(1.028)}$	$\begin{array}{c} 0.054 \\ (0.0099)^{**} \\ 147305 \\22 \\ (.004) \end{array}$
Panel G: Regression	Adj. Gender Gap, Part	ners Working	g in Same Indust	ry	
Female*Displaced Observations Mean Dep. Var Men	-0.11 (0.030)** 14005 104	$\begin{array}{c} 0.0091 \\ (0.022) \\ 9852 \\094 \end{array}$	$12.4 \\ (7.21) \\ 14005 \\ -58.603$	-16.6 (6.19)** 14005 -27.715	-0.00018 (0.024) 14005 263
	(.017)	(.015)	(4.17)	(3.872)	(.013)

Table 5: Household Outcomes and Added Worker Effect

Notes: This table shows household outcomes after displacement from regressions based on the full sample of workers (displaced and non-displaced workers). All outcome variables are based on the individual first differences estimate. Panel A shows the raw gender gap without controls. Panel B shows the adjusted gender gap using reweighting. Panel C shows the regression adjusted gender gap. Panel D shows the gender gap adjusting if the partner is not a full-time worker (e.g., part-time employed or unemployed) in t=c-1. Panel E shows the regression adjusted gender gap for couples where both partners worked in different 2-digit industries in the year before displacement. Panel G shows the regression adjusted gender gap for couples where both partners worked in the same 2-digit industry in the year before displacement. We cluster standard errors at the displacement establishment level (constant within matched worker pare). Workers in our sample are displaced in 2002-2012, and they are observed from 1996-2017. * and ** correspond to 5 and 1 percent significance levels, respectively.

	(1) Partner Earn. Rel. To Job Loser's in t=c-1	(2) Partner Log Wage	(3) Partner Days Worked	(4) Partner Days Worked Fulltime	(5) Household Earnings Rel. To t=c-1
Panel A: Unadjusted	l Gender Gap				
Female [*] Displaced	-0.045	-0.018	3.28	-8.07	0.045
Observations	$(0.0087)^{**}$ 161310	$(0.0071)^{*}$ 93392	(1.89) 161310	$(1.68)^{**}$ 161310	$(0.0098)^{**}$ 161310
Mean Dep. Var Men	02	.005	-15.949	-4.124	224
	(.003)	(.006)	(1.843)	(.982)	(.007)
Panel B: Adjusted G	ender Gap, Reweighted	l			
Female*Displaced	-0.019	0.0016	8.85	-2.63	-0.025
Observations	(0.033) 161310	(0.013)	$(3.47)^{*}$	(3.36) 161310	(0.025) 161310
Mean Dep. Var Men	02	93392 .005	-15.949	-4.124	224
	(.003)	(.006)	(1.843)	(.982)	(.007)
Panel C: Regression	Adj. Gender Gap, Part	ners Working	g in Different Est	ablishments	
Female [*] Displaced	-0.030	-0.018	5.08	-5.82	0.057
	$(0.0089)^{**}$	$(0.0072)^*$	$(1.96)^{**}$	$(1.69)^{**}$	$(0.0098)^{**}$
Observations Mary Day Ven Mary	153294	87808	153294	153294	153294
Mean Dep. var Men	(.005)	(.014)	(1.217)	(1.011)	(.004)
Panel D: Regression	Adj. Gender Gap, Part	ners Working	g in Same Establ	ishment	()
Female*Displaced	-0.20	0.048	8.35	-22.3	-0.068
romate Displaced	$(0.039)^{**}$	(0.030)	(7.66)	$(7.67)^{**}$	$(0.025)^{**}$
Observations	8016	5584	8016	8016	` 8016́
Mean Dep. Var Men	152	18	-77.538	-45.456	282
	(.022)	(.02)	(5.686)	(5.368)	(.017)
Panel E: Regression	Adj. Gender Gap, Part	ners Working	; in Different Oc	cupations	
Female [*] Displaced	-0.044	-0.018	4.22	-7.88	0.048
Ob	$(0.0088)^{**}$	$(0.0073)^*$	$(1.99)^*$	$(1.71)^{**}$	$(0.010)^{**}$
Mean Dep Var Men	152065	80030	152005	-3 345	152005 - 225
Moun Dop. Var Mon	(.005)	(.005)	(1.223)	(1.015)	(.004)
Panel F: Regression	Adj. Gender Gap, Part	ners Working	; in Same Occup	ation	
Female [*] Displaced	-0.012	0.0089	7.22	1.32	0.039
	(0.042)	(0.025)	(7.62)	(7.33)	(0.024)
Observations	9245	`6756´	9245	9245	9245
Mean Dep. Var Men	064	.034	-26.104	-17.597	197
	(.025)	(.012)	(5.247)	(4.939)	(.016)

Table 6: Household Outcomes and Added Worker Effect: Alternative Sample Splits

Notes: This table shows household outcomes after displacement from regressions based on the full sample of workers (displaced and non-displaced workers). All outcome variables are based on the individual first differences estimate. Panel A shows the raggender gap without controls. Panel B shows the adjusted gender gap using reweighting. Panel C shows the regression adjusted gender gap for couples where both partners worked in different establishments in t=c-1. Panel D shows the regression adjusted gender gap for couples where both partners worked in different 3-digit occupations in t=c-1. Panel E shows the regression adjusted gender gap for couples where both partners worked in different 3-digit occupations in t=c-1. Panel F shows the regression adjusted gender gap for couples where both partners worked in the same 3-digit occupation in t=c-1. We cluster standard errors at displacement establishment level (constant within matched worker pairs). Workers in our sample are displaced in 2002-2012, and they are observed from 1996-2017. * and ** correspond to 5 and 1 percent significance levels, respectively.

	(1)	(2)	(3)	(4)
	All	All in ASU	All with Child	All w/o Child
				,
Panel A. Individual Character	istics			
Log Wage in $t=c-2^*$	4 40	4 35	4 40	4 33
	[0 444]	[0, 431]	[0 441]	[0 426]
Earnings in $t=c-1$	32712.9	307615	32414.6	30104 6
	[13427 9]	[12689.0]	[13316 0]	$[12370 \ 1]$
Days per Year Working Fulltime	292.7	290.1	288.3	290.8
Days per rear worning randine	[125 2]	[119.4]	[122.8]	[118.0]
Days per Vear Working Parttime	50.2	43.3	46.5	42.1
Days per rear working rartenne	$[120 \ 1]$	[110.5]	[113 0]	[109.1]
Female	0.394	0.358	0.263	0 305
remate	[0.480]	[0.470]	[0.440]	[0.480]
Voors of Education*	11.2		[0.440]	[0.409]
rears of Education	11.3 [1 52]	[1.28]	11.1 [1.21]	$[1 \ 97]$
Topuno*	$\begin{bmatrix} 1.55 \end{bmatrix}$	[1.20]	$\begin{bmatrix} 1.31 \end{bmatrix}$	$\begin{bmatrix} 1.27 \end{bmatrix}$
Tellule	[4.21]	[1.9]	[4 97]	[4.40]
A*	[4.51]	[4.40]	[4.37]	[4.49]
Age	41.3 [5.01]	41.4 [5.04]	39.2 [5 11]	42.2 [6.02]
Commutin a Distance	[0.91]	[0.94]	[0.11]	$\begin{bmatrix} 0.05 \end{bmatrix}$
Commuting Distance	30.4 [90.4]	27.1 [70.9]	20.0	2(.3)
	[82.4]	[70.8]	[68.4]	[[1.1]
Has child under 7	0.085	0.080	0.281	0
	[0.278]	[0.271]	[0.450]	[0]
Has child aged 7 or older	0.233	0.237	0.719	0.045
	[0.422]	[0.425]	[0.450]	[0.208]
Panel B: Establishment Chara	cteristics		4.50	
Log Firmsize*	4.94	4.57	4.59	4.57
	[1.23]	[0.876]	[0.884]	[0.873]
AKM Estab FE, $2003-2010$	-0.222	-0.215	-0.187	-0.227
	[0.229]	[0.233]	[0.215]	[0.238]
Panel C: Household Character	ristics			
Total Yearly Household Earnings	50176.3	45946.0	46419.3	45757.8
	[22208.4]	[20950.8]	[19169.9]	[21615.1]
Total Yearly Earnings - Partner	18915.1	17539.5	16218.5	18064.5
	[17708.0]	[17147.5]	[16177.4]	[17490.6]
Share of Household Income	68.1	68.3	70.0	67.6
	[25.6]	[26.2]	[25.1]	[26.6]
Same Establishment as Spouse	0.048	0.040	0.037	0.041
	[0.213]	[0.196]	[0.189]	[0.199]
Same Industry as Spouse	0.084	0.070	0.072	0.070
	[0.278]	[0.255]	[0.258]	[0.254]
Number of Individuals	80655	52929	15052	37877

