

THE LEGACY OF THE MISSING MEN
THE LONG-RUN IMPACT OF WORLD WAR I ON
FEMALE LABOR FORCE PARTICIPATION

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APPENDIX
FOR ONLINE PUBLICATION

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A. Appendix Figures and Tables

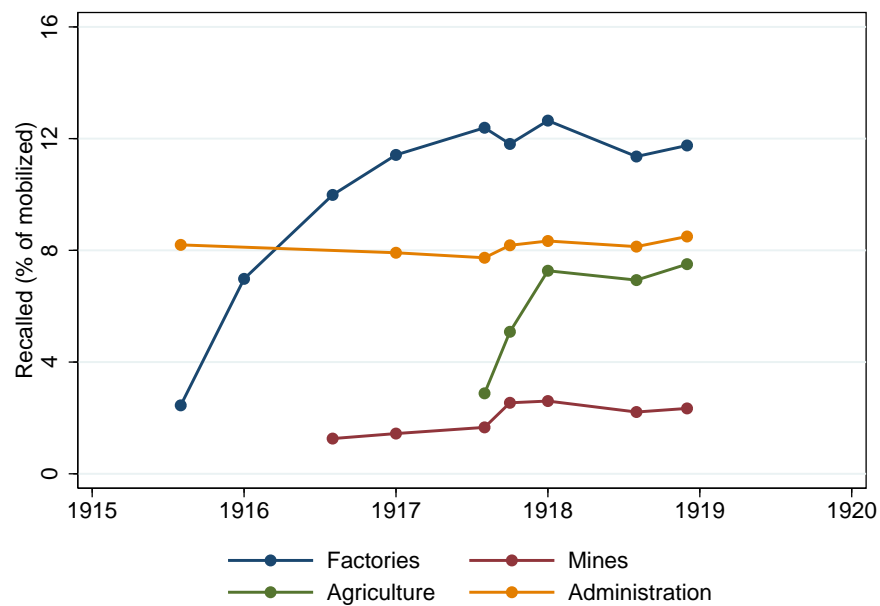
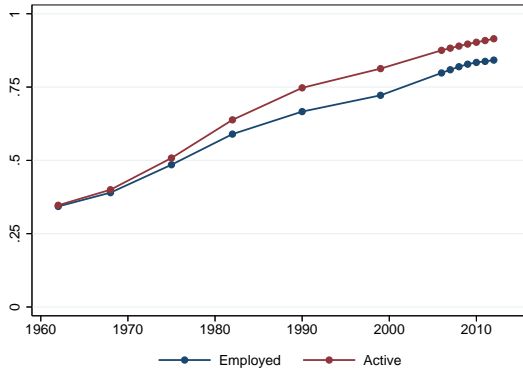
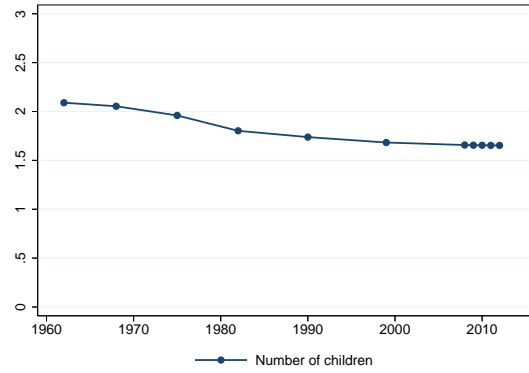


Figure A.1. Shares of Recalled Active Soldiers

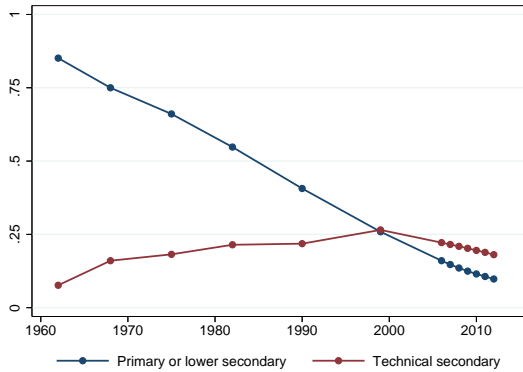
Notes: This figure displays the shares of soldiers that were recalled during the war. *Mines* includes navigation. *Administrations* includes railway transportation. *Agriculture* does not include soldiers on agricultural leaves. See Table A.2 for more details. Data are from Fontaine (1924, p. 61).



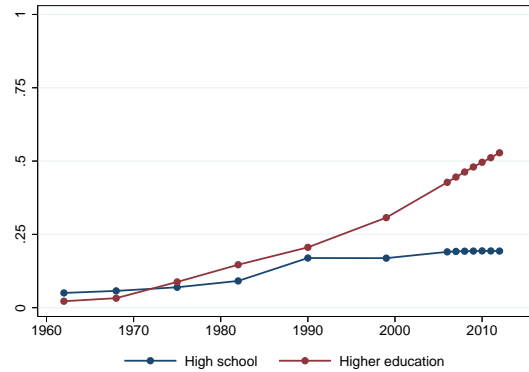
(a) Labor Force Participation



(b) Number of Children



(c) Educational Attainment



(d) Educational Attainment

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

Notes: This figure reports means of labor, fertility, and education outcomes across the 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. *Working* 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. The full set of summary statistics is available in the Supplementary Appendix. Data from the censuses (1962–2012).

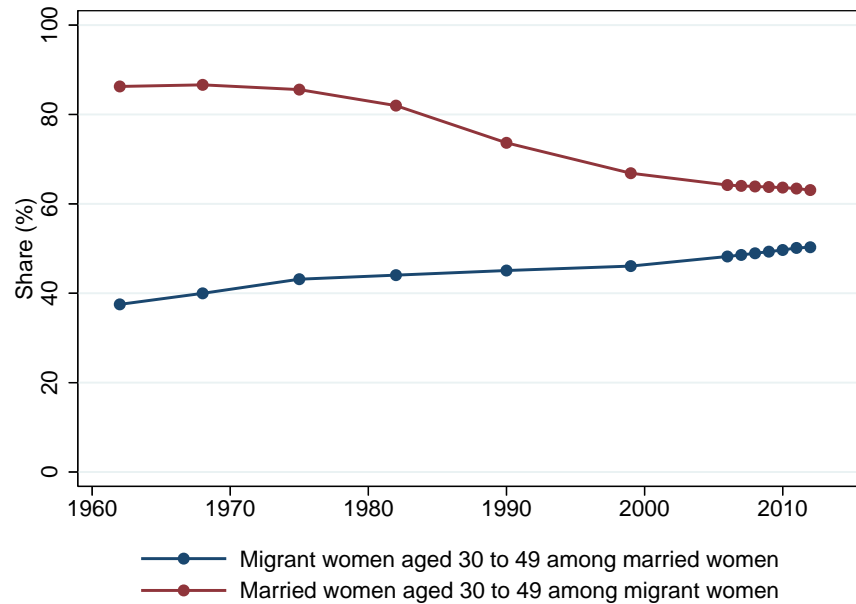
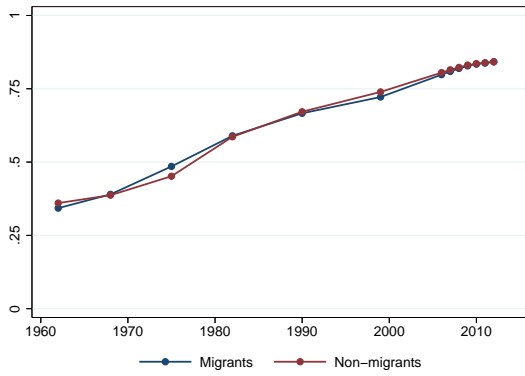
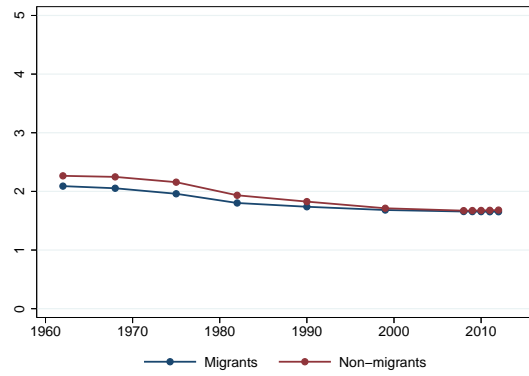


Figure A.3. Migrant and Married Women Aged 30 to 49

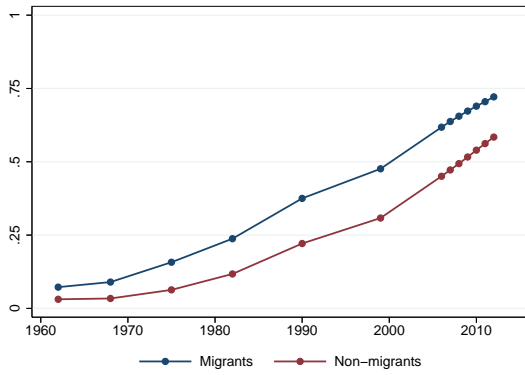
Notes: The blue line displays the share of migrant women among all French married women born in metropolitan France, aged 30 to 49. The red line displays the share of women married with a French husband born in metropolitan France among all French migrant women born in metropolitan France, aged 30 to 49, and residing in metropolitan France. Data from the censuses (1962–2012).



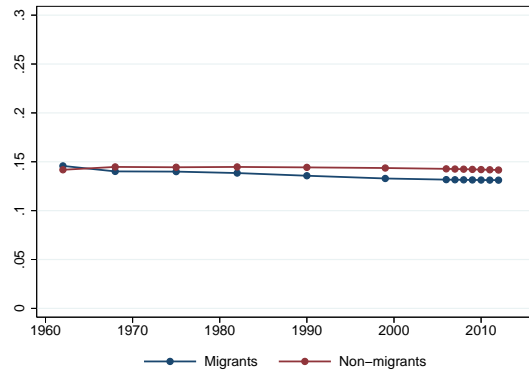
(a) Employed



(b) Number of Children



(c) High School and Above



(d) Military Death Rate

Figure A.4. Characteristics across Migration Status

Notes: This figure reports the means of various observable characteristics across migration status. The sample consists of migrant and non-migrant married women aged 30 to 49. Means are computed using sample weights provided in the censuses. Data from the censuses (1962–2012).

