

The Intergenerational Transmission of World War I on Female Labor

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A. Appendix Figures and Tables

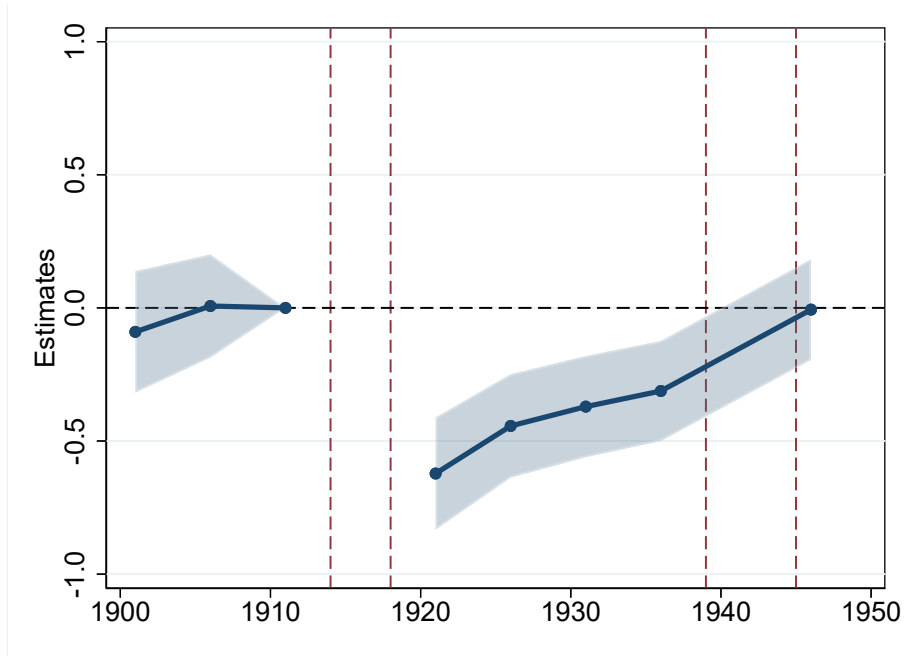


Figure A.1. The Effect of WWI Military Death Rates on Adult Sex Ratios

Notes: This figure displays coefficients from estimating the following difference-in-differences specification on county-level census data between 1901 and 1946, where 1911 was the last census conducted before the war: $\text{sex_ratio}_{a,d,t} = \sum_{\tau \neq 1911} \beta_{\tau} \text{death_rate}_{a,d} \times \text{year}_{\tau} + \gamma_d + \delta_t + \mu_a + \varepsilon_{a,d,t}$, where $\text{sex_ratio}_{a,d,t}$ denotes the sex ratio among age group a in county d and year t in percentage points, and year_{τ} , a set of indicator variables for each year between 1901 and 1946. This specification also includes fixed effects μ_a for age groups 20–29, 30–39, and 40–49, as well as county fixed effects, γ_d , and year fixed effects, δ_t . Standard errors are clustered at the county and year level through two-way clustering. Shaded areas represent 95 percent confidence intervals.

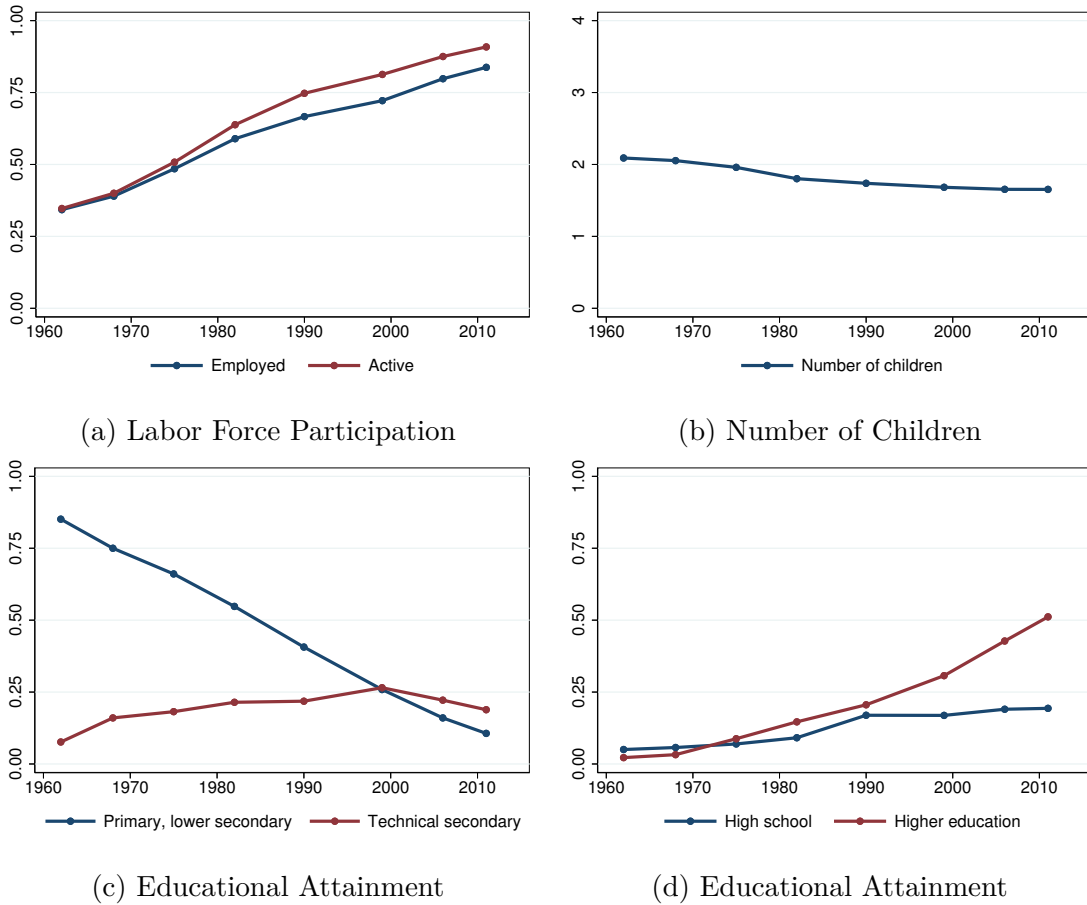
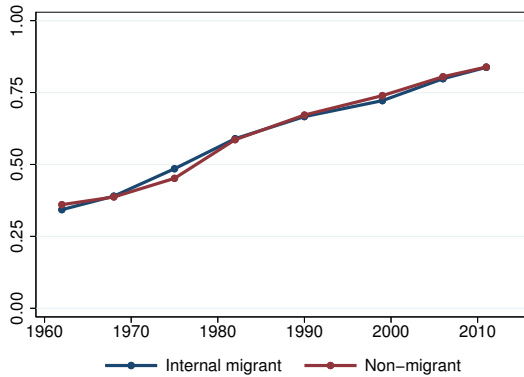
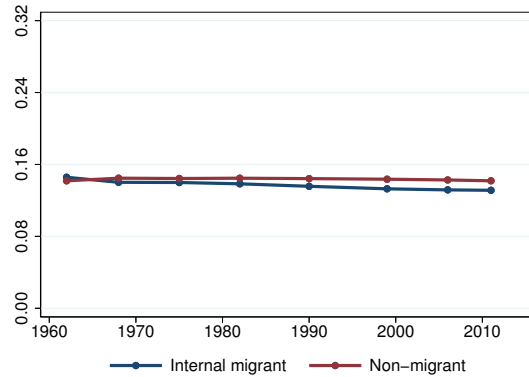


Figure A.2. Labor, Fertility, and Education Outcomes Across Censuses

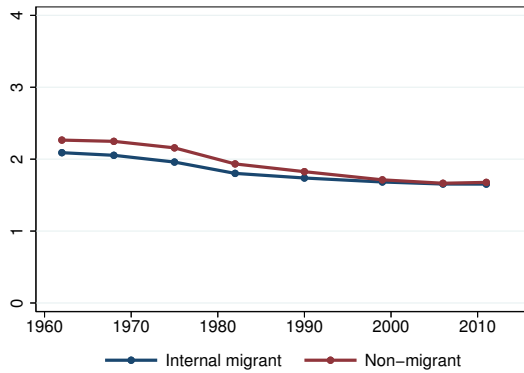
Notes: This figure reports means of labor, fertility, and education outcomes across censuses 1962–2012. The sample consists of internal migrant married women aged 30 to 49. Means are computed using sample weights provided in the censuses. *Employed* and *Active* are indicator variables for whether the respondent is working or in the labor force, respectively. *Number of children* corresponds to the number of children of the respondent’s family in the household. *Educational attainment* corresponds to indicator variables for the highest diploma obtained.



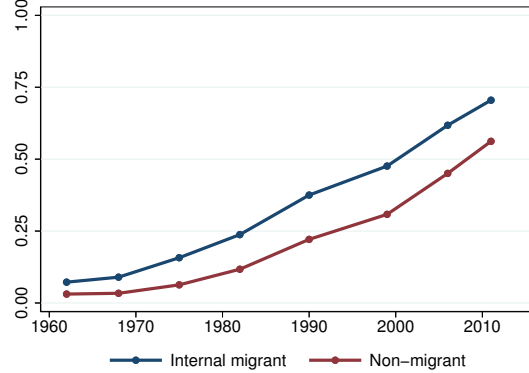
(a) Employed



(b) Military Death Rate



(c) Number of Children



(d) High School and Above

Figure A.3. Observable Characteristics Across Migration Status

Notes: This figure reports the means of various observable characteristics across migration status in the censuses 1962–2012 among internal migrant and non-migrant married women aged 30 to 49. *Employed* is an indicator variables for whether the respondent is working. *Number of children* corresponds to the number of children of the respondent’s family in the household. *High School and Above* corresponds to an indicator variable for whether the respondent achieved at least high school. Means are computed using sample weights provided in the censuses.

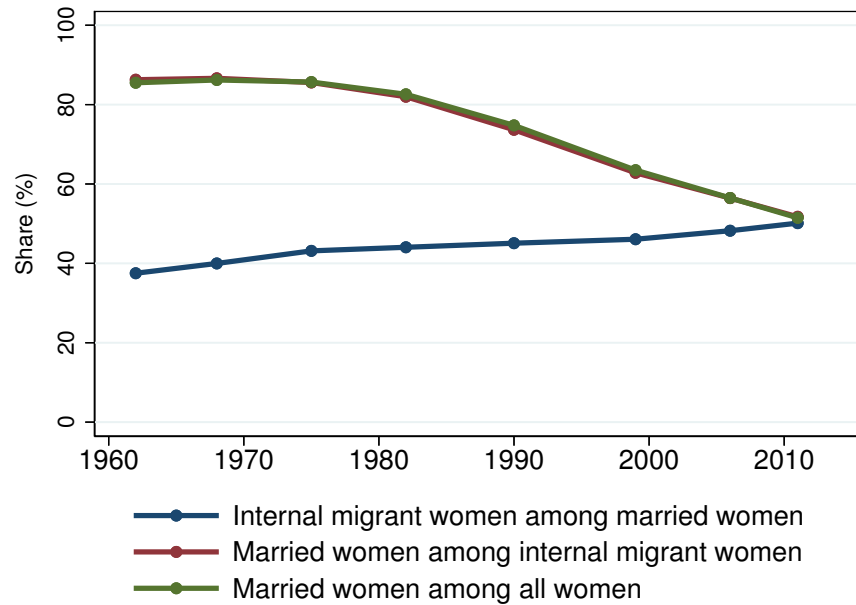


Figure A.4. Internal Migrant and Married Women Aged 30 to 49 Across Censuses

Notes: The blue line displays the share of internal migrant women among all French married women born in metropolitan France, aged 30 to 49. The red line displays the share of women married with a French husband born in metropolitan France among all French internal migrant women born in metropolitan France, aged 30 to 49, and residing in metropolitan France. The green line displays the share of women married with a French husband born in metropolitan France among all French women born in metropolitan France, aged 30 to 49, and residing in metropolitan France.

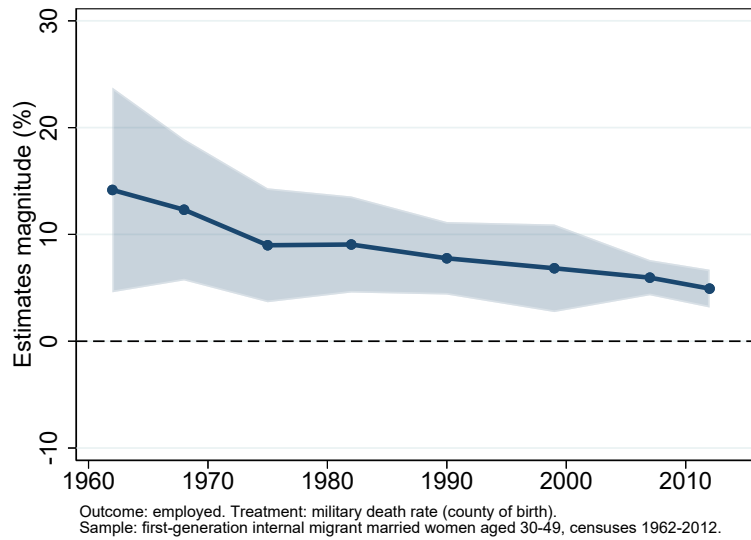


Figure A.5. The Effect of WWI Military Death Rates on Female Labor Force Participation Across Counties of Birth and Within Counties of Residence

Notes: This figure reports the magnitude of the coefficients from panel b of Figure 4 with respect to the outcome mean. It is the share of the mean in the dependent variable explained by switching from being born in a county that experienced low (10 percent) rather than high (20 percent) military death rates.

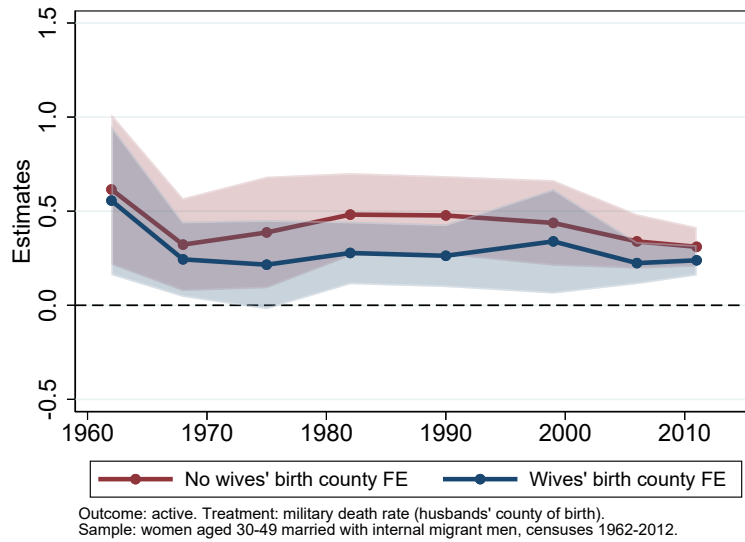
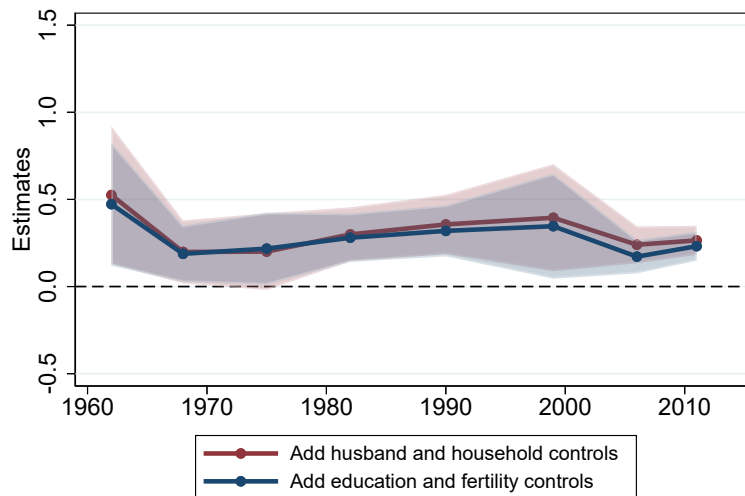


Figure A.6. The Effect of Husbands' Birth County Military Death Rates on Their Wives' Labor Force Participation

Notes: This figure displays OLS coefficients from estimating Specification 5 along with 95 percent confidence intervals on the sample of women aged 30 to 49 that are married with internal migrant men in the censuses 1962–2012. They result from regressing an active indicator on the military death rate of respondents' husbands' counties of birth, along with county-level pre-war controls and cohort by wives' county of birth by county of residence fixed effects. Estimates are computed using the sample weights provided in the censuses. Standard errors are clustered at the level of counties of residence and birth.



Outcome: employed. Treatment: military death rate (husbands' county of birth).
 Sample: women aged 30-49 married with internal migrant men, censuses 1962-2012.

Figure A.7. The Effect of Husbands' Birth County Military Death Rates on Their Wives' Labor Force Participation

Notes: This figure displays OLS coefficients from estimating Specification 5 along with 95 percent confidence intervals on the sample of women aged 30 to 49 that are married with internal migrant men in the censuses 1962–2012. They result from regressing an active indicator on the military death rate of respondents' husbands' counties of birth, along with county-level pre-war controls and cohort by wives' county of birth by county of residence fixed effects. Husband and household controls include husbands' incomes, ages, age squared, education, an indicator for home ownership, and the number of rooms in the home. Education controls consist of indicators for educational attainment. Fertility consists in the number of children in the home. Estimates are computed using the sample weights provided in the censuses. Standard errors are clustered at the level of counties of residence and birth.