Table 7: Summary Statist	ics for Displaced	Workers in ASU	Sample in $t=c-1$
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Notes: This table summarizes characteristics of displaced workers in the ASU sample. Column (1) shows characteristics of all displaced workers. Column (2) shows all displaced workers who appear in the ASU sample. Column (3) shows all displaced workers in the ASU sample whose first child is aged 15 or younger in the year before displacement. Column (4) shows all displaced workers in the ASU sample without a child aged 15 or younger in the year before displacement. Variables with * are used in reweighting. Standard deviations in brackets.

	(1)	(2)	(3)	(4)
	All	All	All	All
		Non-Emp.	Non-Emp.	Non-Emp.
			with Child	w/o Child
Panel A: Individual Characteristics				
Monthly Gross Earnings (Pre-UI)	1788.2	1789.2	1711.2	1821.0
	[1672.7]	[1671.0]	[1621.0]	[1690.0]
Log-Monthly Gross Earnings (Pre-UI)	7.51	7.50	7.41	7.54
	[0.724]	[0.724]	[0.715]	[0.725]
Indicator for Female	0.475	0.474	0.549	0.447
	[0.499]	[0.499]	[0.498]	[0.497]
Education vears	9.93 ⁻	່ 9.93	່ 9.90	່ 9.94
	[1.23]	[1.23]	[1.22]	[1.23]
Indicator for Female	0.475	0.474	0.549	0.447
	[0.499]	[0.499]	[0.498]	[0.497]
Education years	9.93	9.93	9.90	9.94
	[1.23]	[1.23]	[1.22]	[1.23]
Pre-UI Tenure in Years	2.09	2.09	1.78	2.21
	[2.57]	[2.56]	[2.16]	[2.70]
Pre-UI Fulltime = 1	0.548	0.549	0.465	0.584
	[0.498]	[0.498]	[0, 499]	[0, 493]
Age in Years	43.2	43.2	41.3	43.9
	[8 01]	[8 01]	[7 16]	[8 22]
Has child under 7	0.116	0.116	0.443	0
	[0.320]	[0.321]	[0.497]	[0]
Has child aged 7 or older	0.207	0.208	0.557	0.084
has shire agoa t of stact	[0.405]	[0, 406]	$[0\ 497]$	[0.277]
Panel B: Unemployment Characteristics	[0.100]	[0.100]	[0.101]	[0.211]
Eligibility Duration in Months at UI-Start	10.1	10.1	9 49	10.4
	[3 16]	[3 16]	[2, 78]	$[3\ 25]$
Nonemployment Duration at date of contact	6.69	6.70	6.48	6.77
	[3,39]	[3,38]	[3 23]	[3 44]
Months since UI exhaustion	-2.85	-2.88	-2.41	-3.05
	[3,71]	[3,71]	[3 42]	[3, 79]
Total Nonempoyment Duration in Months	14.0	14.0	13.5	14.2
Total Ronempoyment Daration in Months	[11.0]	[11.0]	[8 92]	[11.2]
Panel C: Household Characteristics	[11.0]	[11.0]	[0.92]	[++.,]
Indicator for Married	0.429	0.429	0.637	0.341
	[0.495]	[0.495]	[0.481]	[0.474]
	[0.100]	[0.100]	[0.101]	[0,1,1]
Number of Obs.	222844	217199	57050	160149

Table 8: Summary Statistics for Nonemployed Workers in SMS Data

Notes: This table summarizes characteristics of the SMS data. Column (1) shows characteristics of all workers. Column (2) shows all nonemployed workers. Column (3) shows all nonemployed workers whose first child is aged 15 or younger at time of UI entry. Column (4) shows all nonemployed workers whose first child is older than 15 or without children at time of UI entry. Standard deviations in brackets.

	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: All Workers:	Log Wage	. ,		. ,		
Female	-0.13	-0.19	-0.18	-0.19	-0.19	-0.18
Fulltime Employment	$(0.013)^{**}$	$(0.016)^{**}$	$(0.017)^{**}$ -0.18 $(0.010)^{**}$	$(0.016)^{**}$	$(0.016)^{**}$	$(0.017)^{**}$ -0.10 (0.080)
Parttime Employment			(0.019) -0.41 (0.046)**			(0.080) -0.34
Any Employment			$(0.046)^{-0.24}$			$(0.091)^{-0.18}$
Permanent Contract			$(0.040)^{**}$	-0.19		$(0.086)^{*}$ 0.036
Any Contract				$(0.021)^{**}$ -0.16		(0.096) -0.041
All Regions				$(0.021)^{**}$	-0.084	(0.080) -0.10
Narrow Regions					$(0.020)^{**}$ -0.13 $(0.019)^{**}$	$(0.035)^{**}$ -0.15 $(0.035)^{**}$
Observations P ²	73598	47319	47319	47319	47319	47319
R ² Mean Dep. Var Men	201	289	289	289	289	289
	(.003)	(.004)	(.004)	(.004)	(.004)	(.004)
Panel B: Fulltime Wor	kers: Fulltin	ne Log Wage	9			
Female	-0.039	-0.070	-0.063	-0.070	-0.069	-0.062
Fulltime Employment	(0.0004)	(0.010)	(0.010) -0.084 $(0.013)^{**}$	(0.010)	(0.010)	(0.010) -0.080 (0.033)*
Parttime Employment			(0.013) -0.24 (0.062)**			(0.033) -0.23 (0.060)**
Any Employment			(0.003) -0.14 (0.022)**			(0.009) -0.14 (0.029)**
Permanent Contract			(0.023)	-0.088		0.033
Any Contract				$(0.013)^{**}$ -0.076		(0.036) 0.0078
All Regions				$(0.014)^{**}$	-0.033	$(0.033) \\ -0.031$
Narrow Regions					$(0.011)^{**}$ -0.055 $(0.011)^{**}$	$(0.022) \\ -0.051 \\ (0.022)^*$
Observations p^2	52996	34325	34325	34325	34325	34325
π Mean Dep. Var Men	094 (.002)	143 (.002)	143 (.002)	143 (.002)	(.0013) (.002)	143 (.002)

Table 9: Explaining the Gender Gap in Wage Losses After Displacement: Job Search Info