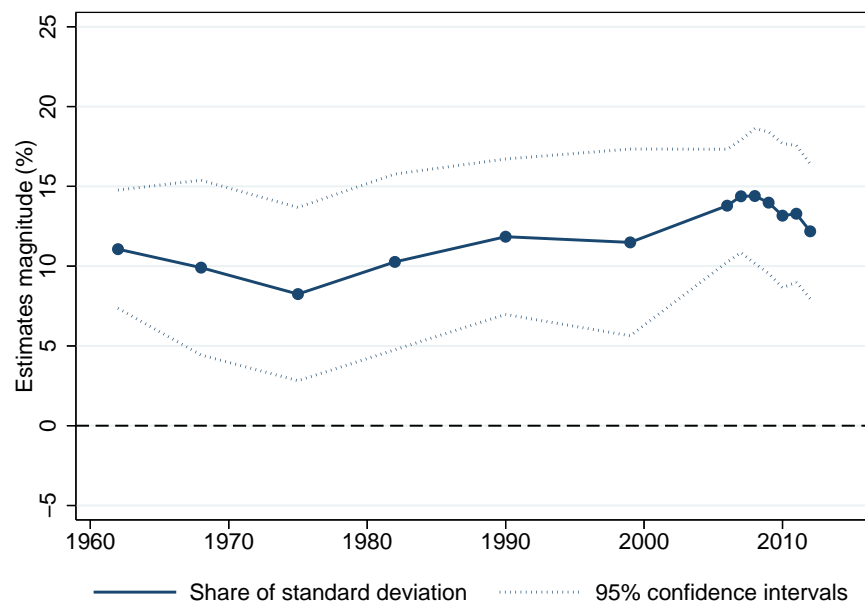
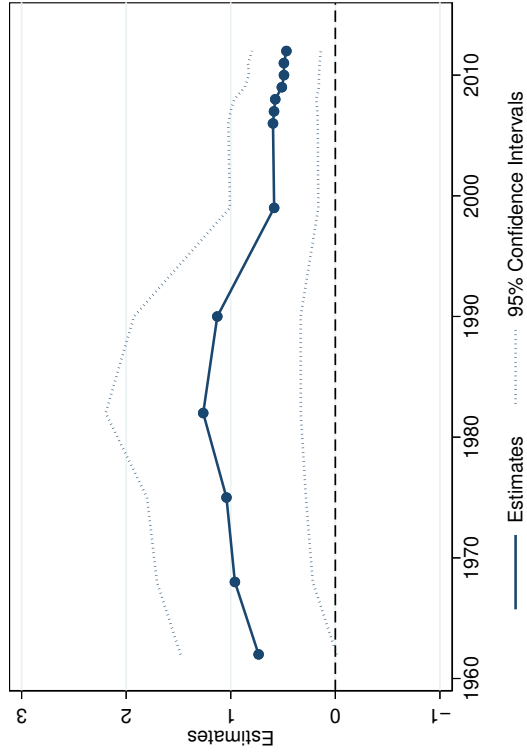
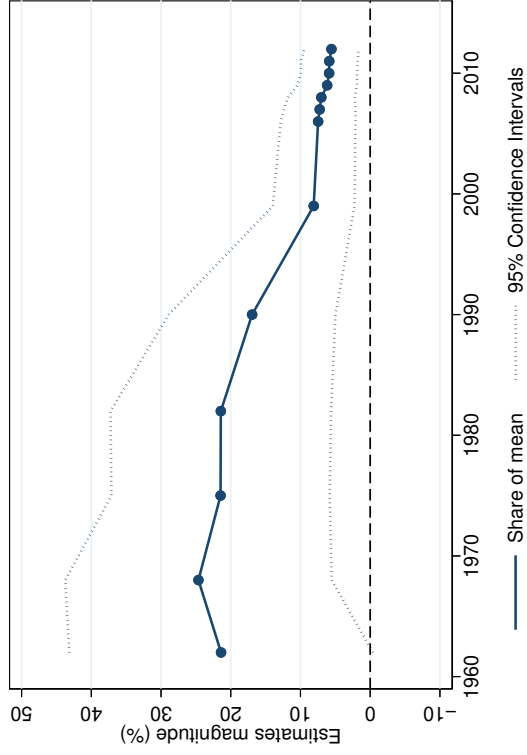


Figure A.5. Magnitude Relative to Standard Deviation
 Dependent Variable: Employed

Notes: This figure reports magnitudes of coefficients reported in Figure 3 with respect to the outcome standard deviation. It is the share of the standard deviation in the dependent variable explained by switching from being born in a département with a military death rate of 10 percent to a département with a military death rate of 20 percent. Data from the censuses (1962–2012).

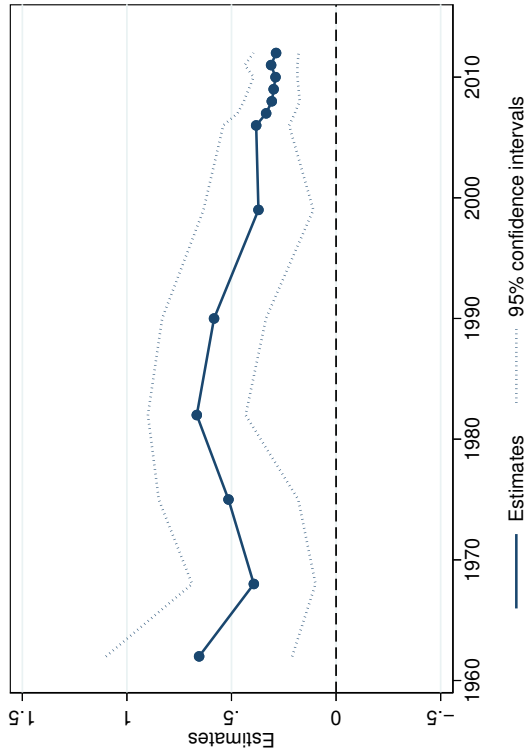


(a) Estimates

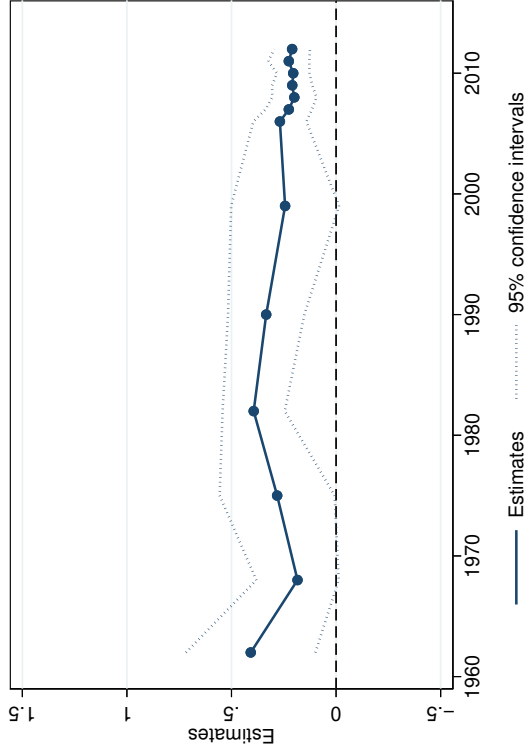
(b) Magnitude Relative to the Mean

Figure A.6. Intergenerational Transmission Estimates, 2SLS
Dependent Variable: Employed

Notes: Panel A reports 2SLS coefficients from estimating the following equation separately for each census t : $\text{employed}_{ibr,t} = \beta \Delta \text{FLFP}_b + \gamma_1 \mathbf{X}'_i + \gamma_2 \tilde{\mathbf{X}}'_{1911,b} + \mu_{1914,b} + \delta_r + \varepsilon_{ibr,t}$, where ΔFLFP_b , the change in female labor force participation in $\text{d}{\text{e}}\text{p}{a}{r}{t}{e}\text{m}\text{e}\text{n}\text{t}$ b between 1911 and 1921 in percentage points, is instrumented with military death rates. Other variables are similar to those in specification 1. Standard errors are clustered both at the level of individual's $\text{d}{\text{e}}\text{p}{a}{r}\text{t}\text{e}\text{m}\text{e}\text{n}\text{t}$ s of birth and residence. The sample consists of migrant married women aged 30 to 49. Panel B reports the magnitude of the coefficients from panel A 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 $\text{d}{\text{e}}\text{p}{a}\text{r}\text{t}\text{e}\text{m}\text{e}\text{n}\text{t}$ that experienced low (10 percent) rather than high (20 percent) military death rates. Estimates are computed using the sample weights provided in the censuses. Data from the censuses (1962-2012).