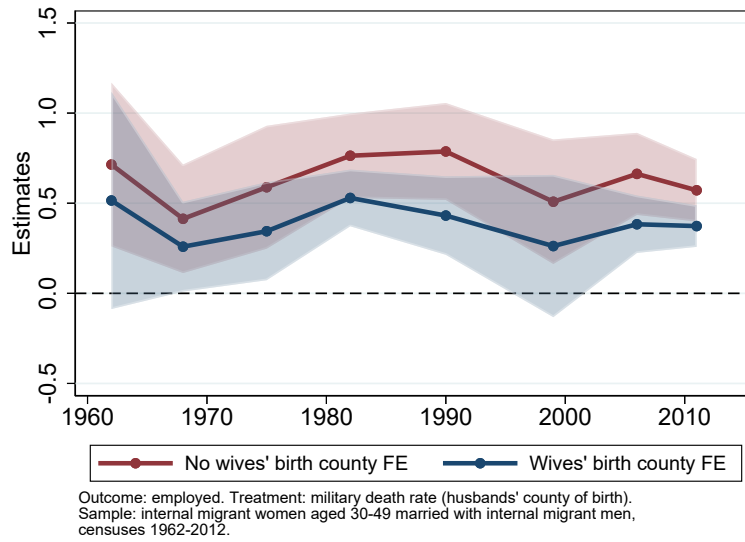
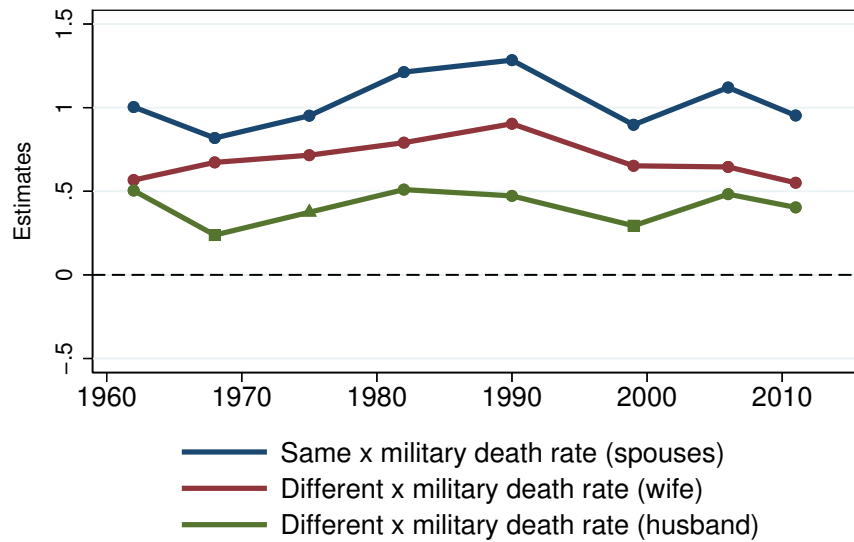


Figure A.8. The Effect of Husbands' Birth County Military Death Rates on Their Wives' Labor Force Participation

Notes: This figure displays OLS coefficients from estimating Specification 5 along with 95 percent confidence intervals on the sample of internal migrant women aged 30 to 49 that are married with internal migrant men in the censuses 1962–2012. They result from regressing an employed indicator on the military death rate of respondents' husbands' counties of birth, along with county-level pre-war controls and cohort by wives' county of birth by county of residence fixed effects. Estimates are computed using the sample weights provided in the censuses. Standard errors are clustered at the level of counties of residence and birth.

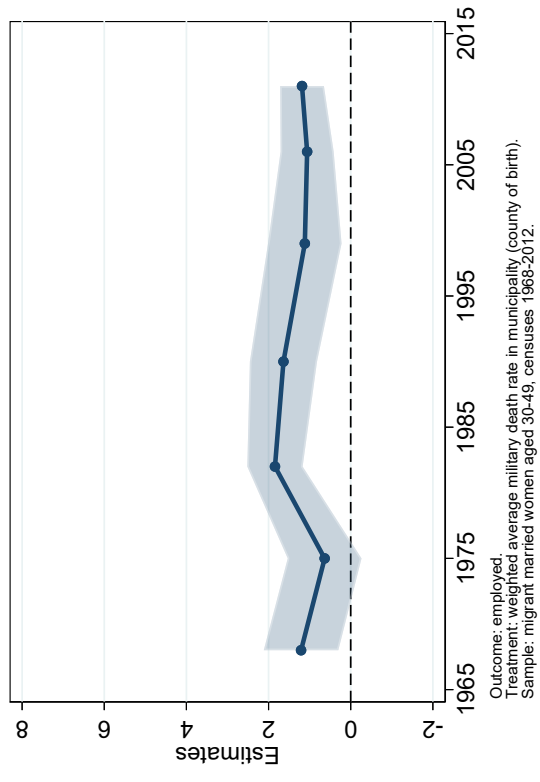


Outcome: employed. Treatment: military death rate (husbands' and wives' counties of birth).
 Sample: internal migrant women aged 30–49 married with internal migrant men,
 censuses 1962–2012.

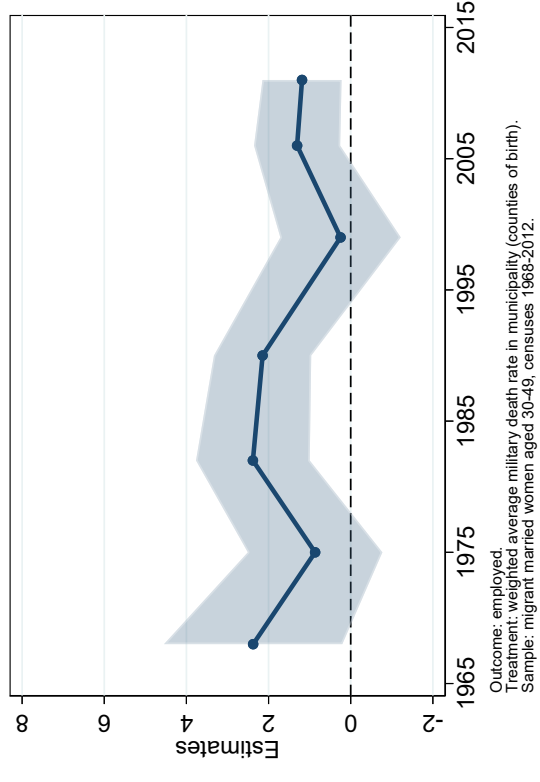
Figure A.9. The Effect of Spouses' Birth County Military Death Rates on Wives' Labor Force Participation

Notes: This figure displays OLS coefficients from estimating Specification 6 along with 95 percent confidence intervals on the sample of internal migrant women aged 30 to 49 that are married with internal migrant men in the censuses 1962–2012. They result from regressing an employed indicator on the military death rate of both spouses' counties of birth, along with county-level pre-war controls and cohort by county of residence fixed effects. Estimates are computed using the sample weights provided in the censuses. Standard errors are clustered at the level of respondents' counties of residence, wives' counties of birth, and husbands counties of birth.

● significant at the 1 percent level. ▲ 5 percent level. ■ 10 percent level.



(a) Diffusion Through Assimilation



(b) Diffusion Through Preservation

Figure A.10. The Local Effects of WWI Military Death Rates on Female Labor Force Participation Control for husband, household, and respondent characteristics

Notes: Panel a reports OLS coefficients on death_rate_m from estimating Specification 7, and Panel b, OLS coefficients on the interaction $\text{sh_res}_{b,m} \times \text{death_rate}_b$ from estimating Specification 8, along with 95 percent confidence intervals on the sample of internal migrant married women in the censuses 1968–2012. Standard errors are clustered at the level of respondents' counties of birth and residence. Estimates are computed using the sample weights provided in the censuses.

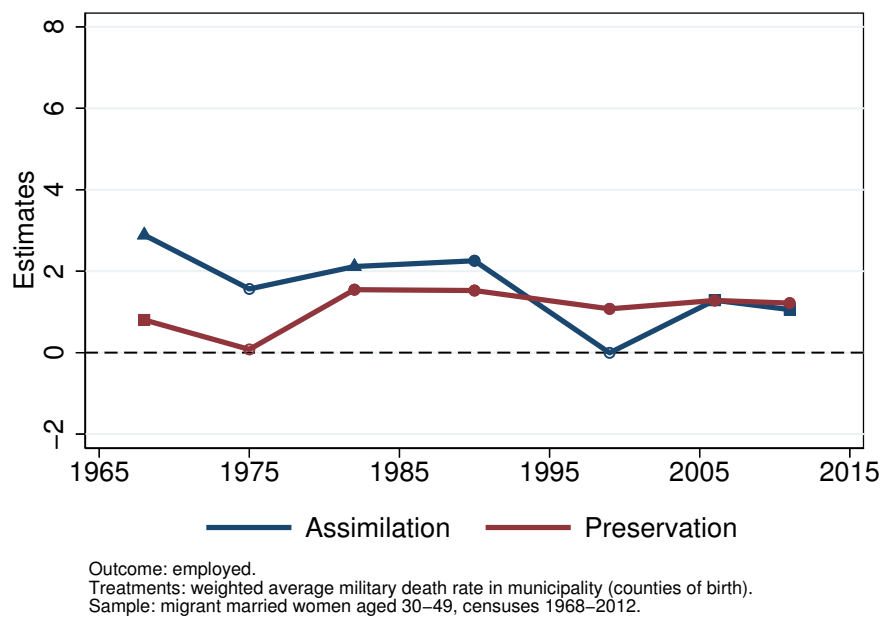


Figure A.11. The Local Effects of WWI Military Death Rates on Female Labor Force Participation

Notes: This figure reports OLS coefficients from estimating Specifications 7 and 8 together on the sample of internal migrant married women in the censuses 1962–2012. Standard errors are clustered at the level of respondents' counties of birth and residence. Estimates are computed using the sample weights provided in the censuses.

● significant at the 1 percent level. ▲ 5 percent level. ■ 10 percent level.

Table A.1. Summary Statistics Across Datasets

A. Pre-war county characteristics (87 counties)									
	Mean		S.d.		Min.		Max.		
Military death rate	0.16		0.04		0.06		0.29		
Share rural population	0.67		0.18		0.00		0.89		
Share born in county	0.80		0.12		0.27		0.94		
Female labor force participation	0.31		0.09		0.14		0.56		
Share girls 5–19 in school	0.58		0.05		0.47		0.73		
Total fertility rate	2.42		0.44		1.56		3.73		
Personal wealth (10,000 francs)	0.16		0.04		0.06		0.29		
B. Census respondents characteristics (1968–2012)									
	Non-migrants (3,818,911 respondents)				1st gen. migrants (3,213,921 respondents)				
	Mean	S.d.	Min.	Max.	Mean	S.d.	Min.	Max.	
Active	0.65	0.48	0	1	0.68	0.46	0	1	
Employed	0.61	0.49	0	1	0.63	0.48	0	1	
High school +	0.22	0.42	0	1	0.37	0.48	0	1	
Number of children	1.93	1.36	0	14	1.80	1.25	0	14	
C. Extended labor survey respondents characteristics (2005–2012)									
	Non-migrants (117,383 respondents)				2nd gen. migrants (15,095 respondents)				
	Mean	S.d.	Min.	Max.	Mean	S.d.	Min.	Max.	
Active	0.81	0.39	0	1	0.85	0.36	0	1	
Employed	0.78	0.42	0	1	0.81	0.39	0	1	
High school +	0.36	0.48	0	1	0.50	0.50	0	1	
Number of children	1.27	1.11	0	13	1.34	1.09	0	9	

Notes: This table reports summary statistics across datasets: pre-war characteristics across counties in Panel A, characteristics of married women aged 30–49 in censuses 1968–2012 in Panel B, and characteristics of married women aged 30–49 in extended labor force surveys 2005–2012 in Panel C. *S.d.* denotes standard deviation, *Min.*, minimum, and *Max.*, maximum. In Panel B, non-migrants are individuals who reside in their county of birth, while 1st generation migrants are those who reside outside their county of birth. In Panel C, non-migrants are individuals who reside in the same county as their county of birth as well as the county of birth of both their parents, while 2nd generation migrants are individuals who reside in their county of birth but whose mothers and fathers were both born in another county. Summary statistics are computed using sample weights provided in the censuses and in the labor force surveys. *Employed* and *Active* are indicator variables for whether the respondent is working or in the labor force, respectively. *Number of children* corresponds to the number of children of the respondent’s family in the household. *High school +* corresponds to an indicator variable for whether the respondent achieved at least high school.

Table A.2. Observable Characteristics Across Migration Status

Outcome	Death rate			Employed			Children			High school		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
2nd generation migrant	0.00 [0.00]	-0.00 [0.01]	0.01 [0.04]	0.02 [0.02]	0.13 [0.09]	0.08*** [0.01]	0.06 [0.05]					
2nd generation migrant × military death rate (mother)			-0.08 [0.27]		-0.76 [0.53]		0.14 [0.31]					
Observations	132,478	132,478	132,478	132,478	132,478	132,478	132,478	132,478	132,478	132,478	132,478	
Natives outcome mean	0.15	0.78	0.78	1.27	1.27	0.36	0.36					

Notes: This table reports estimates from regressing observable characteristics on a second-generation migrant status indicator, where second-generation migrants are non-migrant married women aged 30 to 59 whose mothers and fathers were born in another county. The baseline comparison group consists of natives, i.e., married women aged 30 to 59 who were born in their county of residence as well as both their parents. *Death rate* is the military death rate of a respondent's mother's county of birth, *Employed*, an indicator for whether she is working, *Children*, the number of children in her household, and *High school*, an indicator for whether she achieved at least high school. To remain as close as possible to Specification 3, these estimates are calculated through the following specification: $Y_{imfr} = \beta \text{migrant}_i + \alpha \mathbf{X}'_{1911,m} + \gamma_i + \delta_r + \mu_{1914,m} + \omega_f + \varepsilon_{imfr}$, where migrant_i is an indicator for whether the respondent is a second generation migrant, where historical controls $\mathbf{X}_{1911,m}$, and military region fixed effects $\mu_{1914,m}$ are assigned at the level of mothers' counties of birth, γ_i is a set of year of birth and survey year indicators, δ_r , county of residence fixed effects, and ω_f , fathers' county of birth fixed effects. Specifications in columns (3), (5), and (7) further include the military death rate of the respondent's mother's county of birth and an interaction with the migrant indicator. Standard errors are reported in brackets and are clustered at the level of counties of residence and mothers' counties of birth. *** Significant at the 1 percent level.

Table A.3. The Effect of Mothers' Birth County Military Death Rates on Their Daughters' Labor Force Participation

Dependent variable	Active				
	(1)	(2)	(3)	(4)	(5)
Military death rate (mother)	0.98** [0.41]	0.77* [0.42]	1.01** [0.45]	1.13** [0.44]	0.99*** [0.30]
Father birth county FE	No	Yes	Yes	Yes	Yes
Mother birth region FE	No	No	Yes	Yes	Yes
Other controls	No	No	No	Yes	No
Clusters					
Own birth-residence county	95	95	95	95	95
Mother birth county	95	95	95	95	95
Observations	15,095	15,095	15,095	15,095	32,099
Outcome mean	0.85	0.85	0.85	0.85	0.83
Outcome s.d.	0.36	0.36	0.36	0.36	0.38

Notes: This table reports the OLS coefficients from estimating Specification 3 on the sample of non-migrant married women aged 30 to 59 whose mothers and fathers were born in another county in columns 1–4, and whose mothers (but not necessarily fathers) were born in another county in column 5. They result from regressing an active indicator on the military death rate of respondents' mothers' counties of birth, including cohort, own county of birth and residence, and survey-year fixed effects, as well as the set of historical controls measured at the level of respondents' mothers' counties of birth. *Other controls* include parental, husband, and household characteristics, and the respondent's education and number of children. Standard errors are clustered at the level of counties of residence and mothers' counties of birth. Estimates are computed using the sample weights provided in the extended labor force surveys 2005–2012.

*** Significant at the 1 percent level. ** 5 percent level. * 10 percent level.

Table A.4. The Effect of Fathers' Birth County Military Death Rates on Their Daughters' Labor Force Participation

Dependent variable	Employed			
	(1)	(2)	(3)	(4)
Military death rate (father)	0.76** [0.33]	0.47 [0.34]	0.29 [0.48]	0.16 [0.49]
Mother birth county FE	No	Yes	Yes	Yes
Father birth region FE	No	No	Yes	Yes
Other controls	No	No	No	Yes
Clusters				
Own birth-residence county	95	95	95	95
Mother birth county	95	95	95	95
Observations	15,095	15,095	15,095	15,095
Outcome mean	0.81	0.81	0.81	0.81
Outcome s.d.	0.39	0.39	0.39	0.39

Notes: This table reports the OLS coefficients from estimating Specification 3 on the sample of non-migrant married women aged 30 to 59 whose mothers and fathers were born in another county, but where variables are assigned at the level of fathers' county of birth. They result from regressing an employed indicator on the military death rate of respondents' fathers' counties of birth, including cohort, own county of birth and residence, and survey-year fixed effects, as well as the set of historical controls measured at the level of respondents' fathers' counties of birth. *Other controls* include parental, husband, and household characteristics, and the respondent's education and number of children. Standard errors are clustered at the level of counties of residence and fathers' counties of birth. Estimates are computed using the sample weights provided in the extended labor force surveys 2005–2012.

** Significant at the 5 percent level.

Table A.5. The Effect of Parents' Birth Counties Military Death Rates on Their Daughters' Labor Force Participation

Dependent variable	Employed		
	(1)	(2)	(3)
Same \times military death rate (parents)	1.19*** [0.42]	1.08* [0.60]	1.09* [0.60]
Different \times military death rate (mother)	0.73* [0.43]	0.86* [0.47]	0.94** [0.45]
Different \times military death rate (father)	0.46 [0.34]	0.13 [0.60]	0.07 [0.60]
Parents birth region FE	No	Yes	Yes
Other controls	No	No	Yes
Clusters			
Own birth-residence county	95	95	95
Mother birth county	95	95	95
Father birth county	95	95	95
Observations	15,095	15,095	15,095
Outcome mean	0.81	0.81	0.81
Outcome s.d.	0.39	0.39	0.39

Notes: This table reports the OLS coefficients from estimating a modified version of Specification 3 on the sample of non-migrant married women aged 30 to 59 whose mothers and fathers were born in another county, augmented with an indicator for whether individuals' parents were born in their county of residence and where variables related to both parents are included (except parental birth counties fixed effects). They result from regressing an employed indicator on the military death rate of respondents' parents' counties of birth, including cohort, own county of birth and residence, and survey-year fixed effects, as well as the set of historical controls measured at the level of respondents' parents' counties of birth. *Other controls* include parental, husband, and household characteristics, and the respondent's education and number of children. Standard errors are clustered at the level of counties of residence and fathers' and mothers' counties of birth. Estimates are computed using the sample weights provided in the extended labor force surveys 2005–2012. *** Significant at the 1 percent level. ** 5 percent level. * 10 percent level.