Notes: This table shows to what extent job search characteristics can explain the effect of being female on wages after displacement. All outcome variables are based on the individual difference-in-differences estimate. We reweight women to men using individual and establishment characteristics pre displacement. In Panel A, the outcome variable is fulltime log wages. In Panel B, the outcome variable is fulltime log wages. In both panels, we control for the same set of job search characteristics as depicted in the table. In Columns (2)-(6), we restrict the sample to individuals with at least one job search spell. For each job search characteristic, the omitted category is "missing information". We cluster standard errors at the displacement establishment level (constant within matched worker pairs). Workers in our sample are displaced in 2002-2012, and they are observed from 1996-2017. * and ** correspond to 5 and 1 percent significance levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Female	0.014	0.021	0.017	0.0037	-0.0030	-0.0072	-0.028	-0.051	-0.077
Age in t=c-1	(0.012)	(0.012) -0.0094 (0.00062)**	(0.011) -0.0078 (0.00078)**	-0.0078	(0.017) -0.0075 (0.00078)**	(0.013) -0.0077 (0.00072)**	(0.014) -0.0080 (0.00071)**	(0.011) -0.0080 (0.00078)**	(0.0072) -0.0080 (0.00075)**
Years of education in t=c-1 $$		0.016	(0.00078) 0.017	(0.00080) 0.019	(0.00078) 0.020	0.018	(0.00071) 0.015	0.013	(0.00075) 0.013
Tenure in t=c		(0.012)	(0.011) -0.012	(0.011) -0.012	(0.011) -0.011	(0.012) -0.011	(0.012) -0.011	(0.013) -0.0099	(0.0076) -0.0081
Log wage in t=c-3			(0.0016)	$(0.0017)^{**}$ -0.037	$(0.0017)^{**}$ 0.17	$(0.0015)^{**}$ 0.17	$(0.0015)^{**}$ 0.19	$(0.0016)^{**}$ 0.17	(0.0011) 0.15
Log wage in t=c-4				$(0.016)^{+}$	$(0.021)^{++}$ -0.22 $(0.022)^{**}$	$(0.022)^{**}$ -0.22	$(0.022)^{++}$ -0.20 $(0.022)^{**}$	$(0.022)^{**}$ -0.21	$(0.021)^{**}$ -0.22
Working in East Germany in t=c-1					$(0.022)^{++}$	$(0.022)^{++}$ 0.041	$(0.022)^{++}$ 0.050	$(0.022)^{11}$ 0.029	$(0.020)^{+}$ -0.014
Fulltime Employed in t=c-3						(0.024)	$(0.024)^{+}$ -0.100	(0.023) -0.088	(0.013) -0.075
Log(Firmsize) in t=c-1							(0.013)**	$(0.015)^{**}$ 0.043 $(0.011)^{**}$	$(0.015)^{**}$ 0.029 $(0.0082)^{**}$
Observations	80655	80655	80655	80655	80655	80655	80655	80655	80655
R^2 Mean of dep. var	$0.000 \\ -0.25$	$0.012 \\ -0.25$	$0.022 \\ -0.25$	$0.022 \\ -0.25$	$0.026 \\ -0.25$	$0.027 \\ -0.25$	$0.030 \\ -0.25$	$0.039 \\ -0.25$	$0.054 \\ -0.25$
Industry Dummies	No	No	No	No	No	No	No	No	Yes

Table 10: The Impact of Individual Control and Reweighting Variables on the Gender Gap in Earnings

Notes: Each column in each panel returns the coefficients from a OLS regression. Controls correspond to PS matching variables: age, edyrs, tenure, log wage in t=c-3, log wage in t=c-4, working in East Germany, logfirmsize, fulltime employment in t=c-1, 1-digit industries. Standard Errors clustered on displacement establishment level (constant within matched worker pairs). * and ** correspond to 5 and 1 percent significance levels, respectively.

	(1) Baseline	(2) Mahalanobis And Exact Matching	(3) 1:3 Matching	(4) 1:5 Matching	(5) Baseline + 2-Digit Occ. + 2-Digit Ind.	(6) Baseline + Counties	(7) Baseline + Estab. FE	(8) Baseline + Estab. FE + Worker FE	(9) Random Control Group	
Panel A: Earnings Rel. to Year -2										
Female Observations R^2 Mean Dep. Var Men	$\begin{array}{c} -0.092 \\ (0.012)^{**} \\ 80655 \\ 0.007 \\258 \\ (.002) \end{array}$	$\begin{array}{c} -0.093 \\ (0.012)^{**} \\ 80707 \\ 0.007 \\245 \\ (.002) \end{array}$	$\begin{array}{c} -0.087 \\ (0.011)^{**} \\ 80326 \\ 0.007 \\258 \\ (.002) \end{array}$	$\begin{array}{c} -0.089 \\ (0.012)^{**} \\ 79542 \\ 0.008 \\259 \\ (.002) \end{array}$	$\begin{array}{c} -0.10 \\ (0.012)^{**} \\ 78850 \\ 0.009 \\247 \\ (.002) \end{array}$	$\begin{array}{c} -0.11 \\ (0.014)^{**} \\ 77130 \\ 0.009 \\241 \\ (.003) \end{array}$	$\begin{array}{c} -0.085 \\ (0.011)^{**} \\ 72677 \\ 0.006 \\257 \\ (.003) \end{array}$	$\begin{array}{c} -0.095 \\ (0.011)^{**} \\ 65991 \\ 0.008 \\247 \\ (.002) \end{array}$	$\begin{array}{c} -0.092 \\ (0.012)^{**} \\ 80755 \\ 0.007 \\269 \\ (.002) \end{array}$	
Panel B: Log Wages										
Female Observations R^2 Mean Dep. Var Men	$\begin{array}{c} -0.13 \\ (0.013)^{**} \\ 73598 \\ 0.010 \\201 \\ (.003) \end{array}$	$\begin{array}{c} -0.15 \\ (0.013)^{**} \\ 73626 \\ 0.013 \\188 \\ (.003) \end{array}$	$\begin{array}{c} -0.13 \\ (0.012)^{**} \\ 73288 \\ 0.011 \\199 \\ (.003) \end{array}$	$\begin{array}{c} -0.13 \\ (0.012)^{**} \\ 72539 \\ 0.011 \\199 \\ (.003) \end{array}$	$\begin{array}{c} -0.16 \\ (0.012)^{**} \\ 71978 \\ 0.014 \\188 \\ (.003) \end{array}$	$\begin{array}{c} -0.15 \\ (0.012)^{**} \\ 70519 \\ 0.012 \\192 \\ (.003) \end{array}$	$\begin{array}{c} -0.13 \\ (0.013)^{**} \\ 66355 \\ 0.010 \\2 \\ (.003) \end{array}$	$\begin{array}{c} -0.13 \\ (0.013)^{**} \\ 60287 \\ 0.010 \\191 \\ (.003) \end{array}$	$\begin{array}{c} -0.13 \\ (0.013)^{**} \\ 73672 \\ 0.010 \\209 \\ (.003) \end{array}$	
Panel C: Days Worke	ed Full-time									
Female Observations R^2 Mean Dep. Var Men	$\begin{array}{c} -23.1 \\ (2.84)^{**} \\ 80655 \\ 0.005 \\ -75.47 \\ (.766) \end{array}$	$\begin{array}{c} -10.1 \\ (2.74)^{**} \\ 80707 \\ 0.001 \\ -74.63 \\ (.727) \end{array}$	$\begin{array}{c} -21.1 \\ (2.55)^{**} \\ 80326 \\ 0.005 \\ -75.848 \\ (.699) \end{array}$	$\begin{array}{c} -21.2 \\ (2.47)^{**} \\ 79542 \\ 0.005 \\ -76.049 \\ (.687) \end{array}$	$\begin{array}{c} -18.9 \\ (2.80)^{**} \\ 78850 \\ 0.003 \\ -73.45 \\ (.767) \end{array}$	$\begin{array}{c} -26.5 \\ (2.71)^{**} \\ 77130 \\ 0.006 \\ -71.8 \\ (.768) \end{array}$	$\begin{array}{c} -19.0 \\ (3.12)^{**} \\ 72677 \\ 0.003 \\ -73.948 \\ (.819) \end{array}$	$\begin{array}{c} -20.2 \\ (3.07)^{**} \\ 65991 \\ 0.003 \\ -74.152 \\ (.854) \end{array}$	$\begin{array}{r} -26.7 \\ (2.87)^{**} \\ 80755 \\ 0.007 \\ -77.428 \\ (.765) \end{array}$	