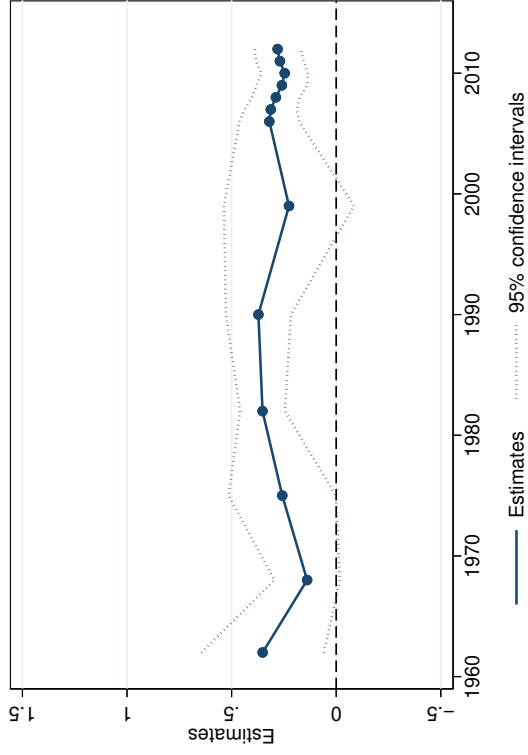
(a) No Wife Birth Département FE



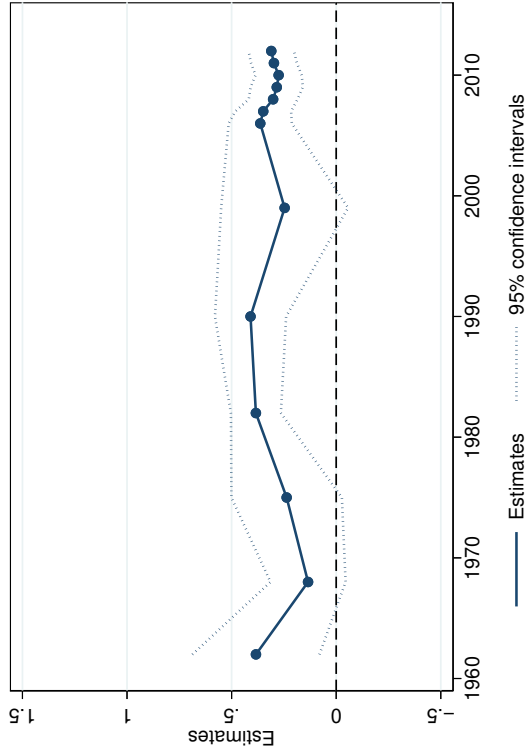
(b) Wife Birth Département FE

Figure A.7. Transmission from Husbands to Wives
Dependent Variable: Active

Notes: This figure reports OLS coefficients from estimating specification 5. Standard errors are clustered at the level of individuals' départements of residence and at the level of their husbands' départements of birth. The sample consists of migrant women aged 30 to 49 who are married with migrant men. The estimates are computed using the sample weights provided in the censuses. Data from the censuses (1962-2012).



(a) Add Husband and Household Controls



(b) Add Education and Fertility Controls

Figure A.8. Transmission from Husbands to Wives
Dependent Variable: Employed

Notes: This figure reports OLS coefficients from estimating specification 5. All regressions contain wives' département of birth fixed effects. Husband and household controls consist of 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 controls consist of the number of children in the home. Standard errors are clustered at the level of individuals' départements of residence and at the level of their husbands' départements of birth. The sample consists of migrant women aged 30 to 49 who are married with migrant men. The estimates are computed using the sample weights provided in the censuses. Data from the censuses (1962–2012).

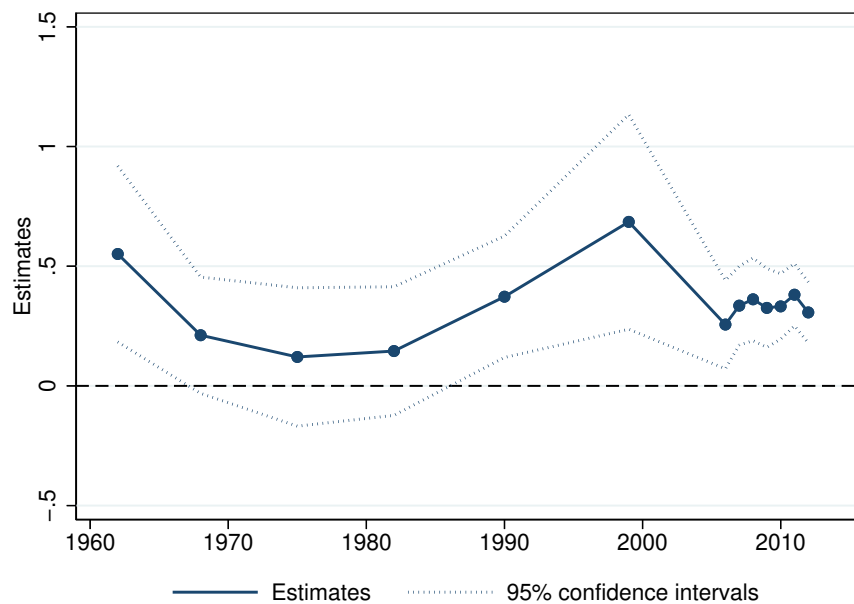


Figure A.9. Transmission from Husbands to Non-Migrant Wives
 Dependent Variable: Employed

Notes: This figure reports OLS coefficients from estimating specification 5. Standard errors are clustered at the level of individuals' départements of residence and at the level of their husbands' départements of birth. The sample consists of non-migrant women aged 30 to 49 who are married with migrant men. The estimates are computed using the sample weights provided in the censuses. Data from the censuses (1962–2012).

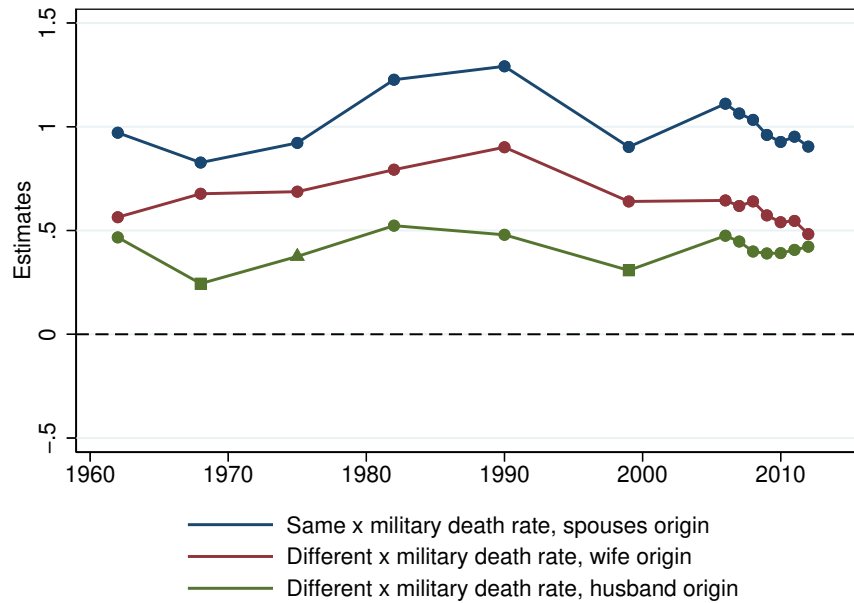
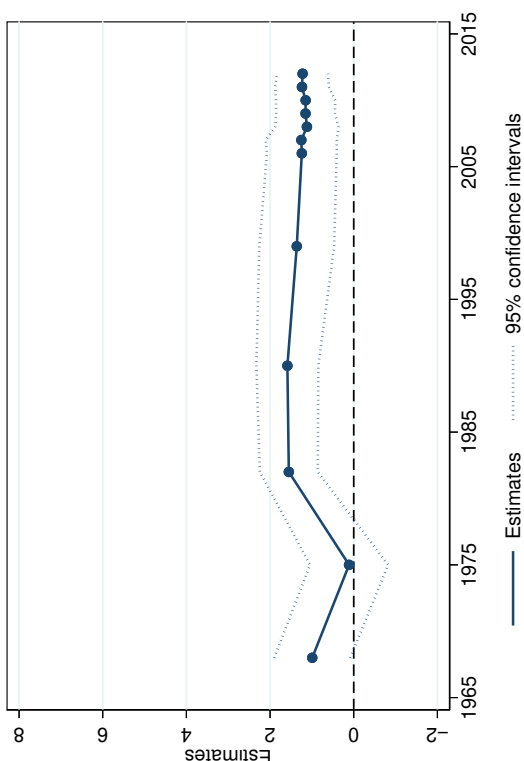


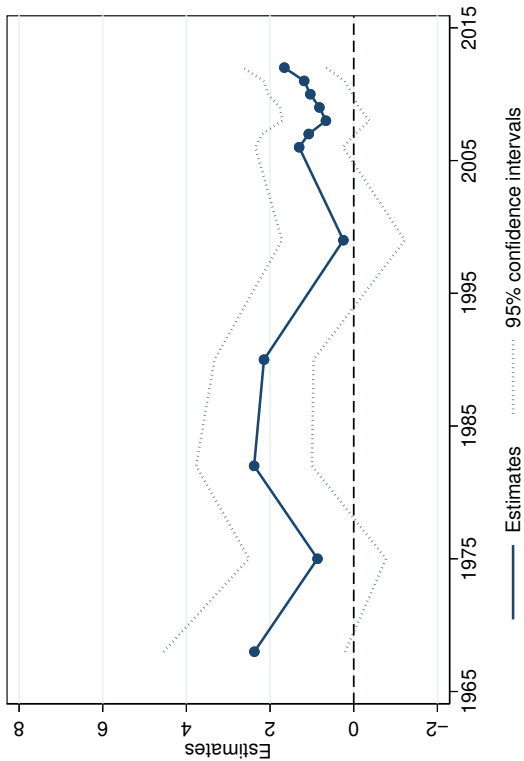
Figure A.10. Wives' versus Husbands' Origins
 Dependent Variable: Employed

Notes: This figure reports OLS coefficients from estimating specification 6. Standard errors are clustered at the level of individuals' départements of residence, wives' départements of birth and husbands départements of birth. The sample consists of migrant women aged 30 to 49 who are married with a migrant man. The estimates are computed using the sample weights provided in the censuses. Data from the censuses (1962–2012).