Table A.6. The Effect of WWI Military Death Rates on Mothers' Labor Force Participation

Dependent variable	Mother worked		
	(1)	(2)	(3)
Military death rate (mother)	1.39*** [0.53]	1.94*** [0.64]	1.80*** [0.61]
Father birth county FE	No	Yes	Yes
Other controls	No	No	Yes
Clusters			
Own birth-residence county	95	95	95
Mother birth county	95	95	95
Observations	15,095	15,095	15,095
Outcome mean	0.59	0.59	0.59
Outcome s.d.	0.49	0.49	0.49

Notes: This table reports OLS coefficients from regressing an indicator for whether respondents' mothers were working when growing up on the sample of non-migrant married women aged 30 to 59 whose mothers and fathers were born in another county in the extended labor force surveys 2005–2012. All regressions include cohort, county of birth and residence, and survey-year fixed effects, as well as the set of historical controls measured at the level of individuals' mothers' counties of birth in 1911. *Other controls* include parental, husband, and household characteristics, as well as respondents' education and number of children. Standard errors are clustered at the level of the counties of birth and mothers counties of birth. Estimates are computed using the sample weights provided in the extended labor force surveys. *** Significant at the 1 percent level.

Table A.7. The Effect of Mothers' and Mothers-in-Law's Birth Counties Military Death Rates on Their Daughters' Labor Force Participation

Dependent variable	Employed		
	(1)	(2)	(3)
Same \times military death rate (mothers)	2.49*** [0.89]	2.83*** [0.81]	3.09*** [0.72]
Different \times military death rate (own mother)	1.17** [0.46]	1.28*** [0.44]	1.26*** [0.41]
Different \times military death rate (mother-in-law)	1.22 [0.75]	1.40** [0.64]	1.62*** [0.60]
Fathers birth département FE	No	Yes	Yes
Mothers birth region FE	No	Yes	Yes
Other controls	No	No	Yes
Clusters			
Own birth-residence counties	94	94	94
Mother birth counties	94	94	94
Mother-in-law birth counties	94	94	94
Observations	13,389	13,389	13,389
Outcome mean	0.81	0.81	0.81
Outcome s.d.	0.39	0.39	0.39

Notes: This table reports the OLS coefficients from estimating a modified version of Specification 3 on the sample of second-generation migrant married women aged 30 to 59, augmented with an indicator for whether individuals' mothers and mothers-in-law were born in their county of residence, and where variables related to both mothers are included (except mothers origins fixed effects), but where variables are assigned at the level of mothers' counties of birth. All regressions contain cohort, county of birth and residence, husbands' birth county, and survey-year fixed effects, as well as the set of historical controls measured at the level of respondents' mothers' counties of birth in 1911. *Other controls* include parental, husband, and household characteristics Standard errors are clustered at the level of counties of residence, and mothers' and fathers' counties of birth. Estimates are computed using the sample weights provided in the extended labor force surveys 2005–2012.

*** Significant at the 1 percent level. ** 5 percent level.

Table A.8. Observable Characteristics Across Migration Status

Outcome	Death rate		Employed		Children		High school		Gender values	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)			
Internal migrant	0.00 [0.00]	-0.00 [0.01]	0.06 [0.05]	-0.04 [0.02]	-0.08 [0.12]	0.17*** [0.02]	0.15** [0.06]	0.02*** [0.01]	-0.01 [0.02]	
Internal migrant × military death rate			-0.49 [0.34]		0.28 [0.82]		0.17 [0.40]		-0.01 [0.02]	
Observations	6,764	6,764	6,764	6,764	6,764	6,764	6,764	6,764	6,764	
Natives outcome mean	0.14	0.57	0.57	0.83	0.83	0.32	0.32	0.70	0.70	

Notes: This table reports estimates from regressing observable characteristics on a migrant status indicator, where migrants are respondents who reside in another county than their county of birth. The baseline comparison group consists of natives, i.e., respondents who were born in their county of residence. *Death rate* is the military death rate of a respondent's county of birth, *Employed*, an indicator for whether they are working, *Children*, the number of children in their household, *High school*, an indicator for whether they achieved at least high school, and *Gender values*, the gender values index on a one-point scale. To remain as close as possible to Specification 3, these estimates are calculated through the following specification: $Y_{ibr} = \beta_1 \text{migrant}_i + \beta_2 \text{female}_i + \alpha \mathbf{X}'_{1911,b} + \gamma_i + \delta_r + \varepsilon_{ibr}$, where migrant_i is an indicator for whether the respondent is a migrant, where historical controls $\mathbf{X}_{1911,b}$ are assigned at the level of respondents' counties of birth, γ_i is a set of year of birth and survey year indicators, and δ_r , county of residence fixed effects. Specifications in columns (3), (5), and (7) further include the military death rate of the respondent's county of birth and an interaction with the migrant indicator. Standard errors are reported in brackets and are clustered at the level of counties of residence and birth.

*** Significant at the 1 percent level. ** 5 percent level.

Table A.9. Preferences and Beliefs About Female Labor

Higher values mean disagreement with the statement

	Sex of respondent		
	All	Men	Women
1 If a woman earns more than her partner, it is detrimental for their relationship	0.78 (0.29)	0.80 (0.27)	0.76 (0.31)
2 Women should not decide how to spend the money they earned without asking their partners	0.73 (0.34)	0.70 (0.35)	0.76 (0.34)
3 In an economic crisis, men should keep their jobs in priority	0.74 (0.35)	0.72 (0.35)	0.76 (0.35)
Gender values index (three-point scale)	2.25 (0.64)	2.22 (0.63)	2.27 (0.65)
Gender values index (one-point scale)	0.75 (0.21)	0.74 (0.21)	0.76 (0.22)
Observations	2,689	1,105	1,584

Notes: This table reports summary statistics for preferences and beliefs about female labor on the sample of internal migrant respondents in the GGS 2005. Higher values indicate disagreement with the statement. Standard deviations are in parenthesis.

Table A.10. Preferences and Beliefs About Religion

Higher values mean disagreement with the statement

		Sex of respondent		
		All	Men	Women
1	A religious event is important for a newborn	0.44 (0.40)	0.44 (0.40)	0.44 (0.41)
2	A religious marriage is important for those who marry	0.51 (0.39)	0.51 (0.39)	0.52 (0.40)
3	A religious event is important for a funeral	0.36 (0.38)	0.36 (0.38)	0.35 (0.39)
	Religious values index (three-point scale)	1.30 (1.04)	1.30 (1.04)	1.30 (1.05)
	Religious values index (one-point scale)	0.43 (0.35)	0.43 (0.35)	0.43 (0.35)
	Observations	2,689	1,105	1,584

Notes: This table reports summary statistics for preferences and beliefs about religion on the sample of internal migrant respondents in the GGS 2005. Higher values indicate disagreement with the statement. Standard deviations are in parenthesis.

Table A.11. Preferences and Beliefs About Marriage

Higher values mean disagreement with the statement

	Sex of respondent		
	All	Men	Women
1 Marriage is not an outdated institution ^a	0.28 (0.34)	0.28 (0.34)	0.28 (0.34)
2 Unmarried couple shouldn't live together if they do not intend to get married ^b	0.78 (0.28)	0.77 (0.28)	0.78 (0.29)
3 Even if individuals in a couple are unhappy, they shouldn't divorce ^c	0.82 (0.26)	0.79 (0.27)	0.85 (0.25)
4 Marriage is a lifelong commitment that should never be broken	0.43 (0.39)	0.44 (0.38)	0.43 (0.39)
Marriage values index (four-point scale)	2.31 (0.82)	2.28 (0.81)	2.34 (0.82)
Marriage values index (one-point scale)	0.58 (0.20)	0.57 (0.20)	0.59 (0.21)
Observations	2,689	1,105	1,584

Notes: This table reports summary statistics for preferences and beliefs about marriage on the sample of internal migrant respondents in the GGS 2005. Higher values indicate disagreement with the statement. Standard deviations are in parenthesis.

^a Original statement reversed. It originally reads: Marriage is an outdated institution.

^b Original statement reversed. It originally reads: It is good for an unmarried couple to live together even if they do not intend to get married.

^c Original statement reversed. It originally reads: If individuals are unhappy as a couple, they may divorce, even if they have children.

Table A.12. Preferences and Beliefs About the Family

Higher values mean disagreement with the statement

	Sex of respondent		
	All	Men	Women
1 To thrive, a woman must have children	0.34 (0.34)	0.31 (0.32)	0.37 (0.36)
2 To thrive, a man must have children	0.37 (0.35)	0.33 (0.34)	0.40 (0.35)
3 To grow up happy, a child needs a home with a mother and a father	0.13 (0.23)	0.11 (0.20)	0.15 (0.25)
4 If parents divorce, it is better for the child to stay with the mother rather than with the father	0.55 (0.31)	0.58 (0.32)	0.53 (0.31)
5 A woman cannot have and raise a child by herself if she does not want a stable relationship with a man ^a	0.58 (0.34)	0.59 (0.34)	0.57 (0.34)
Family values index (five-point scale)	1.98 (0.99)	1.92 (0.95)	2.03 (1.02)
Family values index (one-point scale)	0.40 (0.20)	0.38 (0.19)	0.41 (0.20)
Observations	2,689	1,105	1,584

Notes: This table reports summary statistics for preferences and beliefs about the family on the sample of internal migrant respondents in the GGS 2005. Higher values indicate disagreement with the statement. Standard deviations are in parenthesis.

^a Original statement reversed. It originally reads: A woman can have and raise a child by herself if she doesn't want to have a stable relationship with a man.

Table A.13. The Effect of WWI Military Death Rates on Cultural Beliefs about Female Labor (Individual Questions)

Dependent variable Question	Individual gender values questions ^a					
	1		2		3	
	(1)	(2)	(3)	(4)	(5)	(6)
Military death rate	5.97*** [1.63]	5.77*** [2.04]	-4.14** [1.92]	-2.79 [2.68]	3.54* [1.88]	3.88* [2.03]
Female	-0.18*** [0.04]	-0.22 [0.14]	-0.21*** [0.06]	0.08 [0.23]	0.16*** [0.06]	0.23 [0.19]
Military death rate × Female		0.32 [1.07]		-2.09 [1.75]		-0.52 [1.23]
Clusters						
Residence county	95	95	95	95	95	95
Birth county	88	88	88	88	88	88
Observations	2,688	2,688	2,688	2,688	2,688	2,688
Outcome mean	4.11	4.11	2.08	2.08	3.96	3.96

Notes: This table reports the OLS coefficients from estimating Specification 9 separately on the questions that compose the gender values index from Table 4 on the sample of internal migrant respondents in the GGS 2005. All regressions contain cohort and county of residence fixed effects, as well as the set of historical controls measured at the level of respondents' counties of birth in 1911. Standard errors are clustered at the level of counties of birth and of residence. Estimates are computed using the sample weights provided in the GGS.

^a The meaning of each question is available in Table A.9.

*** Significant at the 1 percent level. ** 5 percent level. * 10 percent level.

Table A.14. The Effect of WWI Military Death Rates on Cultural Beliefs on Religion, Marriage, and the Family

Dependent variable	Cultural values index (one-point scale)					
	Religion		Marriage		Family	
	(1)	(2)	(3)	(4)	(5)	(6)
Military death rate	-0.30 [0.54]	-0.32 [0.58]	0.18 [0.31]	0.11 [0.34]	-0.13 [0.31]	0.00 [0.32]
Female	-0.00 [0.01]	-0.00 [0.06]	0.01 [0.01]	-0.00 [0.02]	0.02** [0.01]	0.05 [0.03]
Military death rate \times Female		0.03 [0.40]		0.11 [0.13]		-0.20 [0.18]
Clusters						
Residence counties	95	95	95	95	95	95
Birth counties	88	88	88	88	88	88
Observations	2,688	2,688	2,688	2,688	2,688	2,688
Outcome mean	0.43	0.43	0.58	0.58	0.40	0.40

Notes: This table reports the OLS coefficients from estimating Specification 9 on the religion, marriage, and family values indexes on the sample of internal migrant respondents in the GGS 2005. All regressions contain cohort and county of residence fixed effects, as well as the set of historical controls measured at the level of respondents' counties of birth in 1911. Standard errors are clustered at the level of counties of birth and of residence. Estimates are computed using the sample weights provided in the GGS.

** Significant at the 5 percent level.

B. Robustness of Baseline Estimates

I present a series of robustness checks that support the credibility of baseline estimates in Section 4. Estimates are robust to the choice of regression model and alternative sample-selection criteria (Section B.1), selective migration patterns (Section B.2), and inaccurate assignment of military death rates (Section B.3). Moreover, education and fertility choices do not mediate the relationship between WWI military fatalities and women’s working behaviors (Section B.4).

B.1. Alternative Specifications

Baseline coefficients are estimated through a linear probability model. This modeling choice does not affect the results, as marginal coefficients evaluated at the mean of the data from Probit and Logit models are similar to OLS coefficients (Figure B.1, Panel a). Estimates are also similar—though slightly lower in the 2000s—when the outcome is a labor force participant indicator, when widening age bounds to 25 to 59, and when including women of all marital statuses (Figure B.1, Panels b–d).

B.2. Selective Migration Patterns

I first explore whether selective out-migration patterns can account for the results. To that end, I analyze differences in observable characteristics across migration status through a set of regressions. To remain as close as possible to Specification 2 and assess the potential biases that might affect baseline estimates, I estimate the following specification, separately for each census year t , on the sample of all married women aged 30 to 49 born and residing in metropolitan France—a total of 7 million individuals:

$$(B.1) \quad Y_{ibt} = \beta \text{migrant}_i + \alpha \mathbf{X}'_{1911,b} + \boldsymbol{\theta}_{i;r;1914,b} + \varepsilon_{ibt},$$

where migrant_i is an indicator for whether the individual is an internal migrant, and $\boldsymbol{\theta}_{i;r;1914,b}$ are cohort by county of residence by military region of birth fixed effects. Y_{ibt} corresponds to four observable characteristics: whether the individual is employed, the military death rate of her county of birth, the number of chil-

dren in her household, and whether she has gone through high school or above. Estimates are reported in Figure B.2. Results point toward an absence of selection into internal migration along the two main variables of interest: employment and military death rates. There is similarly little selection along fertility. Internal migrant women are however positively selected in terms of education: internal migrants are on average 7 percentage points more likely to have gone through at least high school compared to non-migrants. This source of selection could be worrying if it was operating differently across individuals that originate from départements that experienced low and high military death rates. To see whether this is the case, I augment Specification B.1 with an interaction term between the internal migrant indicator and the military death rate of individuals' counties of birth. To enable a comparison across estimates within the same specification, I report standardized estimates in Figure B.3. Reassuringly, selection along all observed characteristics—including education—does not operate systematically differently across counties of birth, suggesting that this source of selection cannot explain the main results.

Beyond selection through out-migration patterns, results might be biased through selective in-migration patterns, that is, through the destination location of internal migrants. In particular, individuals born in counties that experienced greater military death rates might settle in more dynamic labor markets. To assess whether this is the case, I estimate Specification 2 when removing the ten most urban counties of destination from the sample.¹ Results are similar to baseline estimates (Figure B.4, Panel a).

Still, in-migration selection might operate within destination counties, with those born in counties that experienced greater military death rates sorting systematically into the more dynamic local labor markets. To assess the extent of this type of selection, I first compare individuals who reside in the same local labor market. The censuses provide two definitions of local labor market boundaries: (1) explicit local labor markets constructed using home-work migration patterns—Zones of Industrial and Urban Population (ZIUP) from 1962 to 1990, and Economic Zones

¹More precisely, I remove the counties in which the ten largest French cities are located: Paris (75), Marseille (13), Lyon (69), Toulouse (31), Nice (06), Nantes (44), Montpellier (34), Strasbourg (67), Bordeaux (33), and Lille (59).

(EZ) from 1999 to 2012²—and (2) cities respondents reside in—from 1962 to 1999, this information is detailed at the level of *municipalities*, France’s smallest administrative unit, and from 2006 to 2012, at the level of *canton-cities*, a slightly larger level of aggregation.³ Table B.1 provides information on the number of these units in the sample. I replicate the baseline specification successively with local labor market and city fixed effects instead of county of residence fixed effects (Figure B.1, Panel b). Note that because residence location, year of birth, and military region of birth fixed effects are interacted, many singletons are dropped from the regressions. Hence, I keep the sample constant across specifications so that estimates remain comparable, explaining why baseline estimates are slightly different from those in Figure 2. Coefficients are similar across specifications, suggesting little correlation between military death rates and in-migration sorting within destination counties.

To further alleviate potential issues of selective migration patterns, I control for the relative attractiveness of origin and destination counties. I build two types of measures: a county-specific measure and a dyadic measure. County-specific measures are the share of immigrants among the population residing in destination counties and the share of emigrants among the population born in origin counties. The first measure captures the pull force of destination counties and the second measure, the push force of origin counties. Dyadic measures are specific to each pair of counties. The first dyadic measure is the share of immigrants born in an origin county among the population of immigrants in a destination county. It captures the pull force of destination counties specifically toward each origin county. Conversely, the second dyadic measure is the share of emigrants in an individual’s destination county among the population of emigrants born in her origin county. It captures the push force of origin counties specifically toward each destination county. Because labor-related migrations usually peak early in the life-cycle (White and Lindstrom, 2005), I build these measures relative to the time when individuals were 25.⁴ I build these measures relative to the female population of working age

²ZIUPs are more numerous than EZs: the sample contains 600 to 900 ZIUPs with 70 to 800 observations per ZIUP, and 300 EZs with 300 to 2,000 observations per EZ. ZIUPs do not cover the full territory since some rural areas are not included in a ZIUP—88 to 97 percent of respondents in the sample reside in a ZIUP.

³The sample contains 6,000 to 23,000 municipalities with 9 to 23 observations per commune, and 3,500 canton-cities with 200 observations per canton-city.

⁴Censuses do not provide information on the timing of migration except whether respondents

to better capture female labor-related migration dynamics.⁵ Together with the bilateral distance between origin and destination counties, these four variables are likely to capture a large part of the bias introduced by labor-related migration patterns. I further estimate the baseline specification on the subsample of internal migrants who were already present in their county of residence in the previous census—the one-and-a-half generation.⁶ This subsample might be less subject to biases due to selective migration as it contains individuals who migrated at least one decade earlier. Panel c of Figure B.1 reports the results. Including migration controls or estimating the baseline specification on the one-and-a-half generation decreases estimates only slightly. This suggests that selective migration is not a primary mechanism that can explain the patterns in the data.

B.3. Inaccurate Assignment of Military Death Rates

The empirical strategy used throughout this article requires regressors to be assigned at the level of geographical origin, i.e., the county in which internal migrants' ascendants were residing during the interwar period. However, censuses do not provide ascendants' counties of birth. I am therefore constrained to assume that counties of birth and of origin are identical. Here, I relax this assumption by repeating the analysis on the extended labor force surveys 2005–2012, which provide parental counties of birth. I first restrict the regression sample to internal migrants born in the same county as both their parents—this is the case for one third of them. I report results in column 2 of Table B.2, along with a reproduction of the baseline estimate in column 1. The baseline estimate is in line with the one obtained using the census of 2006, at 0.50. Restricting the sample to individuals born in the same county as their parents inflates the coefficient to 0.87. Although the difference is itself not significant, we can interpret it as the result of an inaccurate assignment of military death rates in the baseline sample, which creates some attenuation bias

migrated more than a decade earlier.