Table 11: Robustness to Alternative Matching Specifications

Notes: Each column in this table represents a different robustness check. All specifications are estimated using weights. Column (1) reports the baseline coefficients. Column (2) reports results when using Mahalanobis matching in combination with exact matching of pre-displacement earnings deciles. Column (3) reports results for 1:3 matching. Column (5) reports results when matching exactly on 2-digit occupations and industries in addition to the baseline matching variables. Column (6) reports results when matching exactly on counties (detailed geographic units) in addition to the baseline matching. Column (7) reports results when matching variables. Column (8) reports results when adding AKM establishment FE to the list of matching variables. Column (8) reports results when adding AKM establishment and worker FE to the list of matching variables. Column (9) reports results with a random (non-matched) control group of workers who fulfill the baseline restrictions. We cluster standard errors at the displacement establishment level (constant within matched worker pairs). Workers in our sample are displaced in 2002-2012, and they are observed from 1996-2017. * and ** correspond to 5 and 1 percent significance levels, respectively.

	(1) No Weights	(2) Baseline Weights	(3) Baseline + 2-Digit Occ.	(4) Baseline + 2-Digit Occ. Trimmed	(5) Baseline + 2-Digit Ind.	(6) Baseline + Counties	(7) Baseline + Estab. FE	(8) Baseline + Days Worked	(9) Baseline + HH Income	(10) Reweighting Without Wages
Panel A: Earnings Rel. to Year -2										
Female Observations R^2 Mean Dep. Var Men	$\begin{array}{c} 0.014 \\ (0.012) \\ 80655 \\ 0.000 \\258 \\ (.002) \end{array}$	$\begin{array}{c} -0.092 \\ (0.012)^{**} \\ 80655 \\ 0.007 \\258 \\ (.002) \end{array}$	$\begin{array}{c} -0.20 \\ (0.047)^{**} \\ 80213 \\ 0.035 \\258 \\ (.002) \end{array}$	$\begin{array}{c} -0.11 \\ (0.0081)^{**} \\ 57822 \\ 0.011 \\258 \\ (.003) \end{array}$	$\begin{array}{c} -0.13 \\ (0.019)^{**} \\ 80402 \\ 0.017 \\258 \\ (.002) \end{array}$	$\begin{array}{c} -0.071 \\ (0.022)^{**} \\ 79826 \\ 0.004 \\258 \\ (.002) \end{array}$	$\begin{array}{c} -0.085 \\ (0.013)^{**} \\ 78311 \\ 0.006 \\258 \\ (.002) \end{array}$	$\begin{array}{c} -0.089 \\ (0.012)^{**} \\ 80655 \\ 0.006 \\258 \\ (.002) \end{array}$	$\begin{array}{c} -0.13 \\ (0.034)^{**} \\ 80654 \\ 0.014 \\258 \\ (.002) \end{array}$	$\begin{array}{c} -0.081 \\ (0.0092)^{**} \\ 80423 \\ 0.006 \\258 \\ (.002) \end{array}$
Panel B: Log Wages										
Female Observations R^2 Mean Dep. Var Men	$\begin{array}{c} -0.066 \\ (0.013)^{**} \\ 73598 \\ 0.003 \\201 \\ (.003) \end{array}$	$\begin{array}{c} -0.13 \\ (0.013)^{**} \\ 73598 \\ 0.010 \\201 \\ (.003) \end{array}$	$\begin{array}{c} -0.29 \\ (0.063)^{**} \\ 73182 \\ 0.045 \\201 \\ (.003) \end{array}$	$\begin{array}{c} -0.20 \\ (0.013)^{**} \\ 52524 \\ 0.020 \\194 \\ (.004) \end{array}$	$\begin{array}{c} -0.21 \\ (0.031)^{**} \\ 73349 \\ 0.024 \\201 \\ (.003) \end{array}$	$\begin{array}{c} -0.11 \\ (0.016)^{**} \\ 72820 \\ 0.007 \\201 \\ (.003) \end{array}$	$\begin{array}{c} -0.11 \\ (0.013)^{**} \\ 71526 \\ 0.007 \\201 \\ (.003) \end{array}$	$\begin{array}{c} -0.13 \\ (0.013)^{**} \\ 73598 \\ 0.009 \\201 \\ (.003) \end{array}$	$\begin{array}{c} -0.15 \\ (0.10) \\ 73597 \\ 0.011 \\201 \\ (.003) \end{array}$	$\begin{array}{c} -0.19 \\ (0.013)^{**} \\ 73369 \\ 0.018 \\201 \\ (.003) \end{array}$
Panel C: Days Worke	ed Full-time									
Female Observations R^2 Mean Dep. Var Men	$\begin{array}{c} 31.4 \\ (3.24)^{**} \\ 80655 \\ 0.008 \\ -75.47 \\ (.766) \end{array}$	$\begin{array}{c} -23.1 \\ (2.84)^{**} \\ 80655 \\ 0.005 \\ -75.47 \\ (.766) \end{array}$	$\begin{array}{c} -37.8 \\ (11.3)^{**} \\ 80213 \\ 0.013 \\ -75.471 \\ (.766) \end{array}$	$\begin{array}{c} -29.5 \\ (2.79)^{**} \\ 57822 \\ 0.007 \\ -78.648 \\ (1.092) \end{array}$	$\begin{array}{c} -29.3 \\ (6.90)^{**} \\ 80402 \\ 0.008 \\ -75.471 \\ (.766) \end{array}$	$\begin{array}{c} -20.8 \\ (6.61)^{**} \\ 79826 \\ 0.004 \\ -75.471 \\ (.766) \end{array}$	$\begin{array}{c} -19.9 \\ (3.38)^{**} \\ 78311 \\ 0.004 \\ -75.5 \\ (.766) \end{array}$	$\begin{array}{c} -22.9\\(2.86)^{**}\\80655\\0.005\\-75.471\\(.766)\end{array}$	$\begin{array}{c} -35.0 \\ (10.9)^{**} \\ 80654 \\ 0.011 \\ -75.471 \\ (.766) \end{array}$	$\begin{array}{c} -51.2 \\ (2.98)^{**} \\ 80423 \\ 0.023 \\ -75.471 \\ (.766) \end{array}$

Table 12: Robustness of Using Additional Reweighting Variables

Notes: Each column in this table represents a different robustness check. All specifications are estimated using weights. Column (1) reports coefficients from regressions without weights. Column (2) reports coefficients with baseline weights, i.e. reweighting on age, years of education, tenure, log firm size, East Germany (all measured in t=-1), fulltime work (t=-3), log wages (t=-3 and t=-4), and 1-digit industries (t=-1). Column (3) reports results when adding 2-digit occupations (t=-1) to the baseline weighting variables. Column (4) reports results when adding 2-digit industries (t=-1) to the baseline weighting variables and trimming the sample at the 90th percentile of the propensity score. Column (5) reports results when replacing 1-digit industries with 2-digit industries in the list of baseline weighting variables. Column (7) reports results when adding establishment fixed effects (t=-1) to the baseline weighting variables. Column (8) reports results when replacing 1-digit industries (t=-1) to the baseline weighting variables. Column (7) reports results when adding establishment fixed effects (t=-1) to the baseline weighting variables. Column (8) reports results when replacing full-time work (t=-3) with days worked full-time, days worked part-time, and days worked in a minipob (t=-3) in the list of reweighting variables. Column (9) reports results when log household earnings (t=-1) to the baseline weighting variables. Column (10) reports results when using all our baseline variables except for log wages (in t=-3 and t=-4) in the reweighting algorithm. We cluster standard errors at the displacement establishment level (constant within matched worker pairs). Workers in our sample are displaced in 2002-2012, and they are observed from 1996-2017. * and ** correspond to 5 and 1 percent significance levels, respectively.