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



(a) Assimilation



(b) Preservation

Figure A.11. Local Social Interactions

Dependent Variable: Employed

Control for husband, household, and respondent characteristics

Notes: Panel A reports OLS coefficients on $death_rate_c$ from estimating specification 7, and panel B, OLS coefficients on the interaction $sh_res_{b,c} \times death_rate_b$ from estimating specification 8. Standard errors are clustered at the level of individuals' départements of birth and residence. The sample consists of migrant women aged 30 to 49 who are married with migrant men. The estimates are computed using the sample weights provided in the censuses. Data from the censuses (1968-2012).

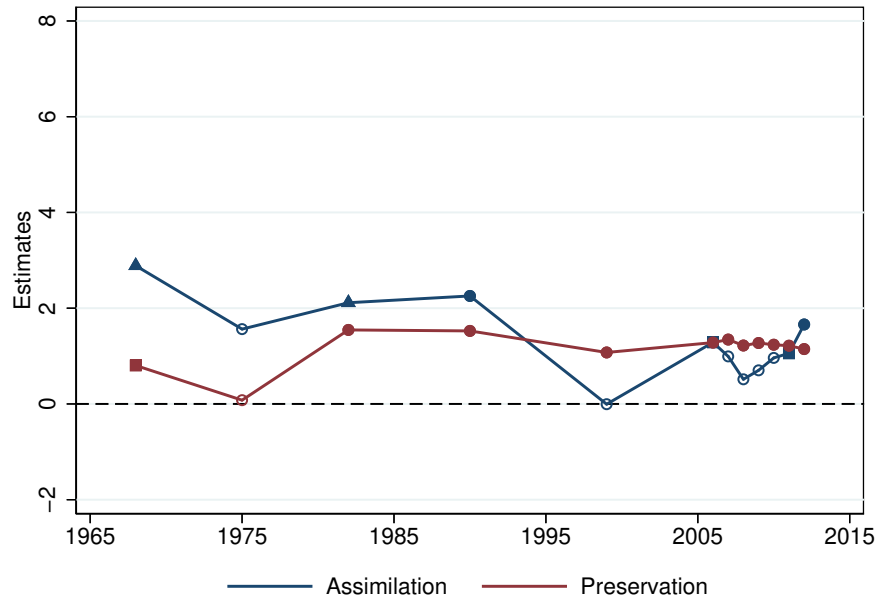


Figure A.12. Local Social Interactions
 Dependent Variable: Employed

Notes: This figure reports OLS coefficients from estimating specifications 7 and 8 together. Standard errors are clustered at the level of individuals' départements of residence and at the level of their husbands' départements of birth. The sample consists of non-migrant women aged 30 to 49 who are married with migrant men. The estimates are computed using the sample weights provided in the censuses (1962–2012).

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

Table A.1. The Impact of Military Fatalities on Sex Ratios

Dependent variable	Change in sex ratio, 1911–1921						
	20–24	25–29	30–34	35–39	40–44	45–49	50–54
Age group							
Military death rate	0.61 [0.95]	-0.46** [0.19]	-0.58*** [0.13]	-0.37*** [0.13]	-0.32** [0.13]	-0.09 [0.14]	0.00 [0.12]
Départements	87	87	87	87	87	87	87
R ²	0.328	0.892	0.932	0.929	0.794	0.348	0.109
Mean sex ratio 1911	107	99	100	100	99	99	97
Mean sex ratio 1921	86	80	82	84	91	96	95

Notes: This table reports OLS coefficients from estimating $\Delta\text{sex_ratio}_{a,d} = \alpha + \beta\text{death_rate}_d + \varepsilon_{a,d}$, where $\Delta\text{sex_ratio}_{a,d}$ denotes the change in sex ratio among age group a in département d in percentage points between 1911 and 1921. Sex ratios are the ratio of the male to the female population in percent. Robust standard errors are in brackets.

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

Table A.2. Soldiers Mobilized Outside of Armed Services

Date	Mobilized outside of armed services (thousand)					Mobilized
	War factories	Mines	Administrations	Agriculture	Total	
08–1914			408			3,781
07–1915	122					4,978
01–1916	339					4,857
07–1916	467	59				4,677
01–1917	515	65	357			4,511
07–1917	559	75	349	130	1,113	4,512
09–1917	511	110	354	220	1,195	4,327
01–1918	534	110	352	307	1,303	4,223
07–1918	493	96	353	301	1,243	4,340
11–1918	487	97	352	311	1,247	4,143

Notes: *Mines* includes navigation. *Administrations* includes railway transportations. *Agriculture* does not include soldiers on agricultural leaves. No data when left blank. Data are from Fontaine (1924, p. 61).

Table A.3. Characteristics Across Migration Status
Extended Labor Force Surveys 2005–2012

Characteristic	Employed	Active	High school	Children
	(1)	(2)	(3)	(4)
2nd Generation Migrant	0.00 [0.01]	0.00 [0.01]	0.09*** [0.02]	0.02 [0.02]
Birth year FE	Yes	Yes	Yes	Yes
Birth-residence département FE	Yes	Yes	Yes	Yes
Observations	132,478	132,478	132,478	132,478
Outcome mean	0.78	0.82	0.38	1.28
Outcome s.d.	0.41	0.39	0.48	1.10

Notes: This table reports estimates from regressing various characteristics on a second-generation migrant status indicator. The baseline comparison group consists of natives, i.e. women who were born in their département of residence as well as both their parents. The sample consists of married women aged 30 to 59. Second-generation migrants corresponds to non-migrant women whose mothers and fathers were born in another département. Standard deviations are reported in brackets and are clustered at the level of départements of residence.

*** Significant at the 1 percent level.

Table A.4. Transmission from Mothers to Daughters
Extended Labor Force Surveys 2005–2012

Dependent variable	Active				
	(1)	(2)	(3)	(4)	(5)
Military death rate, mother origin	0.98** [0.41]	0.77* [0.42]	1.01** [0.45]	1.13** [0.44]	0.99*** [0.30]
Birth year FE	Yes	Yes	Yes	Yes	Yes
Birth-residence département FE	Yes	Yes	Yes	Yes	Yes
Parental controls					
Mother pre-war controls (1911)	Yes	Yes	Yes	Yes	Yes
Father birth département FE	No	Yes	Yes	Yes	No
Mother birth region FE	No	No	Yes	Yes	No
Parental characteristics	No	No	No	Yes	No
Husband and household characteristics					
Education, number of children	No	No	No	Yes	No
Clusters					
Birth-residence département	95	95	95	95	95
Mother département of birth	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 OLS coefficients from estimating specification 4. All regressions include survey-year indicators. Husbands and household characteristics include husbands' incomes, age, age squared, educational attainment, an indicator for home ownership, and the number of rooms in the home. Parental characteristics include indicators for parents' occupational status and mothers' labor status. Standard errors are clustered at the level of départements of residence and mothers' départements of birth. The sample consists of non-migrant married women aged 30 to 59 whose mothers and fathers were born in another département in columns 1–4, and whose mothers (but not necessarily fathers) were born in another département in column 5. Estimates are computed using the sample weights provided in the extended labor force surveys.

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

Table A.5. Transmission from Fathers to Daughters
Extended Labor Force Surveys 2005–2012

Dependent variable	Employed			
	(1)	(2)	(3)	(4)
Military death rate, father origin	0.76** [0.33]	0.47 [0.34]	0.29 [0.48]	0.16 [0.49]
Birth year FE	Yes	Yes	Yes	Yes
Birth-residence département FE	Yes	Yes	Yes	Yes
Parental controls				
Father pre-war controls (1911)	Yes	Yes	Yes	Yes
Mother birth département FE	No	Yes	Yes	Yes
Father birth region FE	No	No	Yes	Yes
Parental characteristics	No	No	No	Yes
Husband and household characteristics				
Education, number of children	No	No	No	Yes
Clusters				
Birth-residence département	95	95	95	95
Mother département of birth	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 OLS coefficients from estimating specification 4. All regressions include survey-year indicators. Husbands and household characteristics include husbands' incomes, age, age squared, educational attainment, an indicator for home ownership, and the number of rooms in the home. Parental characteristics include indicators for parents' occupational status and mothers' labor status. Standard errors are clustered at the level of départements of residence and mothers' départements of birth. The sample consists of non-migrant married women aged 30 to 59 whose mothers and fathers were born in another département. Estimates are computed using the sample weights provided in the extended labor force surveys.

** Significant at the 5 percent level.

Table A.6. Transmission from Parents to Daughters
Extended Labor Force Surveys 2005–2012

Dependent variable	Employed		
	(1)	(2)	(3)
Same \times military death rate, parents origin	1.19*** [0.42]	1.04* [0.59]	1.09* [0.60]
Different \times military death rate, mother origin	0.73* [0.43]	0.82* [0.46]	0.94** [0.45]
Different \times military death rate, father origin	0.46 [0.34]	0.16 [0.58]	0.07 [0.60]
Birth year FE	Yes	Yes	Yes
Birth-residence département FE	Yes	Yes	Yes
Parental controls			
Parents pre-war controls (1911)	Yes	Yes	Yes
Parents birth regions FE	No	Yes	Yes
Parental characteristics	No	No	Yes
Husband and household characteristics			
Education, number of children	No	No	Yes
Clusters			
Birth-residence département	95	95	95
Mother département of birth	95	95	95
Father département of birth	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 OLS coefficients from estimating a modified version of specification 4. All regressions include survey-year indicators. Standard errors are clustered at the level of départements of residence, mothers' départements of birth, and fathers' départements of birth. The sample consists of non-migrant married women aged 30 to 59 whose mothers and fathers were born in another département. Estimates are computed using the sample weights provided in the extended labor force surveys.