⁵ For decades 1960 to 2010, these measures are calculated using the censuses 1962 to 2006. For earlier decades, I use information on bilateral migration flows between counties in the censuses of 1911 and 1946—these are the only censuses before 1962 for which this information is available. Because the administrative geography underwent various modifications, some former counties cannot be mapped into newly created ones, such as Seine-et-Oise. As a result, some respondents cannot be assigned migration controls, especially in earlier censuses.

⁶This information is not available in the censuses after 2006.

through measurement error. Does this method ensure that counties of birth trace to the interwar period in individuals' lineage? Not entirely. Because the mean age of mothers at the birth of their children was 26–29 in the 1950s–1980s, parents of respondents in the sample were likely born in the 1920s–1950s (Toulemon, 2001). To make the assumption more plausible, I therefore further restrict the sample to cohorts born before the mid-1960s, so that their parents were likely born during the 1920s and the mid-1930s.⁷ I report results in column 4 of Table B.2, along with a reproduction of the baseline estimate in column 3. The estimate is larger than the baseline at 1.04, though not significantly different, suggesting again that the inaccurate assignment of military death rates in the baseline sample creates attenuation bias.

A related concern to the one highlighted above is that counties of birth and childhood might differ. If socialization with the surrounding environment beyond own parents is an important mechanism, assimilating counties of birth with cultural origins might underestimate the long-run impact of WWI military fatalities on women's working behaviors. Using information about residence locations in the previous census, I repeat the analysis when further interacting counties of residence, military regions of birth, and years of birth fixed effects with fixed effects for counties of residence in the previous census.⁸ This enables a tight comparison of women of the same cohort with similar migration histories. I report results in Panel d of Figure B.4. They are nearly identical to baseline estimates, suggesting that alternative migration histories do not bias results.

B.4. Education and Fertility

Labor market outcomes are endogenous to human capital investment and fertility decisions.⁹ As a result, these decisions might mediate the relationship between women's working behaviors and WWI military fatalities. For example, if women born in counties that experienced greater military death rates held more favorable

⁷The share of French men born in France that remained in their county of birth was 75.0 percent in 1921, 74.7 percent in 1926, 74.2 percent in 1931, and 73.2 percent in 1936 according to the censuses, suggesting limited migration movements between the end of the war and the mid-1930s. For women, these figures are 75.2, 74.9, 73.5, and 73.2, respectively.

⁸This information is only available in the censuses of 1962 to 1999.

⁹See Greenwood, Guner and Vandenbroucke (2017) for a recent review of family economics models.

views toward being a working wife, they might anticipate longer careers from the onset and make greater human capital investments when young. These investments might in turn increase their likelihood to enter the labor force later in life because of higher wage draws. To examine the role of these potential channels, I augment the baseline specification with educational attainment indicators and the number of children in the household.¹⁰ I report results in Figure B.5. These additional controls do not affect results. This suggests that the long-run impact of WWI military fatalities was direct rather than mediated by education and fertility decisions. Coefficients from this specification imply that the labor force participation impact of being born in a county that experienced 20 rather than 10 percent military death rates is equivalent in magnitude to one third of the impact of graduating from high school, or one half of the impact of having one fewer child.

¹⁰Educational attainment indicators consist of primary or lower secondary education (excluded), technical secondary education, high school, and higher education. Number of children corresponds to the number of own children in the household aged 0 to 6.

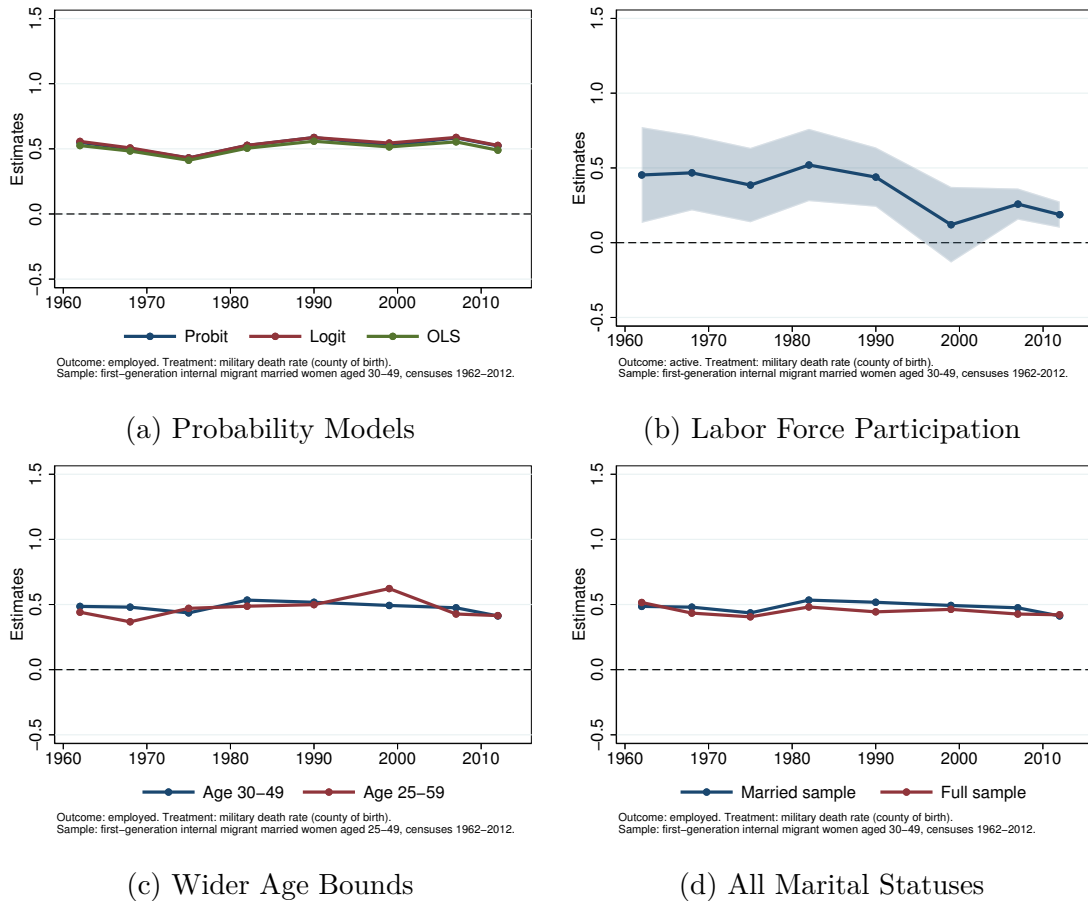
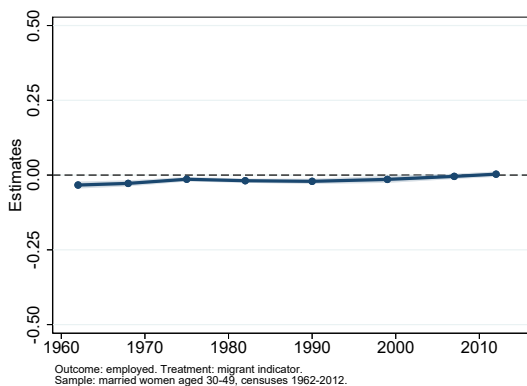


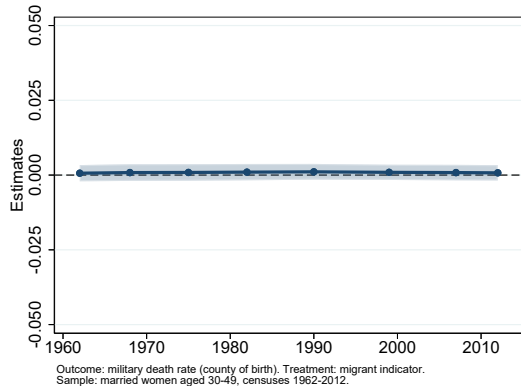
Figure B.1. The Effect of WWI Military Death Rates on FLP Robustness

Notes: Panel a reports estimates from estimating Specification 2 using three different probability models. For Probit and Logit models, I report marginal coefficients evaluated at the mean of the data. For computation efficiency, regressions in this panel only do not employ interacted fixed-effects as in Specification 2. Panels b, c, and d report OLS coefficients from estimating specification 2. In Panel b, the dependent variable is an indicator for whether the respondent is in the labor force. In Panel c, the sample uses wider age bounds: internal migrant married women aged 25 to 59 instead of internal migrant married women aged 30 to 49. In Panel d, the sample consists of women of all marital statuses.

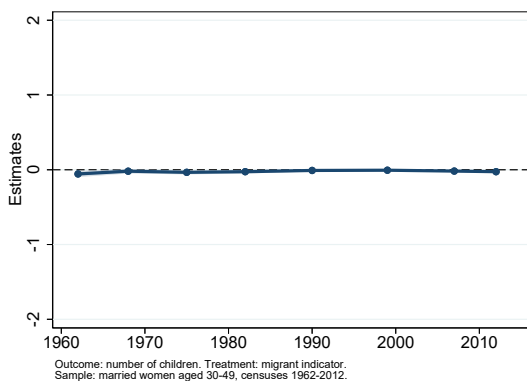
● significant at the 1 percent level.



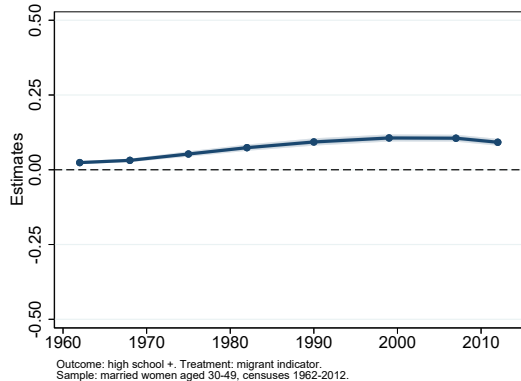
(a) Employed



(b) Military Death Rate



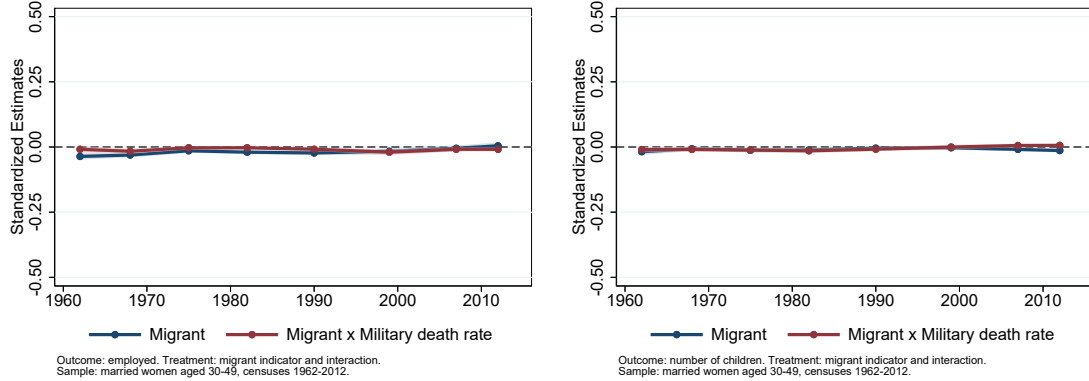
(c) Number of Children



(d) High School and Above

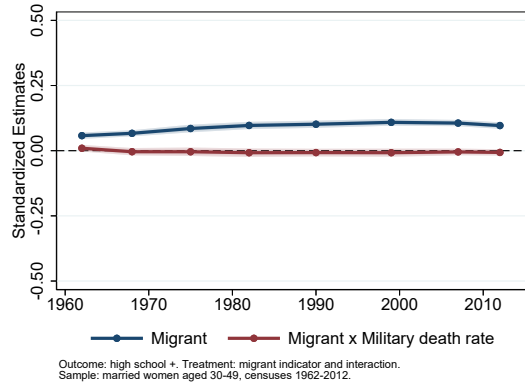
Figure B.2. Observable Characteristics Across Migration Status

Notes: This figure reports OLS coefficients from estimating Specification B.1 along with 95 percent confidence intervals on the sample of all married women aged 30 to 49 born and residing in metropolitan France in the censuses 1962–2012. The outcome in Panel a is an indicator variables for whether the respondent is working, in Panel b, the military death rate of respondents’ counties of birth, in Panel c, the number of children of the respondent’s family in the household, and in Panel d, an indicator variable for whether the respondent achieved at least high school. The size of the y-axis on each panel corresponds to one standard deviation in the outcome variable.



(a) Employed

(b) Number of Children



(c) High School and Above

Figure B.3. Observable Characteristics across Migration Status

Notes: This figure reports standardized OLS coefficients from estimating Specification B.1 augmented with an interaction between migration status and military death rates of individuals' counties of birth, along with 95 percent confidence intervals on the sample of all married women aged 30 to 49 born and residing in metropolitan France in the censuses 1962–2012. The outcome in Panel a is an indicator variables for whether the respondent is working, in Panel b, the number of children of the respondent's family in the household, and in Panel c, an indicator variable for whether the respondent achieved at least high school. The size of the y-axis on each panel corresponds to one standard deviation in the outcome variable, which one—all variables are standardized.

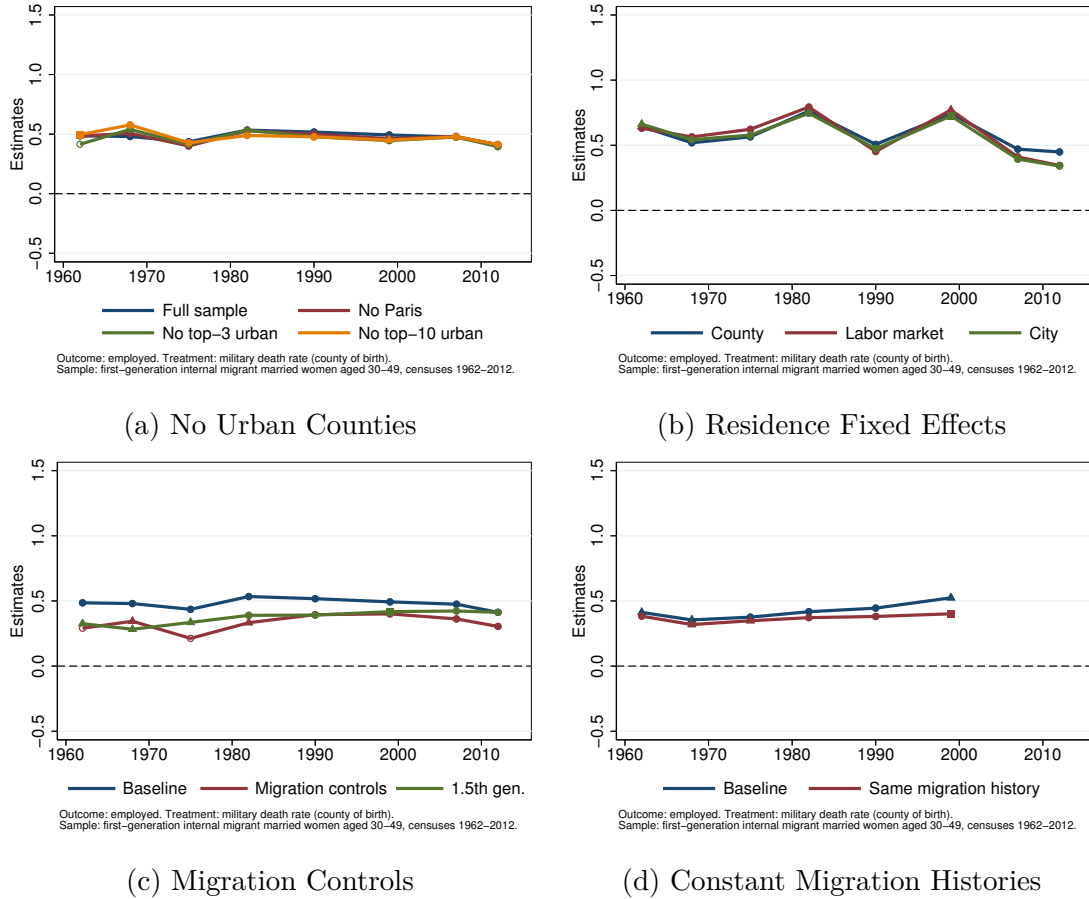
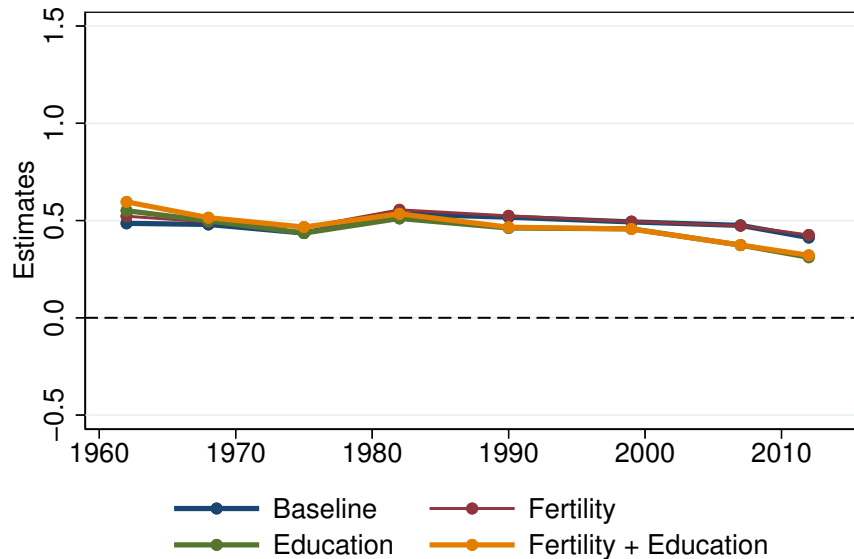


Figure B.4. The Effect of WWI Military Death Rates on FLP Robustness

Notes: This figure report OLS coefficients from estimating Specification 2 on the sample of internal migrant married women aged 30 to 49 in the censuses 1962–2012. In Panel a, respondents who reside in the ten most urban counties are removed from the sample: Paris (75), Marseille (13), Lyon (69), Toulouse (31), Nice (06), Nantes (44), Montpellier (34), Strasbourg (67), Bordeaux (33), and Lille (59). In Panel b, the specification successively includes county of residence fixed effects, local labor market fixed effects (ZIUP and EZ), and city fixed effects (municipality and canton-city). Because residence location, year of birth, and military region of birth fixed effects are interacted, many singletons are dropped from the regressions. Hence, I keep the sample constant across specifications so that estimates remain comparable. The second specification in Panel c is augmented with the bilateral distance between origin and destination counties and with the county-specific and dyadic migration controls. The third specification in Panel c restricts the sample to migrants who were residing in their county of residence in the previous census—this information is only available until the census of 2006. Panel d includes respondents for which the county of residence in the preceding census is available—this is not the case for censuses after 2006.