	(1) Baseline	(2) West Germany	(3) East Germany	(4) Complete Closures	(5) Mass Layoffs	(6) Stricter Baseline Restrictions	(7) Adding Pre-Layoff Leavers
Panel A: Earnings Re	l. to Year -2						
Female Observations R^2 Mean Dep. Var Men	$\begin{array}{c} -0.092 \\ (0.012)^{**} \\ 80655 \\ 0.007 \\258 \\ (.002) \end{array}$	$\begin{array}{c} -0.10 \\ (0.019)^{**} \\ 58373 \\ 0.007 \\259 \\ (.003) \end{array}$	$\begin{array}{c} -0.052 \\ (0.014)^{**} \\ 22280 \\ 0.003 \\257 \\ (.005) \end{array}$	-0.092 (0.016)** 24819 0.008 262 (.004)	-0.092 $(0.017)^{**}$ 55836 0.006 257 (.004)	$\begin{array}{c} -0.22 \\ (0.071)^{**} \\ 35473 \\ 0.012 \\277 \\ (.003) \end{array}$	$\begin{array}{c} -0.085 \\ (0.0097)^{**} \\ 117709 \\ 0.005 \\234 \\ (.002) \end{array}$
Panel B: Log Wages	. ,	. ,	. ,	. ,	. ,	. ,	. ,
Female	-0.13	-0.11	-0.17	-0.17	-0.12	-0.16	-0.12
Observations R^2	73598	53292	20304	23007	50591	32229	108546
Mean Dep. Var Men	201 (.003)	206 (.003)	183 (.006)	213 (.005)	195 (.005)	213 (.004)	18 (.002)
Panel C: Log Full-tim	e Wages						
Female	(0.039) $(0.0084)^{**}$	-0.034 $(0.011)^{**}$	-0.056 $(0.013)^{**}$	-0.060 $(0.015)^{**}$	(0.031) $(0.010)^{**}$	-0.069 $(0.023)^{**}$	(0.037) $(0.0070)^{**}$
R^2 Mean Dep. Var Men	$0.003 \\094 \\ (.002)$	$\begin{array}{c} 38092 \\ 0.002 \\097 \\ (.002) \end{array}$	$\begin{array}{c} 14503 \\ 0.007 \\083 \\ (.003) \end{array}$	$\begin{array}{c} 10975 \\ 0.007 \\108 \\ (.003) \end{array}$	(.003)	$\begin{array}{c} 28318 \\ 0.009 \\1 \\ (.002) \end{array}$	$\begin{array}{c} 80241 \\ 0.003 \\086 \\ (.001) \end{array}$
Panel D: Days Worke	d Full-time						
Female Observations R^2 Mean Dep. Var Men	-23.1 (2.84)** 80655 0.005 -75.47 (766)	-21.9 (3.57)** 58373 0.004 -75.15 (851)	-24.0 (4.26)** 22280 0.005 -76.682 (1.721)	-25.9 (4.99)** 24819 0.006 -72.364 (1.205)	-21.7 (3.52)** 55836 0.004 -77 (1.205)	-27.3 (7.85)** 35473 0.007 -80.036 (047)	-23.8 (2.34)** 117709 0.005 -68.2 (608)

Table 13: The Gender Gap in Earnings Losses - Varying Estimation Samples

Notes: Each column in this table represents a different robustness check. All specifications are estimated using weights. Column (1) reports the baseline coefficients. Column (2) reports results workers working in West Germany in t=-1. Column (3) reports results workers working in East Germany in t=-1. Column (4) reports results for workers displaced from a complete establishment closure, only. Column (5) reports results for workers applying the same baseline restrictions as in Schmieder et al. (2021). These are: the worker is between age 24 and 50, works full-time at a West German establishment with at least 50 employees, and has at least 3 years of tenure. Column (7) reports results when adding workers who leave the displacing firms between t=-2 and t=-1 (and their respective controls) to the baseline sample. For columns (2) and (3), we reweight women in West (East) Germany. We cluster standard errors at displacement establishment level (constant within matched worker pairs). Workers in our sample are displaced in 2002-2012, and they are observed from 1996-2017. * and ** correspond to 5 and 1 percent significance levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Panel A: All Workers	s: Log Wage								
Female	-0.13	-0.11	-0.13	-0.11	-0.13	-0.12	-0.12	-0.096	-0.095
Parttime Job	$(0.013)^{-1}$	$(0.012)^{*}$ -0.18 $(0.020)^{**}$	(0.013)	$(0.013)^{-1}$	(0.013)	$(0.012)^{**}$	$(0.012)^{-1}$	$(0.011)^{*}$ -0.17 $(0.018)^{**}$	$(0.011)^{-0.17}$ $(0.018)^{**}$
Minijob		(0.020) -0.82 $(0.029)^{**}$						(0.010) -0.70 $(0.026)^{**}$	(0.010) -0.69 $(0.026)^{**}$
Industry Change		()	-0.14 (0.011)**					`-0.090 (0.010)**	-0.084 $(0.0098)^{**}$
Occ. Change			-0.13 $(0.0096)^{**}$					(0.0082)	(0.0077)
Log Estab Size			()	0.059 $(0.0040)^{**}$				0.036 $(0.0032)^{**}$	0.032 $(0.0035)^{**}$
Estab Share Women				-0.41 $(0.034)^{**}$				-0.22 $(0.027)^{**}$	-0.20 $(0.027)^{**}$
Commut. Distance				()	-0.000011 (0.000070)			-0.000069 (0.000060)	-0.000064 (0.000061)
AKM Estab FE					(0.0000000)	$1.06 \\ (0.064)^{**}$	1	0.83 $(0.057)^{**}$	1
Observations	73598	73598	73598	73598	73598	73598	73598	73598	73598
R^2 Mean Dep. Var Men	0.010 201	0.140	0.043	0.083	0.034 201	0.157 201	0.038	0.319 201	0.219
Panol B. Full time W	(.005)	(.005)	(.005)	(.005)	(.005)	(.005)	(.005)	(.005)	
Fomalo	0.030		0.038	0.035	0.030	0.032	0.030	0.030	0.028
Industry Change	$(0.0084)^{**}$	$(0.0084)^{**}$	$(0.0084)^{**}$ -0.053	$(0.0085)^{**}$	$(0.0084)^{**}$	$(0.0075)^{**}$	$(0.0075)^{**}$	$(0.0076)^{**}$ -0.031	$(0.0076)^{**}$ -0.021
Occ. Change			$(0.0068)^{**}$ -0.022					$(0.0067)^{**}$ -0.0096	$(0.0062)^{**}$ -0.0019
Log Estab Size			$(0.0059)^{**}$	0.025				(0.0054) 0.012	$(0.0050) \\ 0.0053$
Estab Share Women				$(0.0023)^{**}$ -0.14				$(0.0018)^{**}$ -0.056	$(0.0027)^*$ -0.024
Commut. Distance				$(0.018)^{++}$	0.000066			$(0.016)^{11}$ 0.000054	(0.015) 0.000066
AKM Estab FE					(0.000043)	$0.74 \\ (0.055)^{**}$	1	$(0.000040) \\ 0.70 \\ (0.055)^{**}$	(0.000041) 1
Observations	52996	52996	52996	52996	52996	52996	52996	52996	52996
R^2 Mean Dep Var Men	0.003	0.003 - 0.004	0.014	0.030 - 0.094	0.004	0.220 - 0.094	0.011	0.228 - 0.094	0.015
wear pop. var wen	(.002)	(.002)	(.002)	(.002)	(.002)	(.002)	(.002)	(.002)	