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

Table A.7. Transmission from Mothers to Daughters, 2SLS
Extended Labor Force Surveys 2005–2012

Dependent variable	Mother worked			Active		
	A. First Stage			B. Second Stage		
	(1)	(2)	(3)	(4)	(5)	(6)
Military death rate, mother origin	2.04*** [0.59]	2.92*** [0.66]	2.67*** [0.65]			
Mother worked				0.62* [0.33]	0.35** [0.16]	0.31* [0.17]
Birth year FE	Yes	Yes	Yes	Yes	Yes	Yes
Birth-residence département FE	Yes	Yes	Yes	Yes	Yes	Yes
Parental controls						
Mother pre-war controls (1911)	Yes	Yes	Yes	Yes	Yes	Yes
Father birth département FE	No	Yes	Yes	No	Yes	Yes
Parental characteristics	No	No	Yes	No	No	Yes
Husband and household characteristics	No	No	Yes	No	No	Yes
Education, number of children	No	No	Yes	No	No	Yes
Clusters						
Birth-residence département	94	94	94	94	94	94
Mother département of birth	94	94	94	94	94	94
Observations	12,181	12,181	12,181	12,181	12,181	12,181
Outcome mean	0.58	0.58	0.58	0.85	0.85	0.85
Outcome s.d.	0.49	0.49	0.49	0.36	0.36	0.36
Cragg-Donald Wald F	48.56	74.77	62.58			
Kleibergen-Paap Wald rk F	13.55	20.76	17.69			

Notes: All regressions include survey-year indicators. Standard errors are clustered at the level of the départements of birth and mothers départements of birth. The sample consists of non-migrant married women aged 30 to 59 whose mothers and fathers were born in another département. The estimates are computed using the sample weights provided in the extended labor force surveys.

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

Table A.8. Transmission from Mothers to Daughters
Extended Labor Force Surveys 2005–2012

Dependent variable	Employed		
	(1)	(2)	(3)
Same × military death rate, mothers origin	2.28** [0.87]	2.83*** [0.82]	2.78*** [0.77]
Different × military death rate, mother origin	0.95** [0.47]	1.28*** [0.47]	0.95** [0.45]
Different × military death rate, mother-in-law origin	1.20* [0.70]	1.40** [0.65]	1.53** [0.64]
Birth year FE	Yes	Yes	Yes
Birth-residence département FE	Yes	Yes	Yes
Husband birth département FE	Yes	Yes	Yes
Parental controls			
Mothers pre-war controls (1911)	Yes	Yes	Yes
Father birth département FE	No	Yes	Yes
Mothers birth regions FE	No	Yes	Yes
Parental characteristics	No	No	Yes
Husband and household characteristics	No	No	Yes
Education, number of children	No	No	Yes
Clusters			
Birth-residence département	94	94	94
Mother département of birth	94	94	94
Mother-in-law département of birth	94	94	94
Observations	13,389	13,389	12,496
Outcome mean	0.81	0.81	0.81
Outcome s.d.	0.39	0.39	0.39

Notes: This table reports OLS coefficients from estimating a modified version of specification 4. All regressions include survey-year indicators. Husbands and household characteristics include husbands' incomes, age, age squared, educational attainment, an indicator for home ownership, and the number of rooms in the home. Parental characteristics include indicators for parents' and parents-in-law's occupational status and mothers' and mothers-in-law's labor status. Standard errors are clustered at the level of départements of residence, mothers' départements of birth, and mothers-in-law's départements of birth. The sample consists of second-generation migrant married women aged 30 to 59. Estimates are computed using the sample weights provided in the extended labor force surveys.

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

Table A.9. Preferences and Beliefs About Religion

INTERPRETATION: HIGHER VALUES INDICATE DISAGREEMENT WITH THE STATEMENT

Statement	Men	Women
1 A religious event is important for a newborn	0.44 (0.40)	0.43 (0.41)
2 A religious marriage is important for those who marry	0.51 (0.39)	0.51 (0.40)
3 A religious event is important for a funeral	0.36 (0.38)	0.35 (0.39)
Cultural values index (three-points scale)	1.30 (1.03)	1.29 (1.05)
Cultural values index (one-point scale)	0.43 (0.34)	0.43 (0.35)
Observations	1,143	1,649

Notes: This table presents summary statistics for cultural beliefs variables related to religion constructed using the GGS dataset. Disagreement with the statement implies higher values. Standard deviations are in parenthesis. The sample consists of French internal migrants born in metropolitan France. Data from the GGS (2005).

Table A.10. Preferences and Beliefs About Marriage

INTERPRETATION: HIGHER VALUES INDICATE DISAGREEMENT WITH THE STATEMENT

Statement	Men	Women
1 Marriage is not an outdated institution ^a	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)	0.78 (0.29)
3 Even if individuals in a couple are unhappy, they shouldn't divorce ^c	0.79 (0.27)	0.84 (0.25)
4 Marriage is a lifelong commitment that should never be broken	0.44 (0.38)	0.43 (0.39)
Cultural values index (four-points scale)	2.28 (0.81)	2.34 (0.82)
Cultural values index (one-point scale)	0.57 (0.20)	0.58 (0.20)
Observations	1,139	1,646

Notes: This table presents summary statistics for cultural beliefs variables related to marriage constructed using the GGS dataset. Disagreement with the statement implies higher values. Standard deviations are in parenthesis. The sample consists of French internal migrants born in metropolitan France. Data from the GGS (2005).

^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.11. Preferences and Beliefs About Family

INTERPRETATION: HIGHER VALUES INDICATE DISAGREEMENT WITH THE STATEMENT

Statement	Men	Women
1 To thrive, a woman must have children	0.31 (0.32)	0.37 (0.36)
2 To thrive, a man must have children	0.33 (0.34)	0.40 (0.35)
3 To grow up happy, a child needs a home with a mother and a father	0.11 (0.20)	0.16 (0.25)
4 If parents divorce, it is better for the child to stay with the mother rather than the father	0.58 (0.32)	0.53 (0.31)
5 A woman cannot have and raise a child by herself if she doesn't want a stable relationship with a man ^a	0.59 (0.34)	0.57 (0.35)
Cultural values index (five-points scale)	1.92 (0.95)	2.02 (1.02)
Cultural values index (one-point scale)	0.38 (0.19)	0.40 (0.20)
Observations	1,126	1,646

Notes: This table presents summary statistics for cultural beliefs variables related to family constructed using the GGS dataset. Disagreement with the statement implies higher values. Standard deviations are in parenthesis. The sample consists of French internal migrants born in metropolitan France. Data from the GGS (2005).

^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.12. Respondents with a Partner

Dependent variable	Cultural values index (one-point scale)				
	(1)	(2)	(3)	(4)	(5)
Military death rate	1.36*** [0.35]	1.22*** [0.45]	1.09** [0.47]	1.14** [0.47]	1.15** [0.47]
Female	0.02 [0.01]	-0.01 [0.04]	-0.02 [0.04]	-0.02 [0.04]	-0.02 [0.04]
Military death rate × Female		0.22 [0.24]	0.27 [0.24]	0.25 [0.25]	0.31 [0.25]
Birth year, residence département FE	Yes	Yes	Yes	Yes	Yes
Pre-war controls (1911)	Yes	Yes	Yes	Yes	Yes
Partner and household controls	No	No	No	Yes	Yes
Employment, education, fertility controls	No	No	No	No	Yes
Parental controls					
Mother active	No	No	Yes	Yes	Yes
Parents education	No	No	Yes	Yes	Yes
Clusters					
Residence département	94	94	94	94	94
Birth département	86	86	86	86	86
Observations	1,808	1,808	1,808	1,808	1,808
Outcome mean	0.75	0.75	0.75	0.75	0.75

Notes: This table presents OLS coefficients from estimating specification 9. Partner and household controls contain an indicator for whether the respondent's home is a house rather than an apartment, the number of rooms in the home, an indicator for whether the respondent owns her housing, the age of her partner, indicators for her partner's educational attainment, and her partner's monthly log income. Standard errors are clustered at the level of départements of birth and of residence. The sample consists of migrants in a couple. The estimates are computed using the sample weights provided in the GGS (2005).

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

Table A.13. Four-Questions Cultural Index

Dependent variable	Cultural values index (one-point scale)				
	(1)	(2)	(3)	(4)	(5)
Military death rate	0.88*** [0.19]	0.85*** [0.26]	0.77*** [0.27]	0.80*** [0.27]	0.81*** [0.28]
Female	0.04*** [0.01]	0.03 [0.02]	0.02 [0.02]	0.03 [0.02]	0.02 [0.02]
Military death rate \times Female		0.04 [0.16]	0.09 [0.16]	0.06 [0.16]	0.11 [0.17]
Birth year, residence département FE	Yes	Yes	Yes	Yes	Yes
Pre-war controls (1911)	Yes	Yes	Yes	Yes	Yes
Household controls	No	No	No	Yes	Yes
Employment, education, fertility controls	No	No	No	No	Yes
Parental controls					
Mother active	No	No	Yes	Yes	Yes
Parents education	No	No	Yes	Yes	Yes
Clusters					
Residence département	95	95	95	95	95
Birth département	88	88	88	88	88
Observations	2,796	2,796	2,796	2,796	2,796
Outcome mean	0.64	0.64	0.64	0.64	0.64

Notes: This table presents OLS coefficients from estimating specification 9. Household controls contain an indicator for whether the respondent's home is a house rather than an apartment, the number of rooms in the home, an indicator for whether the respondent owns her housing, and an indicator for whether the respondent has a partner present in the household. Standard errors are clustered at the level of départements of birth and of residence. The sample consists of internal migrants. The estimates are computed using the sample weights provided in the GGS. *** Significant at the 1 percent level.