● significant at the 1 percent level. ▲ 5 percent level. ■ 10 percent level.



Outcome: employed. Treatment: military death rate (county of birth).
 Sample: first-generation internal migrant married women aged 30–49, censuses 1962–2012.

Figure B.5. The Effect of WWI Military Death Rates on FLEP
 Control for Fertility and Education

Notes: This figure reports the OLS coefficients from estimating baseline Specification 2 augmented with education indicators and fertility controls on the sample of internal migrant married women aged 30 to 49 in the censuses 1962–2012. Educational attainment indicators consist of primary or lower secondary education (excluded), technical secondary education, high school, and higher education. Number of children corresponds to the number of children of the respondent’s family in the household. Standard errors are clustered at the level of individuals’ counties of birth and residence. Estimates are computed using the sample weights provided in the censuses.

• significant at the 1 percent level.

Table B.1. Residence Location Units Available in the Censuses 1962–2012

Census	Obs	A. Local labor markets				B. Cities		
		Def	Units	In sample	Obs/unit	Def	Units	Obs/unit
1962	53,841	ZIUP	801	88	67	Commune	5,883	10
1968	370,699	ZIUP	790	90	469	Commune	17,636	23
1975	305,198	ZIUP	857	92	356	Commune	15,692	21
1982	432,227	ZIUP	859	94	503	Commune	20,625	22
1990	481,676	ZIUP	596	97	808	Commune	22,916	22
1999	106,067	EZ	331		320	Commune	11,276	9
2007	660,780	EZ	331		1,996	Canton-city	3,575	185
2012	659,636	EZ	292		2,259	Canton-city	3,573	185

Notes: This table describes the types of residence location units available in the censuses besides the county of residence. The sample consists of migrant married women aged 30 to 49. *In sample* corresponds to the share of observations in the original regression sample that reside in a ZIUP. *Com.* corresponds to *communes*, and *Cant.* to *canton-cities*. See the Data Appendix for a definition of ZIUPs, EZs, communes, and canton-cities. Acronyms: ZIUP = Zone of Industrial and Urban Population; EZ = Economic Zone; Obs = Observations; Def = Definition.

Table B.2. The Effect of WWI Military Death Rates on FLFP When Parents and Daughters Are Born in the Same County

Dependent variable	Employed			
	1946–1982		1946–1966	
Cohorts	(1)	(2)	(3)	(4)
Military death rate	0.50** [0.22]	0.87** [0.36]	0.76** [0.29]	1.04** [0.41]
County of birth = parents'	No	Yes	No	Yes
Clusters				
Birth	92	92	92	91
Residence	92	92	92	92
Observations	167,179	51,391	94,504	30,862
Outcome mean	0.77	0.78	0.74	0.75
Outcome s.d.	0.42	0.41	0.44	0.43
	(2) – (1)		(4) – (3)	
Difference	0.37 [0.42]		0.28 [0.50]	

Notes: This table reports the OLS coefficients from estimating specification 2 on the sample of internal migrant married women aged 30 to 59 in the extended labor force surveys 2005–2012. All the regressions contain survey-year and quarter indicators, pre-war controls, and cohort by military region of birth by county of residence fixed effects. Standard errors are clustered at the level of respondents' counties of birth and residence. In columns 1 and 3, the sample is unrestricted, while in columns 2 and 4, the sample is restricted to women who were born in the same county as both their parents. Estimates are computed using the sample weights provided in the labor force surveys.

** Significant at the 5 percent level.

C. The Role of World War II

In this section, I show that military fatalities (Section C.1) and war destruction (Section C.2) from WWII had no role in the estimated long-run impact of WWI military fatalities on female labor force participation.

C.1. World War II Military Fatalities

Consider first WWII military death rates. Should these be correlated with WWI military death rates, part of the estimated long-run impact of WWI military fatalities on female labor force participation would be attributable to WWII military fatalities. While this is possible, the magnitude of WWII military fatalities relative to those from WWI implies that this part should be marginal at best. Indeed, about 115,000 French soldiers born in metropolitan counties died during WWII—ten times fewer than WWI military fatalities (1.3 million).¹¹

To explore this possibility in more details, I collected the number of French soldiers who died because of WWII for each county from the *Mémoire des Hommes* (MDH) archive. Analogous to WWI military death rates, the WWII military death rate in a county is the ratio of the number of deceased soldiers born in the county to its male population aged 15 to 44 in the census of 1936. WWII military death rates range from 0.7 percent in Alpes-Maritimes to 3.8 percent in Finistère. The average WWII military death rate is 1.5 percent, the 25th percentile, 1 percent, and the 75th percentile, 2 percent. WWII military death rates are one order of magnitude lower than WWI military death rates.

I first analyze whether WWI and WWII military death rates are correlated. The systematic variation in WWI military death rates across counties was due to policies implemented by the Ministry of War to sustain the industrial war effort. As a result of these policies, rurality was a strong predictor of WWI military death rates. It was also the case for WWII military fatalities, but to a smaller extent.¹² I report

¹¹According to recent estimates (Lagrou, 2002), 150,000 French soldiers died during WWII—slightly lower than the traditional estimate of 170,000 from the report of the *Commission Consultative des Dommages et des Réparations* (1951). This includes 40,000 French soldiers from Alsace-Lorraine forcibly enrolled in the *Wehrmacht* who died on the Eastern Front. Among these 150,000 military fatalities, 25,000 were from Overseas France.

¹²About 650,000 French soldiers were affected to war factories at the mobilization in September 1939, representing 14 percent of the 4.7 million mobilized soldiers (Garraud, 2005). This is

estimates from regressing WWII military death rates on pre-WWI characteristics in columns 3 and 4 of Table C.1. Columns 1 and 2 report estimates with an analogous specification for WWI military death rates. Because at least part of the systematic variation in WWII military death rates across counties was due to similar factors than that in WWI military death rates, both measures are correlated: counties that experienced 20 rather than 10 percent WWI military death rates experienced 0.7 percentage point greater WWII military death rates (column 5). While this correlation is statistically significant, including pre-WWI characteristics in column 6 renders it null. As a result, it is unlikely that part of the estimated long-run impact of WWI military fatalities on female labor force participation is driven by WWII military fatalities.

To support this assertion, I directly estimate the impact of WWII military fatalities on female labor force participation, using Specification 2 with WWII military death rates as the regressor instead of WWI military death rates. I report results in Panel a of Figure C.1 along with baseline estimates. None of the estimates relative to WWII are significant at conventional levels. Unsurprisingly, when including military death rates relative to both WWI and WWII, estimates relative to WWI are identical to baseline results (Figure C.1, Panel b).

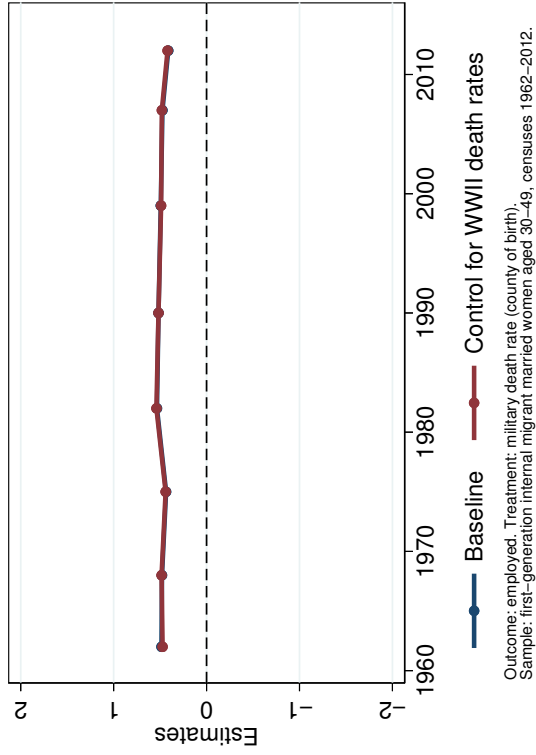
comparable to the share of recalled soldiers into war factories during WWI.

Table C.1. Military Death Rates and Pre-WWI County Characteristics

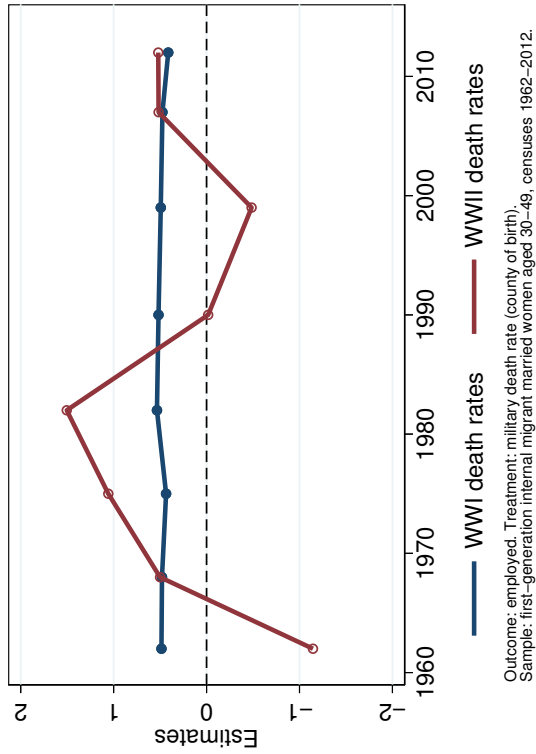
Dependent variable:	Military death rate					
	WWI			WWII		
	(1)	(2)	(3)	(4)	(5)	(6)
WWI military death rate					0.07*** [0.02]	-0.01 [0.02]
Pre-WWI characteristics						
Share rural population	0.12*** [0.01]	0.14*** [0.03]	0.01* [0.00]	0.00 [0.00]		0.01 [0.00]
Share born in county	0.12*** [0.03]	0.16*** [0.04]	0.01** [0.01]	0.00 [0.00]		0.00 [0.01]
Other characteristics	No	Yes	No	Yes	No	Yes
Counties	87	87	87	87	87	87
R ²	0.745	0.887	0.298	0.900	0.269	0.901
Outcome mean	0.16	0.16	0.02	0.02	0.02	0.02

Notes: This table reports OLS coefficients from regressing WWI and WWII military death rates on various pre-WWI county characteristics. *Other characteristics* include the female labor force participation rate, the share of girls aged 5–19 in school, the total fertility rate, the average personal wealth per inhabitant in thousand francs, average height, population, the share of men working in industry, in agriculture, the share of literature population, and the average direct taxes per inhabitant. All these variables are measured in 1911, except the average personal wealth which is measured in 1908. Robust standard errors are in brackets.

*** Significant at the 1 percent level. ** 5 percent level. * 10 percent level.



(a) WWI versus WWII



(b) Controlling for WWII

Figure C.1. The Effect of WWI and WWII Military Death Rates on Female Labor Force Participation

Notes: Panel a reports OLS coefficients from estimating Specification 2 separately with WWI military death rates and WWII military death rates as regressors. Panel b reports OLS coefficients when using WWI military death rates as regressor and controlling for WWII military death rates. Standard errors are clustered at the level of respondents' counties of birth and residence. The sample consists of internal migrant married women aged 30 to 49 in the censuses 1962-2012. Estimates are computed using the sample weights provided in the censuses.

● significant at the 1 percent level. ○ not significant at conventional levels.

C.2. World War II Destruction

Next, consider WWII destruction. Contrary to WWI, destruction resulting from WWII affected most of the territory. While combats in May–June 1940 occurred mostly in the North-East of the territory, combats in 1944 affected both the South-East and the North-West. While the baseline empirical strategy uses county of residence fixed effects, it could still be problematic if WWI military death rates were correlated with WWII destruction. First, losses of physical capital in some counties could have induced a relative decline in the demand for labor in these counties, biasing downward the estimated impact of WWI military fatalities on female labor force participation in these counties. Alternatively, the reconstruction effort in these counties could have induced a relative increase in the demand for labor, biasing estimates upward. The net impact on estimates would then depend on the relative intensity of war destruction vis-à-vis the reconstruction effort, and on the extent of the correlation with WWI military fatalities.

To analyze the potential role of WWII destruction on the estimated long-run impact of WWI military fatalities on female labor force participation, I collected data that capture the extent of destruction from WWII at the county level: the share of a county’s area that needed to be cleared from land mines, the share of a county’s buildings that were partially or totally destroyed, and the share of a county’s factories that were destroyed. The first two variables are from the *Commission Consultative des Dommages et des Réparations* (1951) and the third is from Flaus (1947). Table C.2 provides summary statistics for destruction measures. Table C.3 presents correlations between WWI military death rates and WWII destruction. Counties with relatively more WWII destruction experienced relatively less WWI military fatalities. However, the correlation vanishes when including pre-WWI characteristics (column 5).

To further explore whether WWII destruction could bias the estimated long-run impact of WWI military fatalities on female labor force participation, I replicate baseline Specification 2 and include measures of WWII destruction as controls. I report results in Figure C.2. They imply that WWII destruction do not affect baseline estimates.

Table C.2. Summary Statistics: World War II Destructions

	Mean	S.d.	Min	Max
Share land with mines	0.01	0.01	0.00	0.10
Share buildings partially destroyed	0.01	0.02	0.00	0.11
Share buildings totally destroyed	0.03	0.04	0.00	0.28
Share buildings destroyed	0.04	0.06	0.00	0.40
Share factories destroyed	0.01	0.02	0.00	0.12

Notes: This table reports summary statistics for WWII destructions across the 87 counties for which WWI military fatalities are available. *Share buildings destroyed* is the sum of the share of buildings partially and totally destroyed.

Table C.3. WWI Military Death Rates and WWII Destructions

Dependent variable:	WWI military death rates				
	(1)	(2)	(3)	(4)	(5)
<u>WWII destruction measures</u>					
Share land with mines	-0.97*** [0.30]			-0.78** [0.35]	0.09 [0.20]
Share buildings destroyed		-0.09 [0.06]		0.04 [0.07]	0.01 [0.05]
Share factories destroyed			-0.50** [0.19]	-0.38* [0.23]	-0.02 [0.15]
<u>Pre-WWI characteristics (1911)</u>					
Share rural population					0.15*** [0.03]
Share born in county					0.16*** [0.05]
Other characteristics	No	No	No	No	Yes
Military region FE	No	No	No	No	Yes
Counties	87	87	87	87	87
R ²	0.139	0.021	0.105	0.182	0.887

Notes: This table reports the OLS coefficients from regressing WWI military death rates on WWII destructions measures and various pre-WWI county characteristics. *Other characteristics* include the female labor force participation rate, the share of girls aged 5–19 in school, the total fertility rate, and the average personal wealth per inhabitant in thousand francs. All these variables are measured in 1911, except the average personal wealth which is measured in 1908. Robust standard errors are in brackets.

*** Significant at the 1 percent level. ** 5 percent level. * 10 percent level.

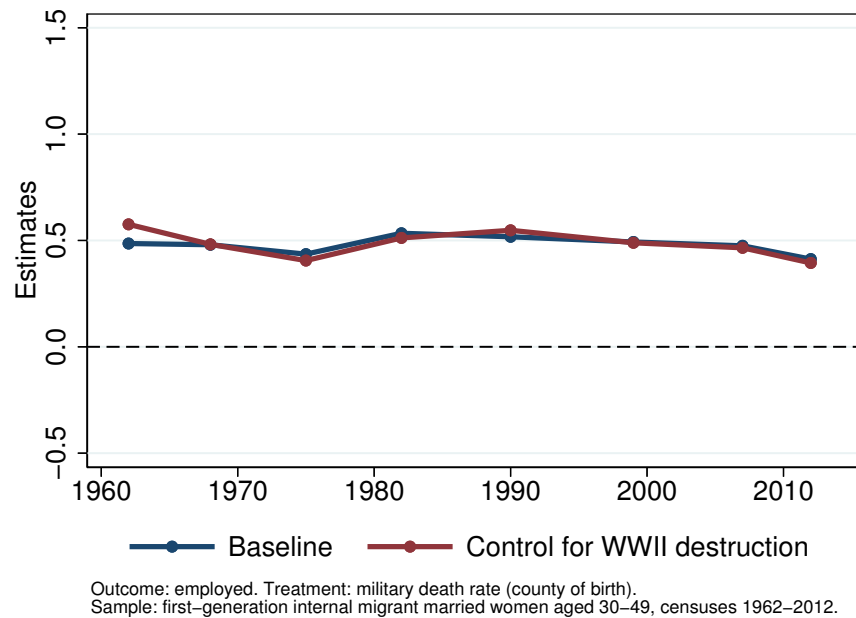


Figure C.2. The Effect of WWI Military Death Rates on FLFP

Notes: This figure reports the OLS coefficients from estimating baseline Specification 2 and controlling for the following measures of WWII destruction: the share of land with mines, the share of buildings partially or totally destroyed during the war, and the share of factories destroyed during the war. Standard errors are clustered at the level of respondents' counties of birth and residence. The sample consists of migrant women aged 30 to 49 in the censuses 1962–2012. Estimates are computed using the sample weights provided in the censuses.

- significant at the 1 percent level.

D. Further Results

D.1. Alternative Outcomes

As discussed in Section 4.2, fertility and education choices do not appear to mediate the relationship between WWI military death rates and women’s working behaviors. To assess this possibility more directly, I estimate the baseline specification for various fertility and education outcomes (Figures D.1 and D.2). As expected, women born in counties that experienced greater military death rates do not make different fertility or education choices.¹³ Moreover, I find that conditional on being employed, these women do not hold more male-biased occupations, where the degree of male-biasedness of an occupation is based on the national-level share of men in an occupation among men and women aged 30 to 49 (Table D.1).¹⁴ Furthermore, these women do not marry at different rates (Figure D.4). Reproducing the analysis on the labor force surveys 1982–2013 generates similar results (Table D.2).¹⁵

D.2. Household-Level Analysis

Husbands and wives can be matched in the censuses when they reside in the same household, which enables a household-level analysis. I estimate the baseline specification when including husband and household characteristics as controls. Husband characteristics include husbands age and age squared, indicators for their educational attainment, and indicators for their migratoin employment status.¹⁶ Household characteristics include an indicator for home ownership, the number of rooms in the home, and a measure of housing quality. These variables attempt to

¹³I also find no heterogeneity in the effect of the war on educational attainment across the urban status of the county, where urban status is consists of counties that contain one of the ten largest French cities: Paris (75), Marseille (13), Lyon (69), Toulouse (31), Nice (06), Nantes (44), Montpellier (34), Strasbourg (67), Bordeaux (33), and Lille (59) (Figure D.3). This implies that the differential supply of education across urban status does not bias the results. I thank a reviewer for suggesting this robustness check.