Table 14: Explaining the Gender Gap in Wage Losses After Displacement: Separate Regressions

Notes: This table shows to what extent changes in contract type, industry, occupation, and establishment characteristics can explain the effect of being female on wages after displacement. All outcome variables are based on the individual difference-in-differences estimate. We reweight women to men using individual and establishment characteristics pre displacement. In Panel A, the outcome variable is log wages. In Panel B, the outcome variable is full-time log wages. In both panels, we control for the same set of difference-in-differences estimates as depicted in the table. Columns (2)-(6) control for various difference-in-differences terms. Column (7) controls for all difference-in-differences terms at once. In columns (6) and (8), the coefficient on the establishment effect is forced to be equal to 1. We cluster standard errors at the displacement establishment level (constant within matched worker pairs). Workers in our sample are displaced in 2002-2012, and they are observed from 1996-2017. * and ** correspond to 5 and 1 percent significance levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Panel A: All Workers: Lo	g Wage						
Female	-0.13 $(0.013)^{**}$	-0.12 $(0.012)^{**}$	-0.12 $(0.012)^{**}$	-0.10 $(0.012)^{**}$	-0.12 $(0.013)^{**}$	-0.12 (0.013)**	-0.14 (0.013)**
AKM Estab FE	· · /	1.06	1	· · /	· · ·	· /	()
AKM Estab FE - Gender		(0.001)		0.92 $(0.078)^{**}$	1		
AKM Estab FE Kmeans				()		$0.78 \\ (0.091)^{**}$	1
Observations	73598	73598	73598	73598	73598	73598	73598
R^2 Moon Don Van Mon	0.010	0.157	0.038	0.148	0.035	0.056	0.027
Mean Dep. var Men	(.003)	(.003)	(.003)	(.003)	(.003)	(.003)	(.003)
Panel B: Fulltime Worker	s: Full-time I	Log Wage					
Female	-0.039	-0.032	-0.030	-0.024	-0.022	-0.038	-0.039
AKM Estab FE	(0.0001)	(0.0013) 0.74 $(0.055)^{**}$	1	(0.0000)	(0.010)	(0.0000)	(0.0002)
AKM Estab FE - Gender		(0.000)		0.70	1		
AKM Estab FE Kmeans				(0.003)		$(0.65)(0.078)^{**}$	1
Observations	52996	52996	52996	52996	52996	52996	52996
R^2	0.003	0.220	0.011	0.222	0.009	0.096	0.005
Mean Dep. Var Men	094	094	094	094	094	094	094
	(.002)	(.002)	(.002)	(.002)	(.002)	(.002)	(.002)

Table 15: Explaining the Gender Gap in Wage Losses After Displacement: Wage Premia

Notes: This table shows to what extent changes in different wage premia measured by AKM-style establishment FE can explain the effect of being female on wages after displacement. All outcome variables are based on the individual difference-in-differences estimate. We reweight women to men using individual and establishment characteristics pre displacement. In panel (A), the outcome variable is log wages. In panel (B), the outcome variable is full-time log wages. In both panels, we control for the same set of difference-in-differences estimates as depicted in the table. In columns (3), (5), and (7), the coefficient on the establishment effect is forced to be equal to 1. We cluster standard errors at displacement establishment level (constant within matched worker pairs). Workers in our sample are displaced in 2002-2012, and they are observed from 1996-2017. * and ** correspond to 5 and 1 percent significance levels, respectively.

(1)			(2)		(3)				
Men			Women			Women - Reweighted			
Occupation	Code	Percent	Occupation	Code	Percent	Occupation	Code	Percent	
Panel A: Most Frequent C	ccupat	ions Pre-	Displacement						
Qualified Office Employee Trucker Warehouseman Data Processing Expert Bricklayer Helper Technician Stockman Salesperson Electrician Panel B: Most Frequent O	781 714 744 774 441 531 628 741 682 311	7.3 6.5 3.9 3.0 2.8 2.8 2.4 2.4 2.4 2.3 2.1 ions Post	Qualified Office Employee Salesperson Cleaner Nursery Worker Despatcher Purchasing Agent Warehouseman Helper Chef Secondary School Teacher - Displacement	$781 \\ 682 \\ 933 \\ 864 \\ 522 \\ 681 \\ 744 \\ 531 \\ 411 \\ 873$	$27.1 \\ 11.6 \\ 4.3 \\ 2.8 \\ 2.3 \\ 2.2 \\ 2.1 \\ 1.9 \\ 1.6 \\ 1.6$	Qualified Office Employee Salesperson Cleaner Accountant Purchasing Agent Data Processing Expert Stenographer Manager Warehouseman Despatcher	$781 \\ 682 \\ 933 \\ 772 \\ 681 \\ 774 \\ 782 \\ 751 \\ 744 \\ 522$	$\begin{array}{c} 30.6 \\ 5.0 \\ 3.9 \\ 2.8 \\ 2.6 \\ 2.5 \\ 2.5 \\ 2.2 \\ 1.9 \\ 1.8 \end{array}$	
Trucker Qualified Office Employee Warehouseman Data Processing Expert Manager Stockman Bricklayer Salesperson Electrician Technician	714 781 744 751 741 441 682 311 628	$7.4 \\ 6.4 \\ 4.1 \\ 3.0 \\ 2.9 \\ 2.6 \\ 2.4 \\ 2.3 \\ 2.2 \\ 2.1$	Qualified Office Employee Salesperson Cleaner Nursery Worker Warehouseman Purchasing Agent Social Worker Chef Accountant Despatcher	$781 \\ 682 \\ 933 \\ 864 \\ 744 \\ 681 \\ 861 \\ 411 \\ 772 \\ 522 \\ $	$25.1 \\ 12.1 \\ 5.5 \\ 3.2 \\ 2.3 \\ 2.3 \\ 2.1 \\ 1.9 \\ 1.8 \\ 1.6$	Qualified Office Employee Salesperson Cleaner Accountant Purchasing Agent Manager Warehouseman Data Processing Expert Stenographer Helper	$781 \\ 682 \\ 933 \\ 772 \\ 681 \\ 751 \\ 744 \\ 774 \\ 782 \\ 531 \\ $	$27.8 \\ 6.0 \\ 4.9 \\ 3.5 \\ 2.9 \\ 2.6 \\ 2.3 \\ 2.0 \\ 1.6 \\ 1.4$	

Table 16: Top 10 3-Digit Occupations in the Five Years Before vs. After Displacement

Notes: Table reports top 10 3-digit source occupation codes by gender. We define source occupation as a worker's most frequent occupation in the five years before displacement (Panel A) and the five years after displacement (Panel B) respectively.