Table A.14. Interactions, Respondents with a Partner

Dependent variable	Cultural values index (one-point scale)				
	(1)	(2)	(3)	(4)	(5)
Military death rate	1.15*** [0.21]	1.20*** [0.21]	1.16*** [0.21]	1.15*** [0.22]	1.16*** [0.23]
Partner present	-0.00 [0.01]	0.01 [0.03]	0.01 [0.03]	0.01 [0.03]	0.01 [0.03]
Military death rate × Partner present		-0.07 [0.22]	-0.08 [0.22]	-0.07 [0.22]	-0.04 [0.22]
Birth year, residence département FE	Yes	Yes	Yes	Yes	Yes
Pre-war controls (1911)	Yes	Yes	Yes	Yes	Yes
Household controls	No	No	No	Yes	Yes
Employment, education, fertility controls	No	No	No	No	Yes
Parental controls					
Mother active	No	No	Yes	Yes	Yes
Parents education	No	No	Yes	Yes	Yes
Clusters					
Residence département	95	95	95	95	95
Birth département	88	88	88	88	88
Observations	2,816	2,816	2,816	2,816	2,816
Outcome mean	0.75	0.75	0.75	0.75	0.75

Notes: This table presents OLS coefficients from estimating specification 9. Household controls contain an indicator for whether the respondent's home is a house rather than an apartment, the number of rooms in the home, and an indicator for whether the respondent owns her housing. Standard errors are clustered at the level of départements of birth and of residence. The sample consists of internal migrants with a partner. The estimates are computed using the sample weights provided in the GGS (2005).

*** Significant at the 1 percent level.

Table A.15. Religion, Marriage, and Family

Dependent variable	Cultural values index (one-point scale)					
	Religion		Marriage		Family	
	(1)	(2)	(3)	(4)	(5)	(6)
Military death rate	-0.29 [0.53]	-0.31 [0.57]	0.16 [0.30]	0.07 [0.32]	-0.14 [0.28]	0.01 [0.30]
Female	-0.01 [0.02]	-0.01 [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]		0.13 [0.13]		-0.23 [0.17]
Birth year FE	Yes	Yes	Yes	Yes	Yes	Yes
Residence département FE	Yes	Yes	Yes	Yes	Yes	Yes
Pre-war controls (1911)	Yes	Yes	Yes	Yes	Yes	Yes
Clusters						
Residence département	95	95	95	95	95	95
Birth département	88	88	88	88	88	88
Observations	2,840	2,840	2,807	2,807	2,751	2,751
Outcome mean	0.43	0.43	0.58	0.58	0.39	0.39

Notes: This table presents OLS coefficients from estimating specification 9 with the religion, marriage, and family cultural indexes as outcomes. Standard errors are clustered at the level of départements of birth and of residence. The sample consists of internal migrants. The estimates are computed using the sample weights provided in the GGS (2005).

* Significant at the 10 percent level.

B. Robustness of Baseline Estimates

I present a series of robustness checks that support the credibility of baseline estimates from section 3. Estimates are robust to the choice of regression model (section B.1), selective migration (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. Panel A of Figure B.1 reports estimates from specification 1 when using alternative probability models. Marginal coefficients evaluated at the mean of the data from Probit and Logit models are similar to OLS coefficients. Estimates are also similar 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 (Figures B.2–B.4).

B.2. Selective Migration Patterns

To assess the extent of selective in-migration, 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 (EZ) from 1999 to 2012.¹ (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.² I replicate the baseline

¹ZIUPs are more numerous than EZs (Table B.1): the sample contains 600 to 800 ZIUPs with 70 to 800 observations per ZIUP, and 300 EZs with 2,000 observations per EZ. ZIUPs do not cover the full territory since some rural areas are not included in a ZIUP—84 to 96 percent of respondents in the sample reside in a ZIUP.

²The 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. Several thousand observations are singletons (i.e., they are single observations in a given municipality). This is the case for 3,000 to 8,000 observations, which are removed from regressions that use municipality fixed effects.

specification successively with local labor market and city fixed effects instead of département of residence fixed effects (Panel B of Figure B.1). Coefficients are similar across specifications, suggesting little correlation between military death rates and in-migration sorting within destination départements. Results are unchanged when removing urban départements—those with Paris, Lyon, Marseille, and Nice (Figure B.5).

I also control for the relative attractiveness of origin and destination départements. I build two types of measures: a département-specific measure and a dyadic measure. Département-specific measures are the share of immigrants among the population residing in destination départements and the share of emigrants among the population born in origin départements. The first measure captures the pull force of destination départements and the second measure, the push force of origin départements. Dyadic measures are specific to each pair of départements. The first dyadic measure is the share of immigrants born in an origin département among the population of immigrants in a destination département. It captures the pull force of destination départements specifically toward each origin département. Conversely, the second dyadic measure is the share of emigrants in an individual's destination département among the population of emigrants born in her origin département. It captures the push force of origin départements specifically toward each destination département. 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 25.³ I build these measures relative to the female population of working age to better capture female labor-related migration dynamics.⁴ Together with the bilateral distance between origin and destination départements, these four variables are likely to capture a large part of the bias introduced by labor-related migration patterns.

I also estimate the baseline specification on the subsample of internal migrants

³Censuses do not provide information on the timing of migration except whether respondents migrated more than a decade earlier.

⁴For 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 départements 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 départements 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.

who were already present in their département of residence in the previous census—the one-and-a-half generation.⁵ This subsample might be less subject to biases due to selective migration as it contains individuals who migrated at least one decade earlier.

Overall, biases introduced by labor-related migrations might not be a significant issue as département of residence fixed effects control for the permanent relative attractiveness of a département and because concentration of population into départements with more dynamic labor markets—the more urban départements—has been low in the second half of the twentieth century. Instead, this type of labor-related migrations primarily occurred in the late nineteenth and early twentieth centuries (White, 1989). Moreover, World War I did not alter migration patterns across départements with varying military death rates.

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. All robustness checks are similar when the outcome is a labor force participant indicator (Figure B.6).⁶

B.3. Inaccurate Assignment of Military Death Rates

The epidemiological approach requires regressors to be assigned at the level of cultural origin (i.e., the département in which internal migrants' ancestors were residing during the interwar period). However, censuses do not provide parental origins. I am therefore constrained to assume that départements of birth and origin are identical. I relax this assumption by replicating the analysis with the extended labor force surveys 2005–2012, which provide parental origins. I restrict the sample to internal migrants whose parents were born in the same département as themselves. Parents of typical respondents in the sample were born during the 1930s, so that départements of birth likely trace to the war. I provide results in Table B.2. They are in line with those obtained with the censuses and imply that women born—and both whose parents were born—in départements that experienced high (20 percent) rather than low (10 percent) military death rates were 8 percentage

⁵This information is not available in the censuses after 2008.

⁶The full set of results for both outcomes is available in the Supplementary Appendix.

points more likely to be working between 2005 and 2012. This suggests that the inaccurate assignment of military death rates using the censuses only creates a slight attenuation bias in baseline estimates.

A related concern is that départements of birth and childhood might differ. If socialization with the surrounding environment beyond own parents is an important mechanism, assimilating départements of birth with cultural origins might underestimate the long-run impact of WWI military fatalities on women's working behaviors. I use information about residence locations one census earlier (this information is only available in the censuses of 1962 to 1999) and replicate the baseline analysis when including fixed effects for the département of residence in the previous census. This enables a comparison of women with similar migration histories. I report results in Figure B.7. 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.⁷ As a result, these decisions might mediate the relationship between women's working behaviors and WWI military fatalities. For example, if women born in départements that experienced greater military death rates held more favorable 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 and include educational attainment indicators and control for number of children.⁸ These additional controls do not affect results (panel D of Figure B.1). 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 département that experienced high (20 percent) rather than low (10

⁷See Greenwood, Guner and Vandenbroucke (2017) for a recent review of family economics models.

⁸Educational 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.

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.