¹⁴The precise nature of respondents’ occupations in the censuses is only available from 1962 to 1999. Moreover, the nomenclature of occupations is different across census, ranging from 188 categories to 454.

¹⁵For more details on the labor force surveys 1982–2013, see Section D.6 below.

¹⁶Educational attainment indicators include primary or lower secondary education (excluded), technical secondary education, high school, and higher education.

capture how wealthy a household is.¹⁷ I report results in Figure D.5. Estimates are close to the baseline, suggesting that women born in counties that experienced greater military death rates do not choose husbands that differ along these characteristics.

This is broadly confirmed by repeating the analysis with husband and household characteristics as outcomes (Figures D.6 and D.7). With one caveat: households with women born in counties that experienced 20 rather than 10 percent military death rates are on average 5.5 percentage points more likely to own their home, which represents 10 percent of the mean. Because there is no substitution between wives' and husbands' market work—husbands of women born in counties that experienced greater military death rates are not more likely to be working—this can be rationalized by the fact that these households are richer due to women working more.¹⁸

D.3. Heterogeneity Across Categories of Women

To assess the extent of heterogeneity in the labor supply response to WWI military death rates across categories of women, I estimate the baseline specification augmented with a set of interaction terms. I analyze heterogeneity along four types of characteristics: the number of children in the household, education, age, and marital status. To make comparisons more amenable, I report standardized coefficients in Figure D.8. Women's labor supply does not respond differently to WWI military fatalities across these characteristics. An exception is education, with the labor supply of high school graduates responding statistically significantly more in the 1960s and 1970s. The magnitude of this dimension of heterogeneity remains however small, with a standardized coefficient on the interaction term close to 0.01 between 1962 and 1982.

¹⁷The censuses do not contain explicit wealth, income, or wage measures. See the Data Appendix for more details on how the measure of housing quality is constructed.

¹⁸Figure D.6 reveals that husbands of women born in counties that experienced greater military death rates are more likely to be working during the 2000s. Nevertheless, the magnitudes of coefficients are small at 0.1, suggesting that husbands of women born in counties that experienced 20 rather than 10 percent military death rates were 1 percentage point more likely to be working between 2006 and 2012—94 percent of these men were employed during that period.

D.4. Cohort-Specific Estimates

I estimate the baseline specification separately on each decennial cohort present in the censuses—cohorts 1910 to 1970. I pool all censuses together and include census-year fixed effects. Panel a of Figure D.9 reports the results. Consistent with baseline results, estimates for each cohort are stable around 0.5 and significant at the 1 percent level. The magnitude of the long-run impact of WWI military fatalities relative to base rates nevertheless linearly declines across cohorts (panel b).

D.5. Placebo Test with the Male Sample

I reproduce the baseline analysis using the sample of migrant married men aged 30 to 49 in the censuses 1962–2012. Consistent with the original interpretation, I find that while WWI military fatalities had a long-run impact on female labor force participation, they did not affect male labor force participation—estimates are precisely zero (Figure D.10).

D.6. Evidence from the Labor Force Surveys (1982–2013)

To corroborate results obtained with the censuses, I combine all thirty-one annual labor force surveys from 1982 to 2012. They provide respondents' counties of residence and birth. Labor force surveys have both drawbacks and advantages over the censuses. On the one hand, information about respondents' counties of birth is not available in the surveys prior to 1982, while it is available from 1962 onward in the censuses. Moreover, the sample size of the surveys is smaller than that of the censuses: while most censuses represent 20 to 25 percent samples of the population, the labor force surveys represent 1.5 to 3 percent samples. On the other hand, the labor force surveys contain a wider range of labor market outcomes: besides labor status, they contain weekly hours worked, ever worked status, the number of months since in current firm, and the monthly wage rate.

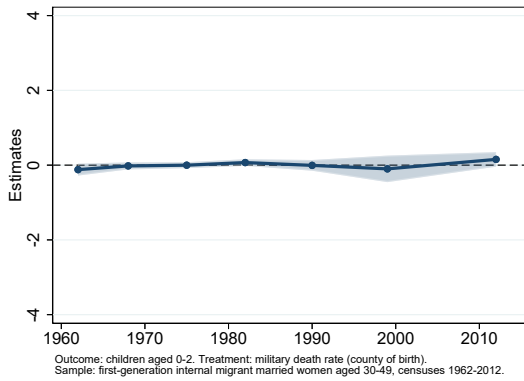
I pool all thirty-two labor force surveys and estimate the baseline specification on the sample of internal migrant married women aged 30 to 49 together with survey-year fixed effects. Results are reported in Table D.3. They are similar to those when using the censuses: for instance, the coefficient for *Employed* is 0.50

(standard error of 0.15) compared to an average coefficient of 0.52 in analogous regressions using the censuses 1982 to 2012.

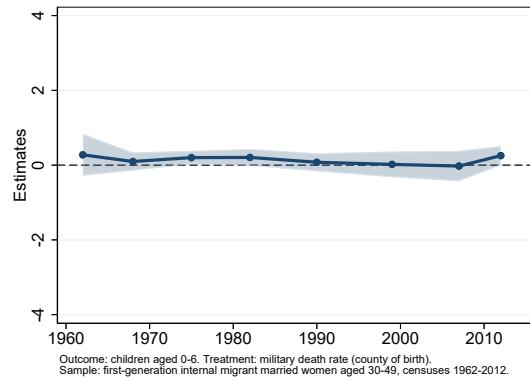
The labor force surveys provide other interesting results. While they are more likely to be in the labor force, there is no evidence that women born in counties that experienced greater military death rates are more likely to have been previously working: the coefficient on *Ever worked* is close to zero and non-significant. Moreover, conditional on being working, women born in counties that experienced 20 rather than 10 percent military death rates are 5 percentage points less likely to work full time, implying that they work 1.3 less hours per week (4 percent of mean hours). Moreover, they have been employed for 16 months longer (13 percent of mean months in firm). All estimates exhibit similar magnitudes, with standardized coefficients all close to 0.05. These results suggest that women born in counties that experienced greater military death rates have higher attachment to the labor force, but that this impact on the extensive margin does not translate to the intensive margin, since these women work shorter hours.

D.7. Unobserved Heterogeneity in Human Capital

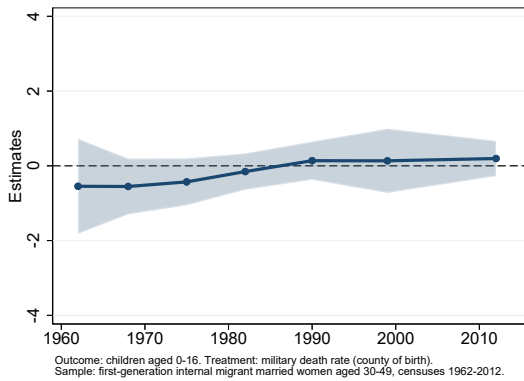
Although there is no evidence that WWI military fatalities had a long-run impact on women’s educational attainment—so that heterogeneity in *observed* human capital cannot account for the results—these could be driven by heterogeneity in *unobserved* human capital. For instance, women born in counties that experienced greater military death rates could have better information about the payoffs from working and about labor market conditions in general, making them more likely to get a higher wage draw and enter the labor force. To assess this possibility, I estimate the baseline specification with log monthly wage rates as the dependent variable on the sample of married women aged 30 to 49 in the labor force surveys 1982–2012 through a Heckman selection model in which husbands’ characteristics are used to control for selection into the labor force—husbands ages and age squared, education levels and employment status. I report results in Table D.4. The coefficient on military death rates is close to zero and non-significant. Controlling for educational attainment does not alter results. Overall, there is no evidence that heterogeneity in unobserved human capital helps explain the long-run impact of WWI military fatalities on women’s working behaviors.



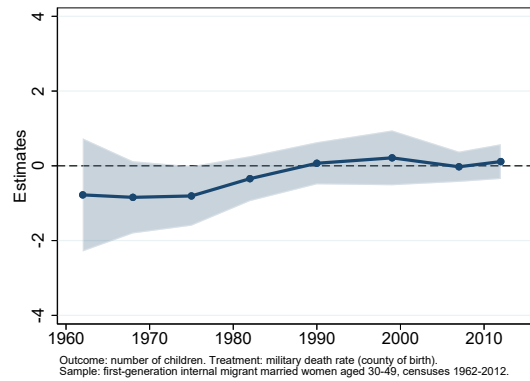
(a) Children Aged 0–2



(b) Children Aged 0–6



(c) Children Aged 0–16



(d) All Children

Figure D.1. The Effect of WWI Military Death Rates on Fertility

Notes: This figure presents OLS coefficients from estimating Specification 2 with the number of own children in the household as outcomes along with 95 percent confidence intervals, on the sample of internal migrant married women aged 30 to 49 in the censuses 1962–2012. The census of 2006 do not provide the number of children by age, so it is excluded from Panels a, b, and c. In panel a, the number of children is for ages 0–3 for the censuses of 1990 and 2012. In Panel c, the number of children is for ages 0–18 for the censuses of 2012. Standard errors are clustered both at the level of the respondents’ counties of birth and counties of residence. Estimates are computed using the sample weights provided in the censuses.

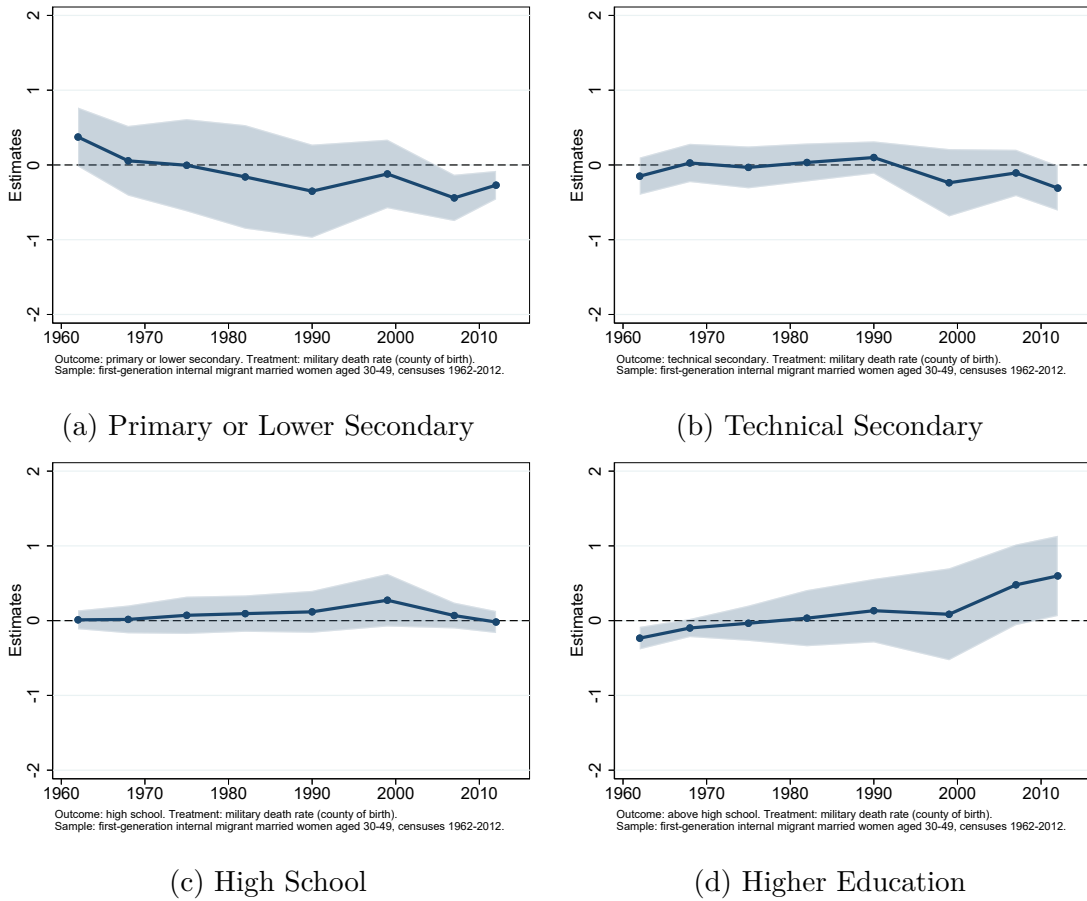


Figure D.2. The Effect of WWI Military Death Rates on Educational Attainment

Notes: This figure presents OLS coefficients from estimating Specification 2 with indicators for educational attainment as outcome along with 95 percent confidence intervals on the sample of internal migrant married women aged 30 to 49 in the censuses 1962–2012. Standard errors are clustered both at the level of the respondents’ counties of birth and counties of residence. Estimates are computed using the sample weights provided in the censuses.

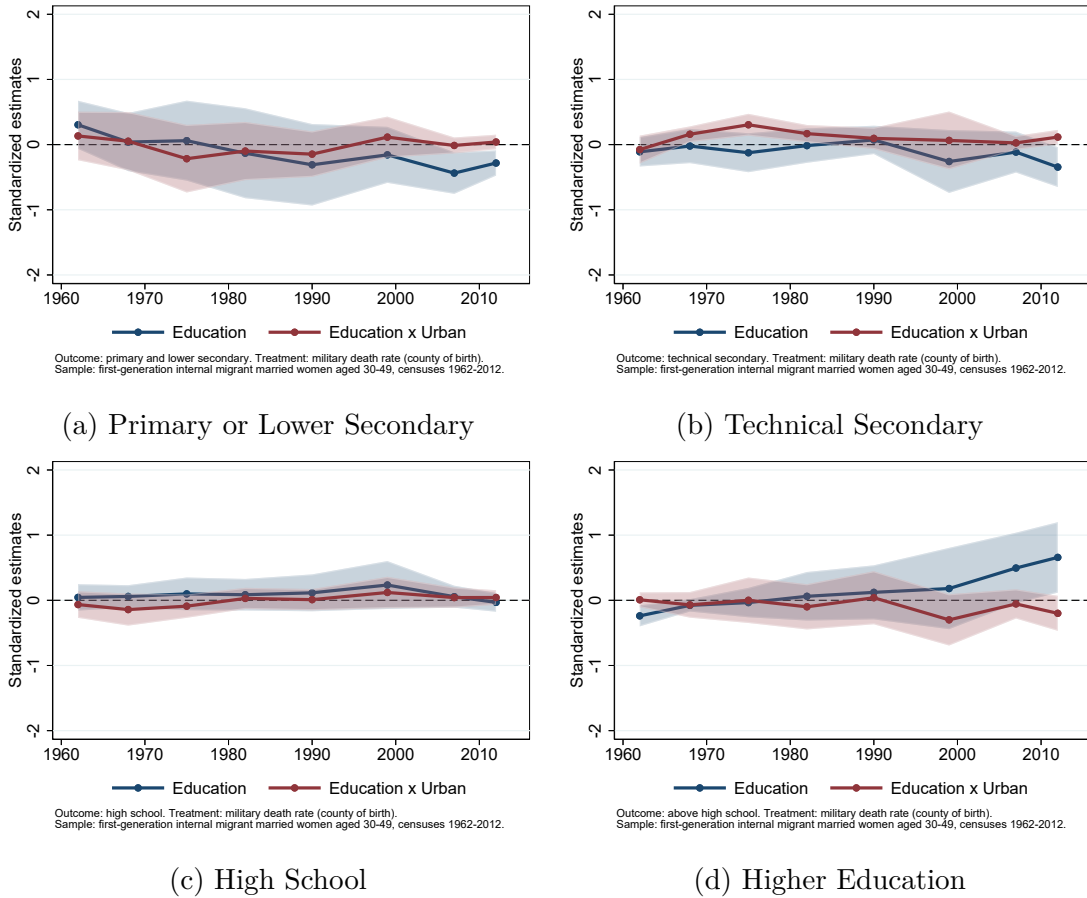


Figure D.3. The Effect of WWI Military Death Rates on Educational Attainment Heterogeneity Across Urban Status

Notes: This figure presents OLS coefficients from estimating Specification 2 with indicators for educational attainment as outcome interacted with an indicator for the urban status of the county, along with 95 percent confidence intervals on the sample of internal migrant married women aged 30 to 49 in the censuses 1962–2012. A county is considered urban if it hosts one of the ten largest cities in France. Standard errors are clustered both at the level of the respondents’ counties of birth and counties of residence. Estimates are computed using the sample weights provided in the censuses.

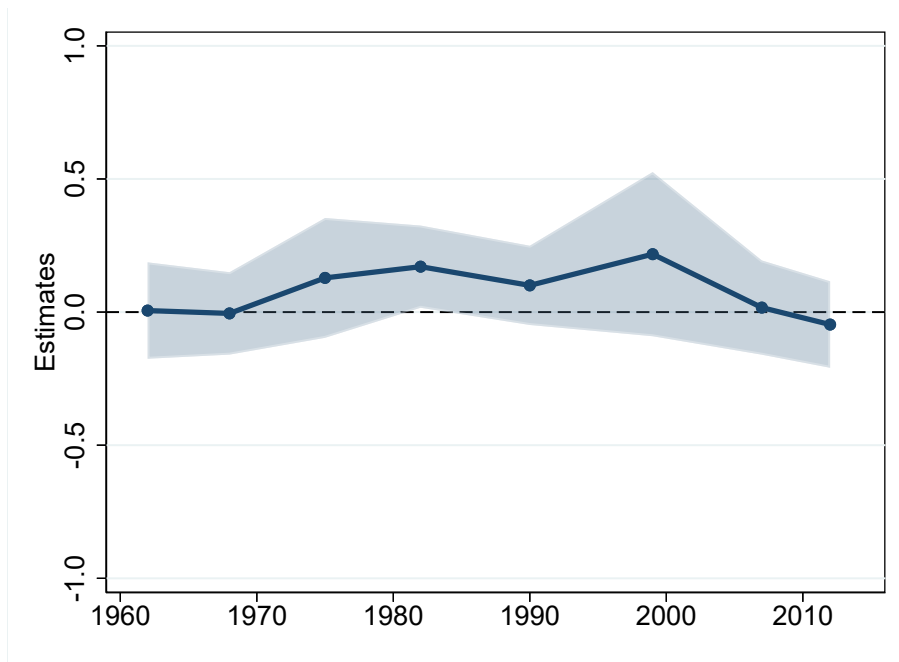


Figure D.4. The Effect of WWI Military Death Rates on Marital Status

Notes: This figure presents OLS coefficients from estimating Specification 2 with an indicator for being married as the outcome along with 95 percent confidence intervals on the sample of internal migrant women aged 30 to 49 in the censuses of 1962–2012. Standard errors are clustered both at the level of the respondents’ counties of birth and counties of residence. Estimates are computed using the sample weights provided in the censuses.