	Retail	Edu- cation	Admin- istration	Whole- sale Trade	Destina Maint. Services	tion Indust Nursing	tries Temp Work	Food Prod.	Food Services	Medical Care	All
Panel A: Women											
Retail Education Administration Wholesale Trade Food Production Maintenance Services Clothing Manufacturing Nursing Logistics Production of Electronics	$2914 \\ 8 \\ 61 \\ 350 \\ 407 \\ 25 \\ 81 \\ 7 \\ 89 \\ 86$	$32 \\ 3111 \\ 569 \\ 20 \\ 5 \\ 8 \\ 7 \\ 317 \\ 9 \\ 11$	$\begin{array}{c} 44\\ 113\\ 1123\\ 38\\ 7\\ 17\\ 10\\ 24\\ 4\\ 13 \end{array}$	193 4 5 366 79 7 62 2 44 47	$ \begin{array}{r} 69\\ 4\\ 55\\ 53\\ 566\\ 24\\ 2\\ 22\\ 19\\ \end{array} $	$egin{array}{c} 60 \\ 65 \\ 12 \\ 24 \\ 32 \\ 56 \\ 45 \\ 96 \\ 15 \\ 17 \end{array}$	$72 \\ 12 \\ 6 \\ 63 \\ 61 \\ 22 \\ 19 \\ 5 \\ 47 \\ 48$	$ \begin{array}{r} 169\\ 1\\ 2\\ 76\\ 410\\ 12\\ 23\\ 4\\ 16\\ 14 \end{array} $	$70 \\ 13 \\ 4 \\ 45 \\ 46 \\ 49 \\ 23 \\ 7 \\ 14 \\ 24$	$54 \\ 17 \\ 22 \\ 31 \\ 17 \\ 27 \\ 18 \\ 28 \\ 17 \\ 17 \\ 17 \end{cases}$	$\begin{array}{c} 4706\\ 3990\\ 2058\\ 1988\\ 1535\\ 1011\\ 805\\ 797\\ 784\\ 726 \end{array}$
Panel B: Men											
Construction Wholesale Trade Logistics Machine Production Metal Processing Retail Trade Temp Work Food Production Production of Electronics Plastics Production	$\begin{array}{c} 99\\ 1139\\ 191\\ 179\\ 132\\ 223\\ 66\\ 149\\ 128\\ 73 \end{array}$	$78\\135\\127\\119\\142\\60\\687\\100\\67\\106$	$71\\86\\33\\327\\650\\30\\98\\37\\92\\113$	$59 \\ 261 \\ 908 \\ 16 \\ 35 \\ 70 \\ 66 \\ 71 \\ 32 \\ 41$	$50 \\ 255 \\ 75 \\ 56 \\ 910 \\ 20 \\ 82 \\ 67 \\ 26$	$24 \\ 113 \\ 30 \\ 679 \\ 203 \\ 28 \\ 94 \\ 38 \\ 138 \\ 62$	$\begin{array}{c} 613\\ 85\\ 36\\ 73\\ 118\\ 77\\ 96\\ 40\\ 25\\ 54 \end{array}$	$1414 \\ 15 \\ 7 \\ 6 \\ 21 \\ 8 \\ 9 \\ 4 \\ 4 \\ 7$	$73 \\ 117 \\ 382 \\ 20 \\ 34 \\ 33 \\ 29 \\ 60 \\ 17 \\ 27$	$20 \\ 17 \\ 6 \\ 14 \\ 12 \\ 20 \\ 4 \\ 2 \\ 20 \\ 10$	$\begin{array}{r} 4407\\ 3824\\ 2488\\ 2383\\ 2381\\ 2206\\ 1875\\ 1786\\ 1673\\ 1469\\ \end{array}$

Table 17: 2-digit Industry Switches - Women vs. Men

Notes: This table shows the number of women in the 10 most common origin 2-digit industries (rows) switching to the 10 most common destination industries (columns). The last column shows the total number of women in a given origin 2-digit industry.

Figure 1: Binscatter Plots



Female Employees Pre Displ.

(a) Binscatter Plot of AKM Effects vs. Share of (b) Binscatter Plot of AKM Effects vs. Share of Female Employees Post Displ.



(c) Binscatter Plot of AKM Effects vs. Establish- (d) Binscatter Plot of AKM Effects vs. Establishment Size Pre Displ. ment Size Post Displ.

Notes: This figure shows different binscatter plots for AKM establishment effects vs. the share of female employees in an establishment (Panels A-B), and AKM establishment effects vs. establishment size (Panels C-D).



Figure 2: The Gender Gap and Children

Notes: This figure shows how labor market outcomes before and after displacement differ for men and women with older and younger children. Panels (a)-(d) show eventstudy coefficients for earnings relative to t=c-2, log wage, days worked in fulltime employment, and days worked in parttime employment. The four lines correspond to four event study regressions: Men with no children or children older than 6 only, women with no children and children older than 6 only, men with children younger than 7, women with children younger than 7. In reweighting, men with no or older children are the baseline group, to which we reweight the other three groups using individual and establishment characteristics. All regressions include controls for person FE, year FE, years since separation, and age polynomials. Vertical bars indicate the estimated 95% confidence interval based on standard errors clustered at the individual level. Commuting distance is measured on the municipality level, and is recorded on December 31 each year. Workers are displaced in 2002-2012, and they are observed from 1997-2017.





(b) Distribution of Displaced Husbands' Share in Household Income - t=c-1

Notes: This figure shows the distribution of displaced wifes' (Panel (a)) and husbands' (Panel (b)) share in household income in the year before displacement (t=c-1). We set the share equal to missing if the partner is not working.



Figure 4: Costs of Job Loss by Displaced Worker's Share in Household Income in t=c-1

Notes: This figure shows how labor market outcomes before and after displacement differ for men and women by their share in household income in t=c-1. All outcomes variables are the respective difference-in-difference estimate. Panels (a)-(d) show eventstudy coefficients for earnings relative to t=c-2, log wage, days worked in fulltime job, and days worked in parttime job. The dark blue line corresponds to men, the dashed red line corresponds to women. All regressions control for individual and establishment characteristics. Individual characteristics are a worker's log wage in t=c-3 and t=c-4, fulltime employment in t=c-3, and age, years of education, tenure, and location in East or West Germany in t=c-1. Establishment characteristics are 1-digit industry dummies and log establishment size in t=c-1. Vertical bars indicate the estimated 95% confidence interval based on standard errors clustered at the displacement establishment level. Workers are displaced in 2002-2012, and they are observed from 1997-2017.





(a) Fulltime Employment Conditional on (b) Parttime Employment Conditional on Working Working







(c) At Least 1 Mini-job Conditional on Working

(d) Only Mini-job Conditional on Working



Notes: This figure shows how fulltime employment, parttime employment, marginal employment (all conditional on working), days worked in parttime employment, and occupation specific wages evolve for non-displaced workers compared to displaced workers. Panels (a)-(d) show eventstudy coefficients for the propensity to be fulltime employed, parttime employed, employed in at least 1 mini-job, and only employed in mini-jobs, all conditional on working. Panel (e) show event study coefficients for the number of days worked in parttime employment per year. Panel (f) shows average occupation log wages for a random sample of workers as an outcome. The three lines correspond to three event study regressions: Men only, women only, and women reweighted with individual and establishment characteristics. All regressions include controls for person FE, year FE, years since separation, and age polynomials. Vertical bars indicate the estimated 95% confidence interval based on standard errors clustered at the individual level. Workers are displaced in 2002-2012, and they are observed from 1997-2017.