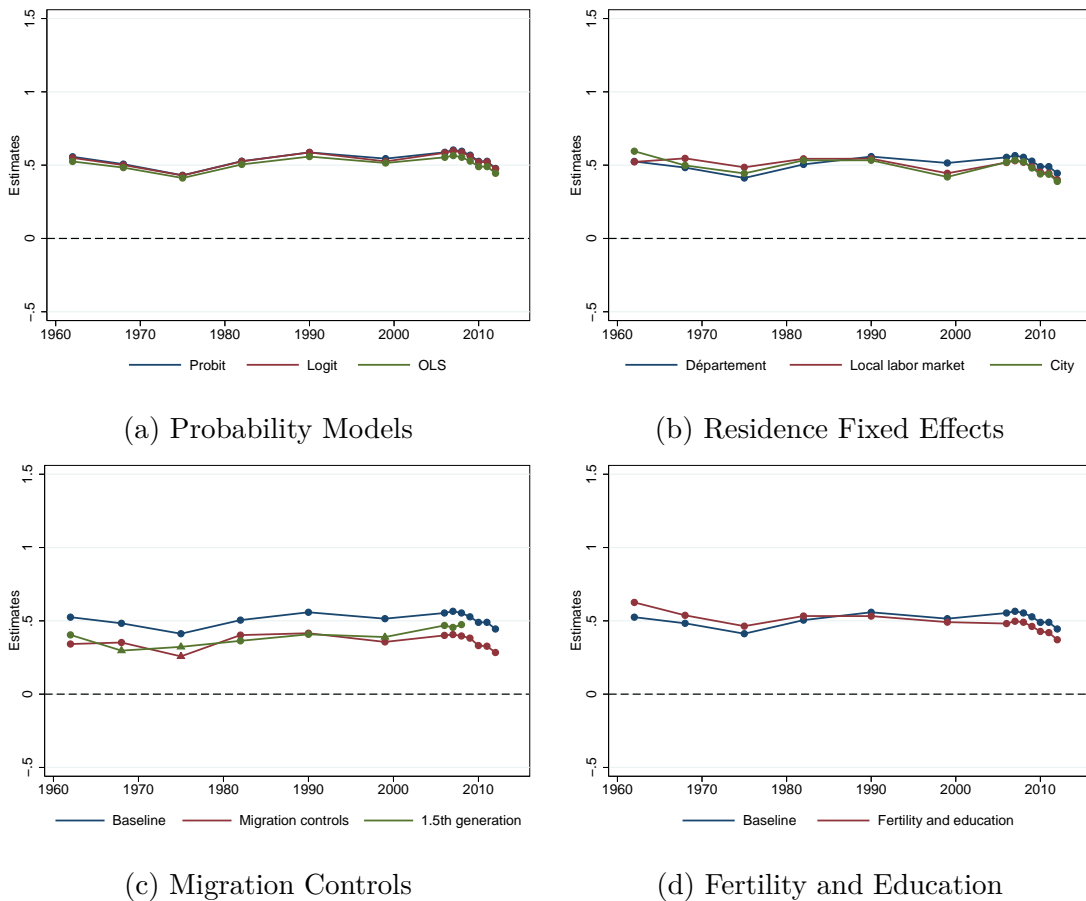
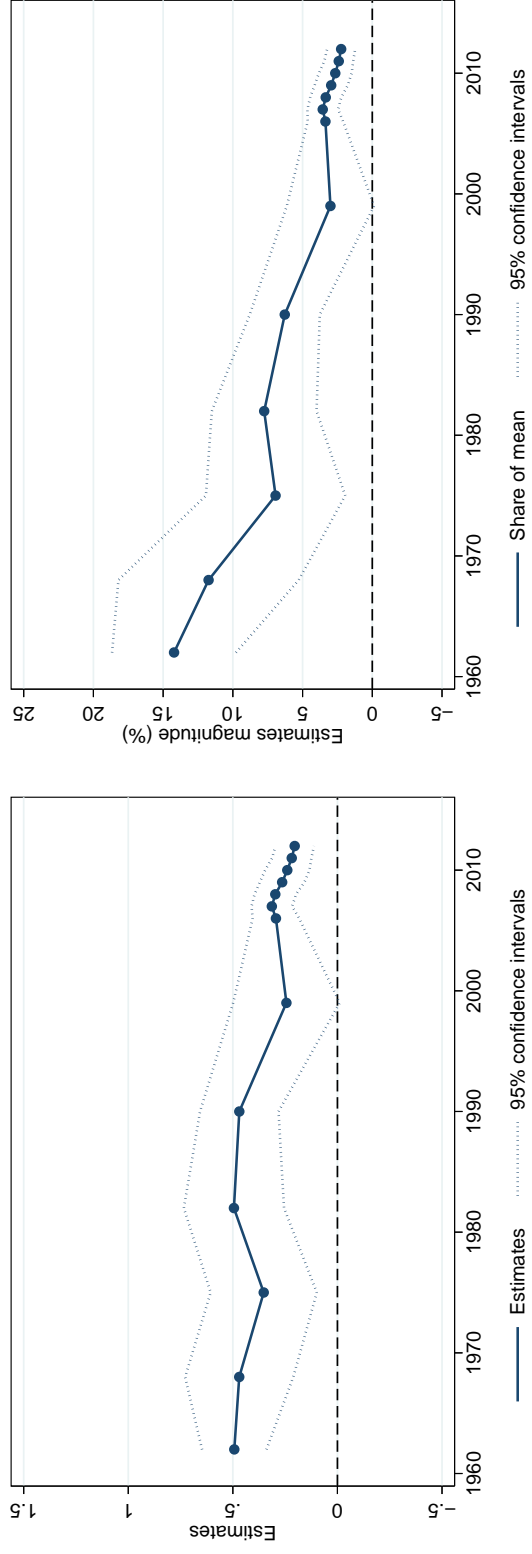


Figure B.1. The Impact of WWI Military Fatalities on FLEP
 Robustness
 Dependent Variable: Employed

Notes: Panel A reports OLS coefficients from estimating specification 1 with three different probability models. For Probit and Logit models, I report marginal coefficients evaluated at the mean of the data. Panel B reports OLS coefficients from estimating specification 1 with successively département of residence fixed effects, local labor market fixed effects (ZIUP and EZ), and city fixed effects (municipality and canton-city). Panel C restricts the sample to migrants who were residing in their département of residence in the previous census—this information is only available until the census of 2008. It also augments the baseline specification with the bilateral distance between origin and destination départements and with the département-specific and dyadic migration controls. Panel D augments the baseline specification with educational attainment indicators (primary or lower secondary education (excluded), technical secondary education, high school, and higher education) and the number of own children in the household aged 0 to 6. Data from the censuses (1962–2012).

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



(a) Baseline Estimates
(b) Magnitude Relative to the Mean

Figure B.2. The Impact of WWI Military Fatalities on FLFP
Dependent Variable: Labor Force Participant

Notes: Panel A reports OLS coefficients from estimating specification 1. The dependent variable is an indicator for whether the individual is in the labor force. All regressions contain cohort, département of residence, and military region of birth fixed effects, as well as the set of historical controls measured at the level of individuals' départements: départements of birth in 1911. They consist of the share of rural population, the share of population born in the département, 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. Standard errors are clustered both at the level of individuals' départements of birth and départements of residence. The sample consists of migrant married women aged 30 to 49. See Table B.1 for details about sample sizes for each census year. Panel B reports the magnitude of the coefficients from panel A 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 département that experienced low (10 percent) rather than high (20 percent) military death rates. Estimates are computed using the sample weights provided in the censuses. Data from the censuses (1962–2012).

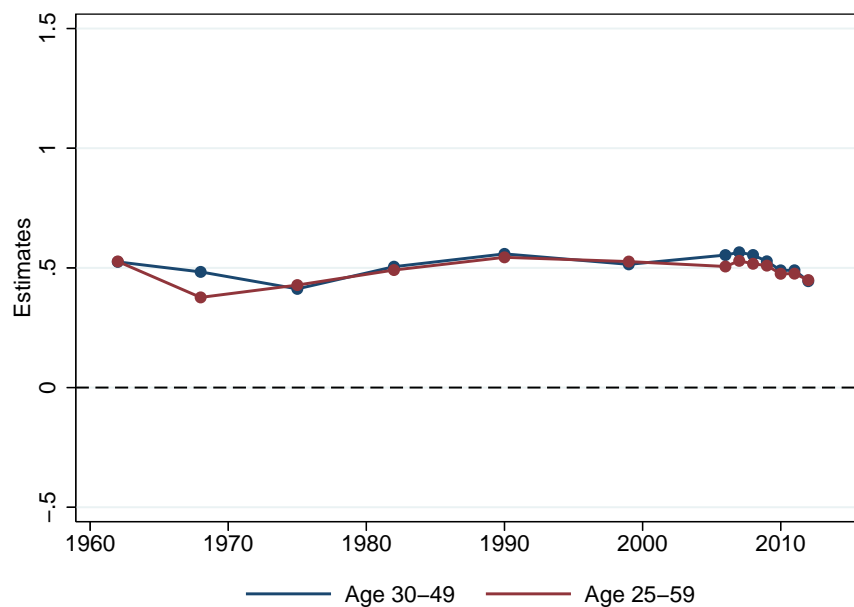
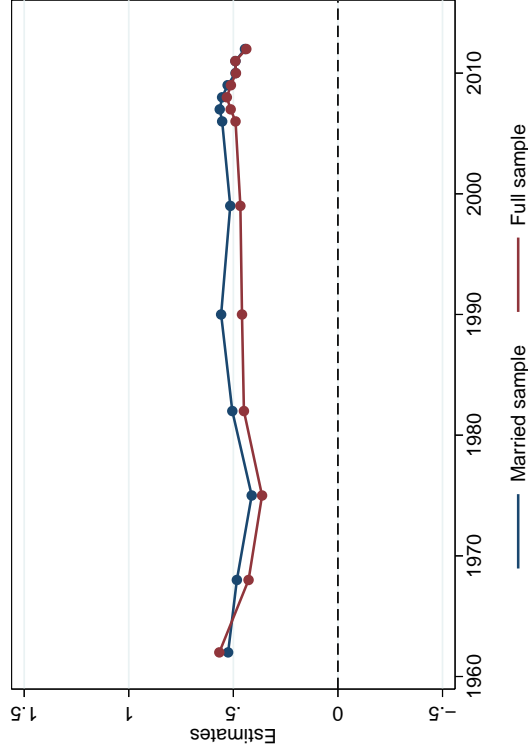


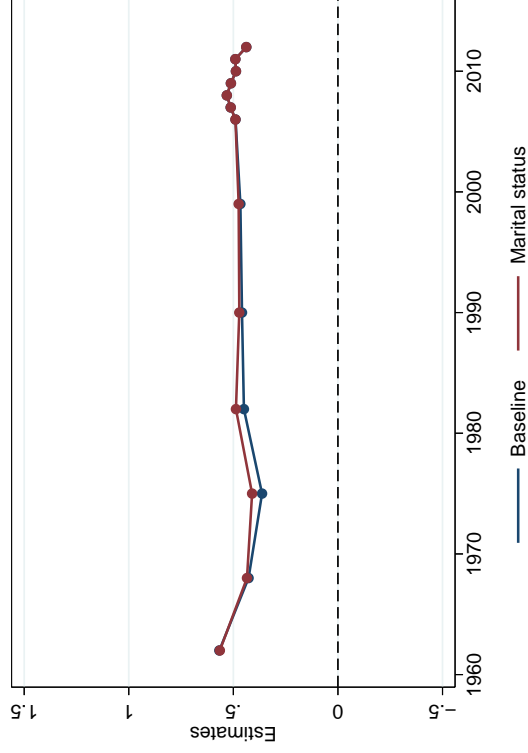
Figure B.3. The Impact of WWI Military Fatalities on FLP
 Wider Age Bounds
 Dependent Variable: Employed

Notes: This figure replicates the analysis of Figure 3 when using a wider age bounds: migrant married women aged 25 to 59 instead of migrant married women aged 30 to 49. See Figure 3 notes for more details. Data from the censuses (1962–2012).

● significant at the 1 percent level.