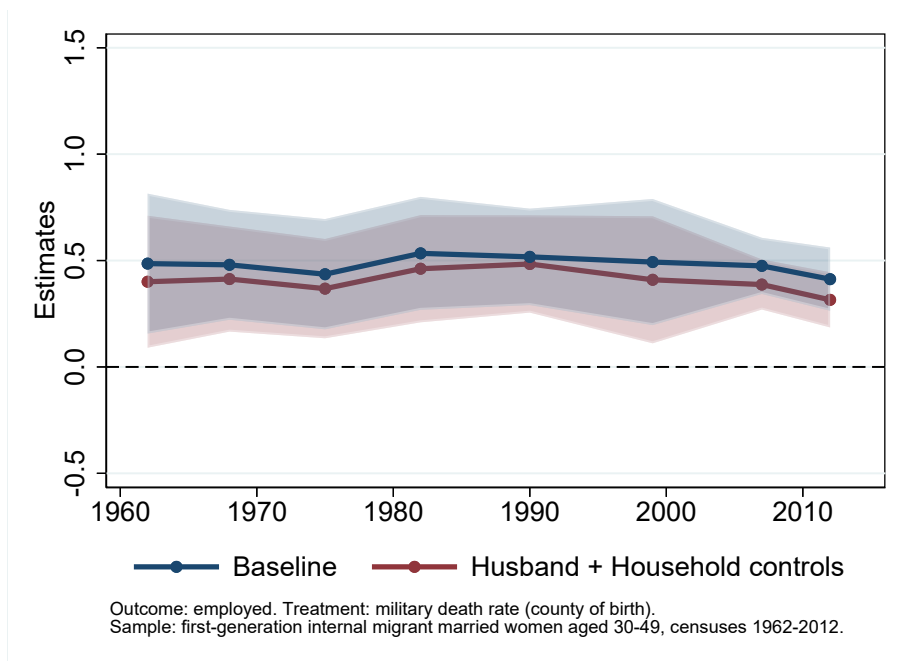


Figure D.5. The Effect of WWI Military Death Rates on FLP Household and Husband Controls

Notes: This figure reports OLS coefficients from estimating Specification 2 on the sample of internal migrant married women aged 30 to 49 in the censuses 1962–2012, when adding household and husband controls. Husband characteristics include husbands age and age squared, indicators for their educational attainment, and an indicator for whether they are employed. Household controls include an indicator for whether the household owns its housing, the number of rooms in the home, and a measure of housing quality. Standard errors are clustered both at the level of respondents’ counties of birth and counties of residence. Estimates are computed using the sample weights provided in the censuses.

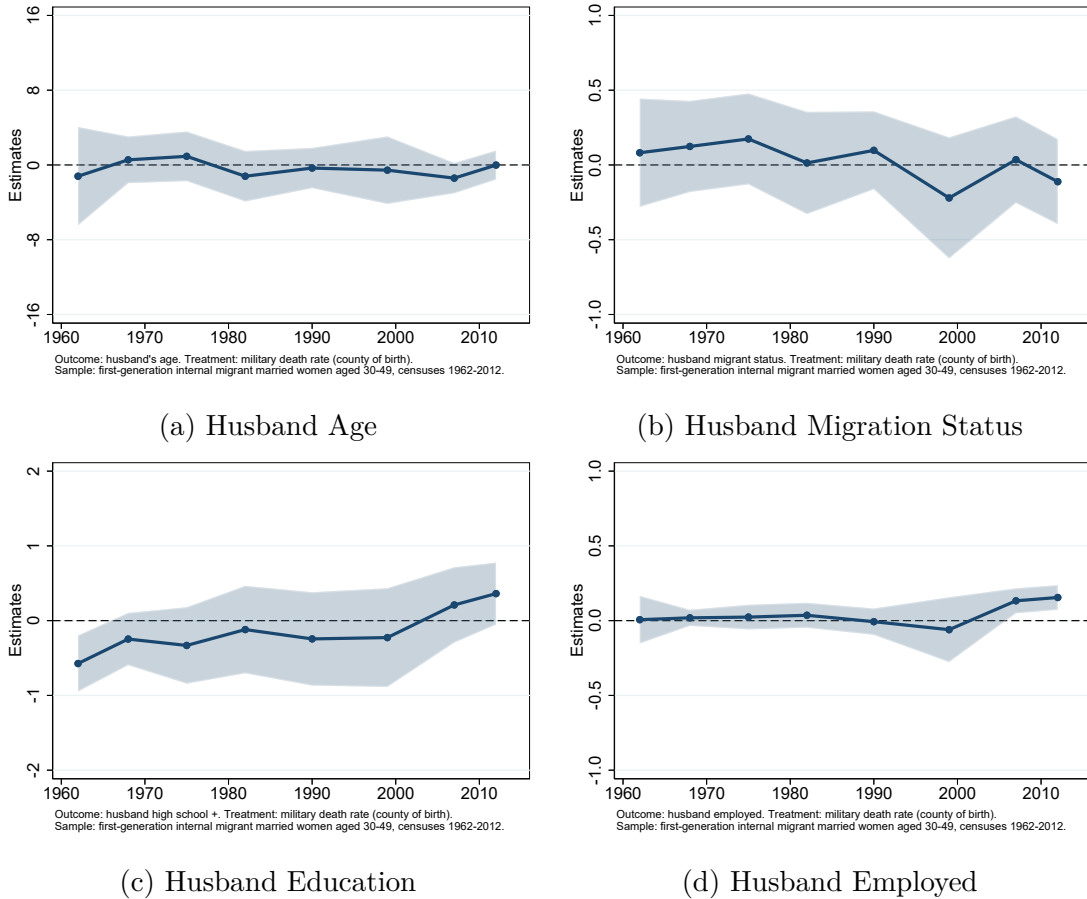
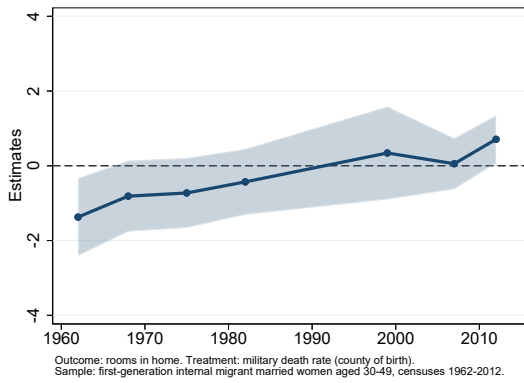
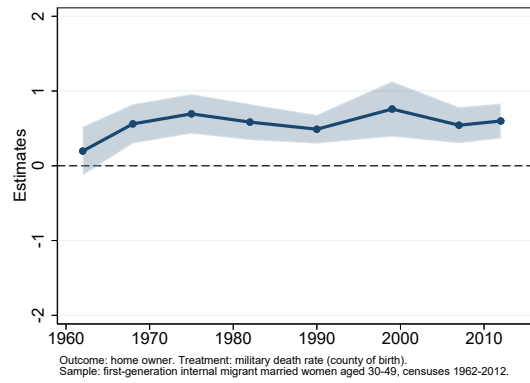


Figure D.6. The Effect of WWI Military Death Rates on Husband Characteristics

Notes: This figure reports OLS coefficients from estimating Specification 2 along with 95 percent confidence intervals on the sample of internal migrant married women aged 30 to 49 in the censuses 1962–2012. Outcomes are husbands’ age in Panel a, indicators for whether husbands are internal migrants in Panel b, have at least gone through high school in Panel c, and are employed in Panel d. Estimates are computed using the sample weights provided in the censuses.



(a) Rooms in Home



(b) Home Ownership

Figure D.7. The Effect of WWI Military Death Rates on Home Characteristics

Notes: This figure reports OLS coefficients from estimating Specification 2 along with 95 percent confidence intervals on the sample of internal migrant married women aged 30 to 49 in the censuses 1962–2012. Outcomes are the number of rooms in the home in Panel a and an indicator for whether the household owns their home in Panel b. Estimates are computed using the sample weights provided in the censuses.

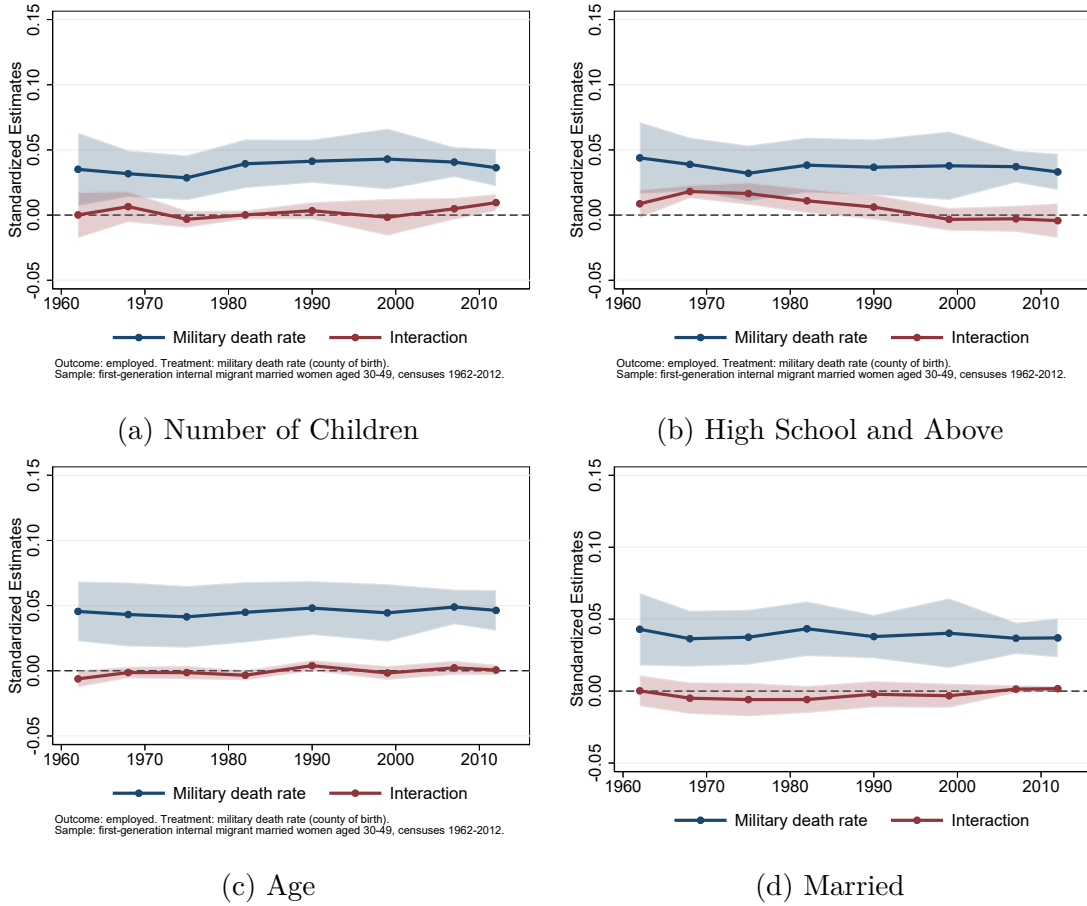
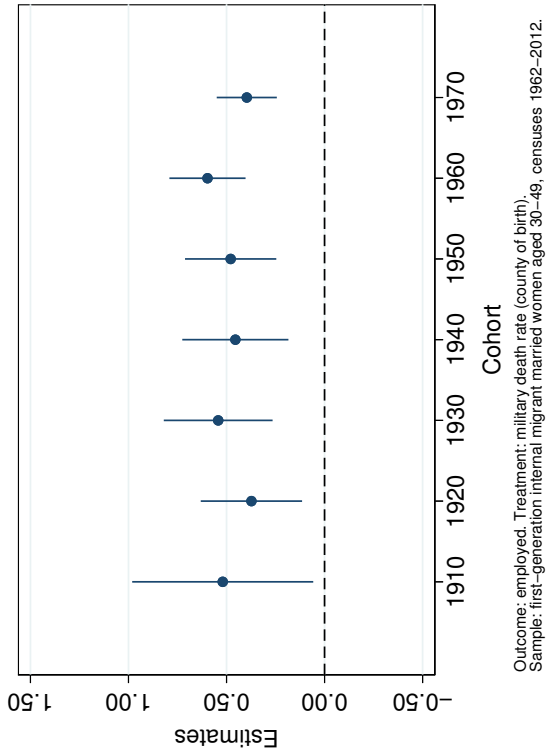
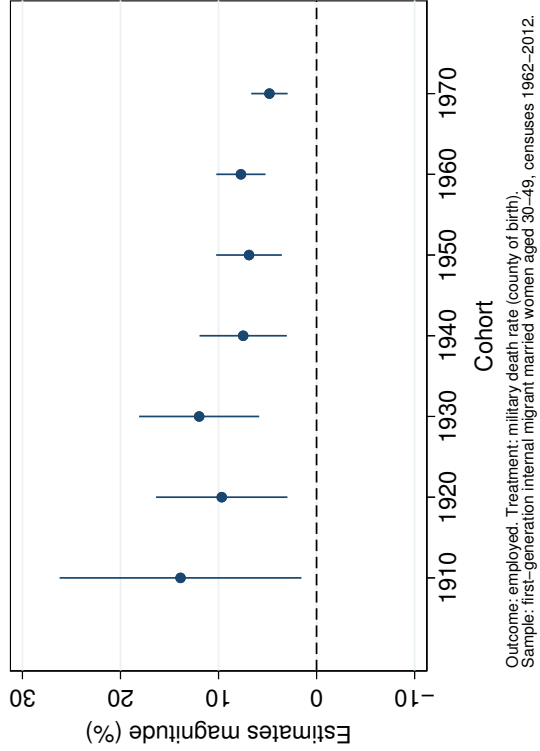


Figure D.8. The Effect of WWI Military Death Rates on FLEP Heterogeneity Across Observable Characteristics

Notes: This figure presents OLS coefficients from estimating Specification 2 together with interactions for various characteristics and 95 percent confidence intervals, on the sample of migrant married (except in Panel d) women aged 30 to 49 in the censuses 1962–2012. In Panel a, the baseline specification is augmented with the number of own children in the household and the interaction between the number of children and the military death rate exposure of the county of birth of the respondent; in Panel b, the specification adds an indicator variable for whether the respondent is a high school graduate together with the interaction term; in Panel c, the specification controls for age together with the interaction term (age fixed effects are not included); in Panel d, the specification adds an indicator variable for whether the respondent is married together with the interaction term. Standard errors are clustered both at the level of the respondents’ counties of birth and counties of residence. Estimates are computed using the sample weights provided in the censuses.



(a) Estimates



(b) Magnitude Relative to the Mean

Figure D.9. The Effect of WWI Military Death Rates on FLFP Cohort-Specific Estimates

Notes: Panel a reports OLS coefficients from estimating Specification 2 separately for each cohort on the pooled censuses 1962-2012 along with 95 percent confidence intervals around the estimates on the sample of migrant married women aged 30 to 49. All regressions include census-year fixed effects. The dependent variable is an indicator for whether the respondent is employed. Standard errors are clustered both at the level of respondents' counties of birth and counties of residence. Panel b reports the magnitude of coefficients from panel a with respect to the outcome mean. The magnitude is interpreted as the share of the mean in the dependent variable explained by switching from being born in a county exposed to a military death rate of 10 percent to a county exposed to a military death rate of 20 percent.

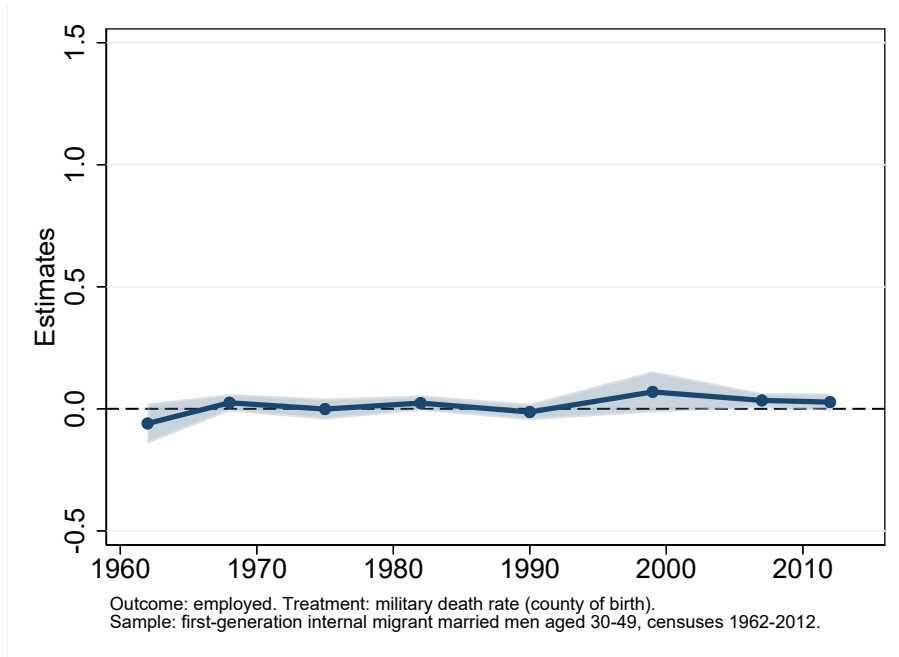


Figure D.10. The Effect of WWI Military Death Rates on Male Labor Force Participation

Notes: This figure presents OLS coefficients from estimating Specification 2 along with 95 percent confidence intervals on the sample of internal migrant married men aged 30 to 49 in the censuses 1962–2012. Standard errors are clustered both at the level of the respondents’ counties of birth and counties of residence. The sample consists of internal migrant married men aged 30 to 49. The estimates are computed using the sample weights provided in the censuses. Data from the censuses (1962–2012).