Figure 6: Job Loss on the Household Level - The Added Worker Effect

(a) Partner's Earnings Relative to Job Loser's in t=c-2 $\,$



(b) Partner's Days Worked per Year



(c) Partner's Days Worked Fulltime per Year

(d) Household Earnings Relative to t=c-2

Notes: This figure shows how partner and household outcomes evolve differently for non-displaced workers compared to displaced workers. Panels (a)-(d) show eventstudy coefficients for partner's earnings relative to the earnings of the job loser in t=c-2, partner's days worked per year, partner's days worked fulltime per year, and household earnings relative to t=c-2. The three lines correspond to three event study regressions: Men only, women only, and women reweighted with individual and establishment characteristics. All regressions include controls for person FE, year FE, years since separation, and age polynomials. Vertical bars indicate the estimated 95% confidence interval based on standard errors clustered at the individual level. Workers are displaced in 2002-2012, and they are observed from 1997-2017.



Figure 7: Long Run Effects of the Gender Gap in Earnings, Wage and Employment Losses

Notes: This figure shows how earnings losses, wage losses and losses in days worked from displacement differ for men and women for post-displacement window of 10 years. Panels (a)-(f) show eventstudy coefficients for log wage, log wage from fulltime jobs, eanings relative to 2 years before displacement, days worked, days worked in fulltime job, and days worked in minijob. The three lines correspond to three event study regressions: Men only, women only, and women reweighted with individual and establishment characteristics. All regressions include controls for person FE, year FE, years since separation, and age polynomials. Vertical bars indicate the estimated 95% confidence interval based on standard errors clustered at the individual level. Workers are displaced in 2002-2012, and they are observed from 1997-2017.



Figure 8: Long Run Effects of Changes in Job Characteristics after Displacement

Notes: This figure shows how job characteristics for men and women evolve before and after displacement. Panels (a)-(f) show event study coefficients for log establishment size, share of female workers in establishment (leave-oneout mean), industry switches (2-digits), occupation switches (3-digits), AKM establishment effects, and commuting distance (in km). The three lines correspond to three event study regressions: Men only, women only, and women reweighted with individual and establishment characteristics. All regressions include controls for person FE, year FE, years since separation, and age polynomials. Vertical bars indicate the estimated 95% confidence interval based on standard errors clustered at the individual level. Commuting distance is measured on the municipality level, and is recorded on December 31 each year. Workers are displaced in 2002-2012, and they are observed from 1997-2017.

Figure 9: Robustness Checks: Shorter Tenure, Mahalanobis Matching



(a) Earnings Relative to t=c-2 - Shorter (b) Log Wage Fulltime - Shorter Tenure Restr. Tenure Restr.



(c) Earnings Relative to t=c-2 - Mahalanobis (d) Log Wage Fulltime - Mahalanobis Match-Matching ing

Notes: This figure shows how earnings relative to t=c-2 and fulltime log wages differ for men and women before and after displacement for different robustness specifications. Panels (a)-(b) show event study coefficients for a sample of workers which are observable up to 10 years after job loss. Panels (c)-(d) show event study coefficients for a sample of workers with at least 1 year of tenure in t=c-1. Panels (e)-(f) show event study coefficients for a sample of workers matched via Mahalanobis in combination with exact matching of pre-displacement earnings deciles. The three lines correspond to three event study regressions: Men only, women only, and women reweighted with individual and establishment characteristics. All regressions include controls for person FE, year FE, years since separation, and age polynomials. Vertical bars indicate the estimated 95% confidence interval based on standard errors clustered at the individual level. Workers are displaced in 2002-2012, and they are observed from 1997-2017.

Figure 10: Robustness Checks: Occupational Reweighting, Displ. Estab. Fixed Effects, Matching without Wages



(a) Earnings Relative to t=c-2 - Reweighting (b) Log Wage Fulltime - Reweighting with Ocwith Occupations cupations



(c) Earnings Relative to t=c-2 - Adding Displ. (d) Log Wage Fulltime - Adding Displ. Estab. Estab. Effects Effects



(e) Earnings Relative to t=c-2 - Matching (f) Log Wage Fulltime - Matching Without Without Wages Wages

Notes: This figure shows how earnings relative to t=c-2 and fulltime log wages differ for men and women before and after displacement for different robustness specifications. Panels (a)-(b) show event study coefficients for our baseline sample of workers, where we add 1-digit occupations as controls to our reweighting algorithm. Panels (c)-(d) show event study coefficients for our baseline sample of workers, where we add displacement establishment fixed effects to the regression specifications. Panels (e)-(f) show event study coefficients for a sample of workers matched using our baseline propensity score matching algorithm but without matching on pre-displacement wages. The three lines correspond to three event study regressions: Men only, women only, and women reweighted with individual and establishment characteristics. All regressions include controls for person FE, year FE, years since separation, and age polynomials. Vertical bars indicate the estimated 95% confidence interval based on standard errors clustered at the individual level. Workers are displaced in 2002-2012, and they are observed from 1997-2017.

Figure 11: Robustness Checks: Reweighting Men to Women, Non-Couples, Couples and Non-Couples



(a) Earnings Relative to t=c-2 - Reweighting (b) Log Wage Fulltime - Reweighting Men to Men to Women Women



(c) Earnings Relative to t=c-2 - Non-Couples (d) Log Wage Fulltime - Non-Couples Only Only



(e) Earnings Relative to t=c-2 - Couples + (f) Log Wage Fulltime - Couples + Non-Non-Couples Couples

Notes: This figure shows how earnings relative to t=c-2 and fulltime log wages differ for men and women before and after displacement for different robustness specifications. Panels (a)-(b) show event study coefficients for our baseline sample of workers, where we reweight men to women with respect to individual characteristics and 1-digit industries. Panels (c)-(d) show event study coefficients for a sample of workers not identified in the couple data. Panels E-F show eventstudy coefficients for a combined sample of workers in the couple data and not in the couple data. The three lines correspond to three event study regressions: Men only, women only, and women reweighted with individual and establishment characteristics. All regressions include controls for person FE, year FE, years since separation, and age polynomials. Vertical bars indicate the estimated 95% confidence interval based on standard errors clustered at the individual level. Workers are displaced in 2002-2012, and they are observed from 1997-2017.

Figure 12: Comparing Outflows and Employment Changes of Establishments with Mass-layoff with Matched Control Establishments



(a) Employment Change for Treatment and Control Relative to Employment in c-3



(c) Outflows Relative to Employment in c-3



(b) Employment Change for Treatment and Control Relative to Employment in c-3



(d) Outflow of High-skilled Workers Relative to Total Employment in c-3

Notes: This figure shows establishment-level in-and outflows for establishments that face a mass-layoff compared to matched control establishments without a mass-layoff, relative to c-3. Panel (a) shows employment changes relative to c-3 for treatment and control firms, whereas panel (b) shows the corresponding event study estimates of employment change separately for males and reweighted females. Panel (c) shows event-study estimates of the number of outflows relative to year c-3 separately for males and females, and panel (d) shows outflows of high-skilled males and females only.



Figure 13: Main Outcomes when Including Pre-layoff Leavers (1 year before mass-layoff) in Displaced Worker Sample

Notes: This figure replicates main event-study graphs that applies the baseline-restrictions in year c-3 instead of c-2, thereby including potential leavers between c-3 and c-2 which are dropped in the baseline restriction. Panels (a) shows eventstudy coefficients for earnings relative to t=c-3, Panel (b) for log-wage and Panel (c) and (d) days worked in fulltime employment, and days worked in parttime employment respectively.





(a) Log Target Wage Ratio - All Nonemployed



(b) Log Target Wage Ratio - Nonemployed w/ Fulltime Job Pre UI

Notes: This figure shows histograms of the log-target wage ratio, defined as the log of the ratio of monthly target wage (the monthly gross wage of the job last applied to) and the monthly gross wage pre unemployment separate by males and females. Panel (A) includes all observations during nonemployment, panel B restricts further to individuals with a fulltime-job pre unemployment.