Table D.1. Effect of WWI Military Fatalities on Occupational Segregation

Dependent variable	Share of Men in Own Profession					
	(1)	(2)	(3)	(4)	(5)	(6)
Military death rate	0.08 [0.19]	0.01 [0.08]	-0.01 [0.08]	-0.01 [0.06]	-0.10 [0.07]	0.05 [0.13]
Census	1962	1968	1975	1982	1990	1999
Number of professions	392	328	128	466	454	454
County of residence FE	Yes	Yes	Yes	Yes	Yes	Yes
Historical controls	Yes	Yes	Yes	Yes	Yes	Yes
Clusters						
County of birth	87	92	92	92	92	92
County of residence	87	92	92	92	92	92
Observations	17,626	156,081	156,187	267,256	327,903	68,600
Outcome mean	0.42	0.40	0.39	0.33	0.33	0.33
Outcome s.d.	0.26	0.26	0.26	0.25	0.25	0.25

Notes: This table displays OLS coefficients from estimating Specification 2. The units of observations are first-generation internal migrant married women aged 30 to 49 that are employed. The outcome is the national-level share of men in the respondent's occupation. Estimates are computed using sample weights provided in the censuses. Standard errors are in brackets and are clustered both at the levels of counties of birth and of residence.

Table D.2. The Effect of WWI Military Death Rates on Fertility and Educational Attainment

Dependent variable	Number of children				Educational attainment			
	0-3 (1)	0-6 (2)	0-18 (3)	All (4)	Primary (5)	Tech. sec. (6)	High sch. (7)	Higher ed. (8)
Military death rate	0.33 [0.37]	0.63 [0.73]	-0.82 [0.86]	-0.59 [0.86]	-0.04 [0.55]	0.31 [0.58]	0.08 [0.40]	-0.35 [0.67]
Clusters								
Counties of birth	92	92	92	92	92	92	92	92
Counties of residence	92	92	92	92	92	92	92	92
Observations	343,863	343,863	343,863	343,863	343,863	343,863	343,863	343,863
Outcome mean	0.18	0.44	1.46	1.69	0.16	0.22	0.18	0.44

Notes: This table reports the OLS coefficients from estimating Specification 2 for the number of children in the household and educational attainment indicators as outcomes on the sample of internal migrant married women aged 30 to 49 in the labor force surveys 1982–2013. All regressions include pre-war controls, survey wave fixed effects, and cohort by military region of birth by county of residence fixed effects. *Primary:* primary education; *Tech. Sec.:* technical secondary education; *High sch.:* high school; *Higher ed.:* higher education. Standard errors are in brackets and are clustered both at the level of respondents' counties of birth and of residence. Estimates are computed using the sample weights provided in the labor force surveys.

Table D.3. The Effect of WWI Military Death Rates on FLFP

Dependent variable	Employed	Active	Ever worked	Full time	Hours	Months in firm
	(1)	(2)	(3)	(4)	(5)	(6)
Military death rate	0.50*** [0.15]	0.43*** [0.13]	0.02 [0.06]	-0.47** [0.21]	-13.4*** [4.9]	154*** [39]
Sample	All	All	All	Employed	Employed	Employed
Clusters						
Birth counties	92	92	92	92	92	92
Residence counties	92	92	92	92	92	92
Observations	244,001	244,001	244,001	170,383	170,383	170,383
Outcome mean	0.77	0.82	0.98	0.69	35.3	117
Outcome s.d.	0.42	0.38	0.14	0.46	10.9	91
Standardized coef.	0.05*** [0.01]	0.04*** [0.01]	0.01 [0.02]	-0.04** [0.02]	-0.05*** [0.02]	0.07*** [0.02]

Notes: This table reports the OLS coefficients from estimating Specification 2 across various labor market outcomes on the sample of internal migrant married women aged 30 to 49 in the labor surveys 1982–2012. All regressions include survey-year fixed effects, pre-war controls, and cohort by military region of birth by county of residence fixed effects. Standard errors are in brackets and are clustered both at the level of respondents’ counties of birth and counties of residence. Estimates are computed using the sample weights provided in the labor force surveys. *** Significant at the 1 percent level. ** 5 percent level.

Table D.4. The Effect of WWI Military Death Rates on Female Wage Rates

Dependent variable	<i>Log</i> monthly wage rate		
	(1)	(2)	(3)
Military death rate	-0.05 [0.26]	-0.13 [0.17]	-0.22 [0.16]
Years of education	No	Yes	No
Education category FE	No	No	Yes
Clusters			
Birth counties	92	92	92
Residence counties	92	92	92
Observations	179,183	179,183	179,183
Censored observations	73,767	73,767	73,767
Outcome mean	8.69	8.69	8.69

Notes: This table presents the coefficients from estimating Specification 2 with the log monthly wage rate as the outcome through a Heckman selection model on the sample of internal migrant married women aged 30 to 49 in the labor force surveys 1982–2012. All regressions include survey-year fixed effects as well as cohort, military region of birth, and county of residence fixed effects. Education categories consist of no schooling (excluded), primary education, secondary education, and higher education. The selection equation includes the following husband characteristics: husband age and age squared, education level, and employment status. Standard errors are in brackets and are clustered both at the level of respondents' counties of birth and of residence. Estimates are computed using the sample weights provided in the labor force surveys.

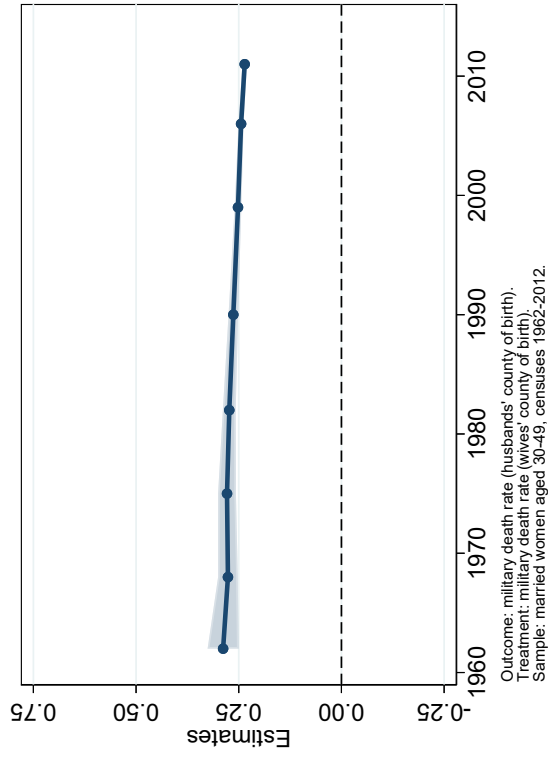
E. Homogamy in Military Death Rates

In this appendix, I provide evidence for homogamy in military death rates. That is, women born in counties that experienced greater military death rates are more likely to marry men born in counties that experienced greater military death rates, and vice versa. Using the censuses 1962 to 2012, I estimate the following specification on the sample of married women aged 30 to 49:

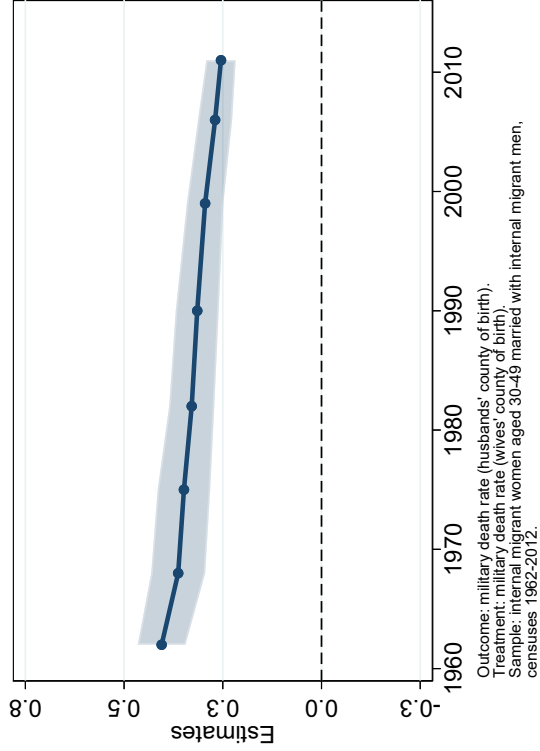
$$(E.1) \quad \begin{aligned} \text{death_rate}_{ihbrt}^{\text{husb}} &= \beta \text{death_rate}_b + \alpha_1 \mathbf{X}'_{1911,b} + \alpha_2 \mathbf{X}'_{1911,h} + \boldsymbol{\theta}_{i;r} \\ &+ \eta \text{Same}_{bh} + \mu \text{ldist}_{bh} + \varepsilon_{ihbrt}, \end{aligned}$$

where $\text{death_rate}_{ihbrt}^{\text{husb}}$ denotes the military death rates exposure of the county of birth of husband h of wife i , and $\boldsymbol{\theta}_{i;r}$ are cohort by county of residence fixed effects. $\mathbf{X}_{1911,b}$ and $\mathbf{X}_{1911,h}$ contain the set of pre-war controls corresponding to wives' and husbands' counties of birth, respectively. Wives' and husbands' military death rates are positively correlated as individuals born in the same county are more likely to marry with one another—this is the case for 43 to 57 percent of couples, with a downward trend over the period. To assess the extent of homogamy in military death rates beyond marriages between individuals born in the same county, I include an indicator variable (Same_{bh}) for whether spouses were born in the same county. I also include the log distance between wives' and husbands' counties of birth (ldist_{bh}). I cluster standard errors at the levels of wives' counties of birth and residence, and also at the level of their husbands' counties of birth.

I report results in Panel a of Figure E.1. There is a positive correlation between spouses birth counties' military death rates: each additional percentage point in military death rates exposure of wives' counties of birth is associated with an increase of 0.24 to 0.29 percentage point in the military death rates exposure of their husbands', with a downward trend from 1962 to 2012. The correlation is slightly larger for internal migrant couples—from 0.26 to 0.41 percentage point (Panel b). In Section 6, I provide evidence that one potential reason behind such homogamy is the more progressive views toward female labor held by women and men whose lineage was exposed to greater military death rates.



(a) All Wives and Husbands



(b) Internal Migrant Wives and Husbands

Figure E.1. Homogamy in Military Death Rates

Notes: This figure reports OLS coefficients from estimating Specification E.1 along with 95 percent confidence intervals on the sample of married women aged 30 to 49 in the censuses 1962-2012. Standard errors are clustered at the level of wives' counties of birth, counties of residence, and also at the level of their husbands' counties of birth. Estimates are computed using the sample weights provided in the censuses.

F. The Distribution of Household Tasks

In this appendix, I explore whether men in couples with women from counties that experienced greater military death rates perform relatively more household and childcare tasks, thereby freeing some time for their wives to enter the labor force. I use the Generation and Gender Survey (GGS) of 2005 as it contains questions related to the distribution of two types of household tasks for individuals with a partner present in the household, along with their counties of residence and birth: household chores (cooking, dish washing, grocery shopping, ironing, vacuuming) and child care (who dresses children, takes them to bed, stays with them when they are sick, plays with them, helps them with their homework, brings them to activities). Respondents were asked who performed these tasks: “always me,” “mostly me,” “as much me as my partner,” “mostly my partner,” and “always my partner.” When the respondent is a woman, I assign 0 to “always me” and 1 to “always my partner,” and use 0.25-point increments for responses in between. I use the opposite coding scheme when the respondent is a man, so that higher values indicate a more progressive distribution of tasks in the household (men doing a larger share of household chores). Finally, I aggregate these statements linearly and standardize them on a one-point scale.

I report summary statistics for the household chores index in Table F.1 and for the childcare index in Table F.2 for the sample of internal migrant respondents with a partner in the household. According to the above coding scheme, women “mostly” perform household tasks, with an index at 0.28. While women still perform most childcare tasks, men share a larger burden of these activities than household chores, with an index at 0.44.

To assess whether men in couples with women from counties that experienced greater military death rates perform relatively more household and childcare tasks, I estimate the following specification on the sample of internal migrant respondents with a partner in the household (and with children for the childcare index), where I include an interaction between the military death rate of respondents’ county of birth and their gender:

$$(F.1) \quad \begin{aligned} \text{index}_{ibr} &= \beta_1 \text{death_rate}_b + \beta_2 \text{Male}_i + \beta_3 \text{death_rate}_b \times \text{Male}_i \\ &+ \boldsymbol{\alpha} \mathbf{X}'_{1911,b} + \gamma_i + \delta_r + \varepsilon_{ibr}, \end{aligned}$$

where $\text{index}_{ibr t}$ is the household chores or the childcare index, $\mathbf{X}_{1911,b}$, a set of pre-war controls assigned at the level of the respondent’s county of birth, γ_i , cohort fixed effects, and, consistent with the epidemiological approach, δ_r , county of residence fixed effects. I use two-way clustering and cluster standard errors at the levels of counties of birth and residence. β is identified from variations in household tasks performed by internal migrant respondents of the same gender, of the same cohort, residing in the same county, but who were born in counties that experienced different military death rates. Table F.3 reports the results. Estimates imply that women are generally more likely to perform household tasks—the magnitude of the estimate is close to half a standard deviation in the outcome. However, WWI military fatalities have no impact on the distribution of tasks in the household for either gender.

Table F.1. Distribution of Household Chores

Higher values mean women do less chores

		Sex of respondent		
		All	Men	Women
1	Cooking	0.24 (0.27)	0.27 (0.28)	0.20 (0.26)
2	Washing Dishes	0.36 (0.29)	0.40 (0.29)	0.32 (0.28)
3	Buying Groceries	0.35 (0.28)	0.40 (0.29)	0.31 (0.27)
4	Ironing	0.15 (0.25)	0.17 (0.26)	0.13 (0.23)
5	Vacuuming	0.32 (0.29)	0.35 (0.29)	0.29 (0.28)
	Household chores index (five-point scale)	1.41 (0.88)	1.59 (0.91)	1.25 (0.82)
	Household chores index (one-point scale)	0.28 (0.18)	0.32 (0.18)	0.25 (0.16)
	Observations	2,074	916	1,158

Notes: This table reports summary statistics for the distribution of household chores on the sample of internal migrant respondents with a partner present in the household. Higher values indicate that women do less chores. Standard deviations are in parenthesis. Data from the GGS (2005).

Table F.2. Distribution of Childcare
Higher values mean women do less childcare

	Sex of respondent		
	All	Men	Women
1 Dressing children	0.30 (0.21)	0.34 (0.20)	0.28 (0.23)
2 Putting children to bed	0.40 (0.21)	0.44 (0.20)	0.37 (0.21)
3 Attending children when sick	0.28 (0.25)	0.34 (0.24)	0.23 (0.25)
4 Playing with children	0.45 (0.17)	0.48 (0.16)	0.44 (0.18)
5 Aiding children with homework	0.39 (0.21)	0.40 (0.19)	0.38 (0.22)
6 Bringing children to activities	0.38 (0.24)	0.42 (0.22)	0.35 (0.25)
Childcare index (five-point scale)	2.22 (0.80)	2.42 (0.70)	2.04 (0.84)
Childcare index (one-point scale)	0.44 (0.16)	0.48 (0.14)	0.41 (0.17)
Observations	762	324	438

Notes: This table reports summary statistics for the distribution of childcare on the sample of internal migrant respondents with a partner present in the household. Higher values indicate that women do less chores. Standard deviations are in parenthesis. Data from the GGS (2005).

Table F.3. The Effect of WWI Military Death Rates on Household Tasks

Dependent variable	Household tasks index			
	Chores		Childcare	
	(1)	(2)	(3)	(4)
Military death rate	-0.25 [0.27]	-0.16 [0.27]	-0.09 [0.33]	-0.09 [0.42]
Female	-0.08*** [0.01]	-0.05* [0.03]	-0.08*** [0.01]	-0.08* [0.05]
Military death rate \times Female		-0.17 [0.20]		-0.00 [0.31]
Clusters				
Residence counties	94	94	94	94
Birth counties	86	86	77	77
Observations	2,070	2,070	746	746
Outcome mean	0.28	0.28	0.44	0.44

Notes: This table reports the OLS coefficients from estimating Specification F.1 with the household chores and the childcare indexes as outcomes on the sample of internal migrant respondents in the GGS 2005. All regressions include pre-war controls as well as cohort and county of residence fixed effects. Standard errors are clustered at the level of respondents' counties of birth and of residence. Estimates are computed using the sample weights provided in the Generation and Gender Survey. *** Significant at the 1 percent level. * 10 percent level.

G. Pre-War Differences in Attitudes Toward Gender Roles

In this appendix, I explore whether there were pre-war differences in attitudes toward female labor and gender roles across counties that experienced different military death rates. To capture local attitudes toward women, I rely on legislative behaviors of *députés* in the Assemblée Nationale, France's lower house, and analyze two important political elements: support to the extension of suffrage and eligibility to women in labor courts (*conseils de prud'hommes*) in 1901, and support to the extensions of political suffrage to women in 1914. The former captures pre-war men's beliefs about women's abilities as workers, as parliamentary debates were specifically focused on this issue (Willemez, 2015). The second captures a more general aspect of men's belief about gender roles. While support to the bill of 1901 can be directly observed through roll-call votes, support to the bill of 1914 can only be observed through an open letter written by several women's rights organizations in June 1914—the bill was to be voted on in August 1914, but the war interrupted the process.¹⁹

To assess whether local attitudes toward gender roles were correlated with the distribution of WWI military fatalities, I regress military death rates on county-level supports for each of these two bills along with the determinants of military death rates (Table G.1). Results imply that neither was correlated with the residual variation in military death rates used through the article, suggesting that results in Section 6 are not driven by pre-war differences in attitudes toward gender roles.

¹⁹The bill was eventually voted on in May 1919. While 32 percent of *députés* supported female suffrage in 1914, 79 percent did so in 1919. The bill was rejected by the Sénat in 1922, France's upper house.

Table G.1. Military Death Rates and Pre-War Attitudes Across Counties

Dependent variable	Military death rate		
	(1)	(2)	(3)
Support to suffrage (1901)	0.20 [0.77]		0.47 [0.91]
Support to suffrage (1914)		-1.26 [0.99]	-1.38 [1.13]
Pre-war controls	Yes	Yes	Yes
Military region FE	Yes	Yes	Yes
Counties	86	86	86
R ²	0.825	0.831	0.829

Notes: This table reports OLS coefficients from regressing military death rates on pre-war supports to the extension of female suffrage across counties. *Support to suffrage (1901)* denotes average votes in favor of the extension of the suffrage to women for labor courts in 1901 in percent; *Support to suffrage (1914)*, average support to the bill extending the political suffrage to women in June 1914 in percent; *Pre-war characteristics* includes the share of rural population, the share of population born in the county, the female labor force participation rate, total fertility, the share of girls aged 5 to 19 who go to primary or secondary school, and personal wealth per inhabitants in Francs. Robust standard errors are in brackets.

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