(a) Married Versus Full Sample



(b) Marital Status Controls

Figure B.4. The Impact of WWI Military Fatalities on FLFP Women of All Marital Statuses
Dependent Variable: Employed

Notes: Panel A reports OLS coefficients from estimating equation 1 on the sample of women of all marital statuses. It also reports baseline estimates from Figure 3 for comparison. The dependent variable is an indicator for whether the individual is employed. The specification in panel B includes the following indicator variables for marital status: single (excluded), married, widowed, and divorced. Standard errors are clustered the levels of individuals' départements of residence. The sample consists of migrant women aged 30 to 49. Data from the censuses (1962-2012).

• significant at the 1 percent level.

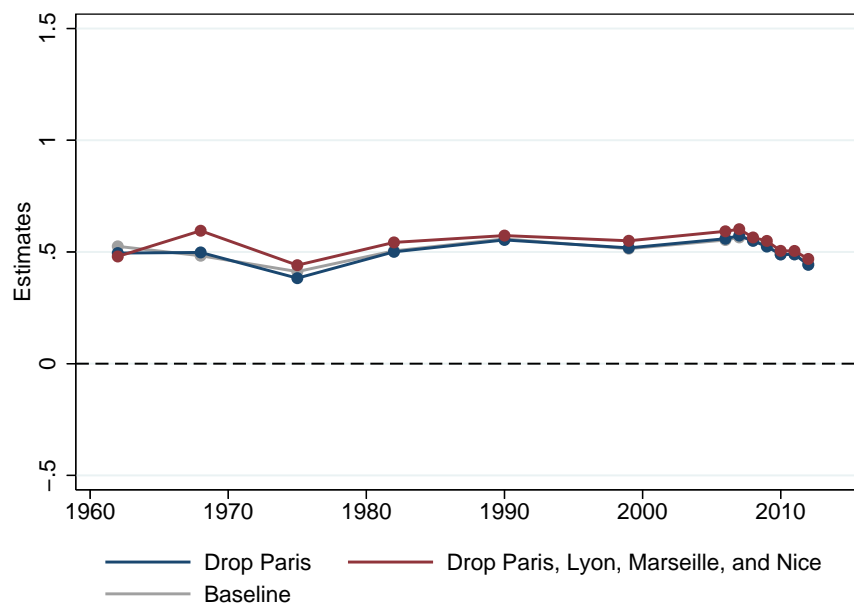


Figure B.5. The Impact of WWI Military Fatalities on FLP
 Drop Urban Départements
 Dependent Variable: Employed

Notes: This figure replicates the analysis of Figure 3 when dropping the most urban départements: Paris (75, Paris), Rhône (69, Lyon), Bouches-du-Rhône (13, Marseille), and Alpes-Maritimes (06, Nice). See Figure 3 notes for more details. Data from the censuses (1962–2012).

● significant at the 1 percent level.

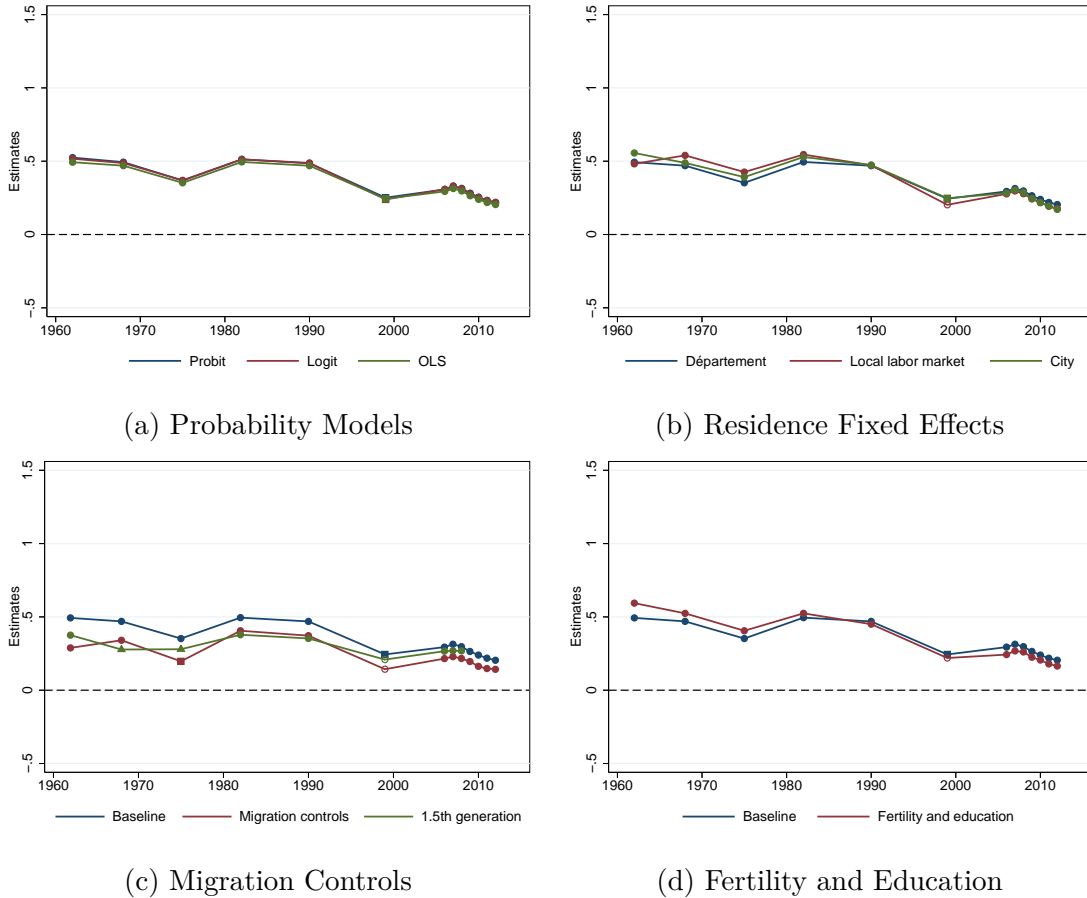


Figure B.6. The Impact of WWI Military Fatalities on FLFP
Robustness
Dependent Variable: Labor Force Participant

Notes: Panel A reports OLS coefficients from estimating specification 1 with three different probability models. For Probit and Logit models, I report marginal coefficients evaluated at the mean of the data. Panel B reports OLS coefficients from estimating specification 1 with successively département of residence fixed effects, local labor market fixed effects (ZIUP and EZ), and city fixed effects (municipality and canton-city). Panel C restricts the sample to migrants who were residing in their département of residence in the previous census—this information is only available until the census of 2008. It also augments the baseline specification with the bilateral distance between origin and destination départements and with the département-specific and dyadic migration controls. Panel D augments the baseline specification with educational attainment indicators (primary or lower secondary education (excluded), technical secondary education, high school, and higher education) and the number of own children in the household aged 0 to 6. Data from the censuses (1962–2012).

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

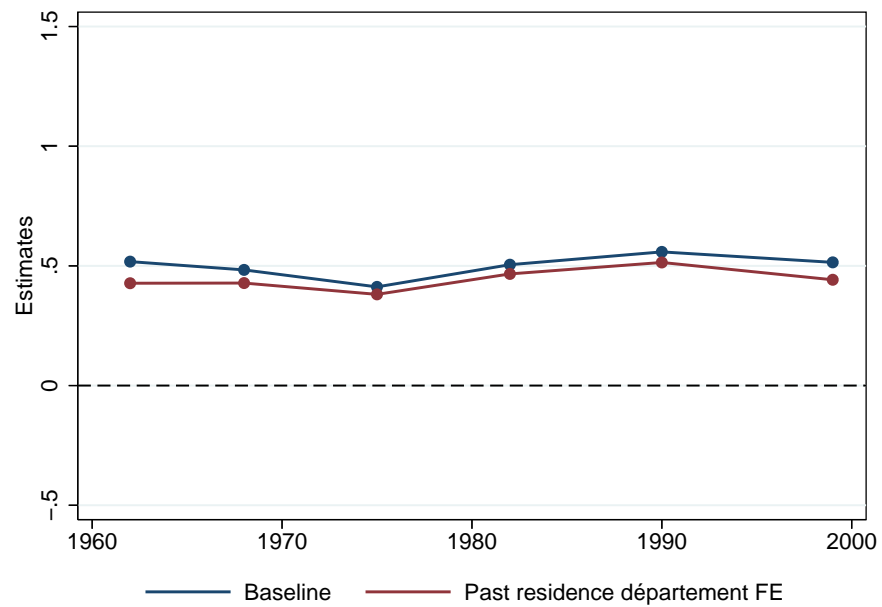


Figure B.7. The Impact of WWI Military Fatalities on FLP
 Past Residence Département Fixed Effects
 Dependent Variable: Employed

Notes: This figure replicates the analysis of Figure 3 when including fixed effects for the département of residence in the previous census. This information is only available in the censuses 1962–1999. Data from the censuses (1962–1999).

• significant at the 1 percent level.

Table B.1. Residence Location Units

Census	A. Local labor markets					B. Cities			
	Obs	Def	Units	In sample	Obs/unit	Def	Units	Singletons	Obs/unit
1962	64,145	ZIUP	801	83.94	67	Com.	5,883	3,099	10
1968	419,366	ZIUP	790	88.40	469	Com.	17,636	7,489	23
1975	337,463	ZIUP	857	90.44	356	Com.	15,692	7,397	21
1982	464,979	ZIUP	859	92.96	503	Com.	20,625	6,413	22
1990	501,485	ZIUP	596	96.05	808	Com.	22,916	5,915	22
1999	106,067	EZ	331	100.00	320	Com.	11,276	8,387	9
2006	660,780	EZ	331	100.00	1,996	Cant.	3,575	1	185

Notes: This table describes the types of residence location units available in the censuses besides the département 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*, *Cant.* to *canton-cities*, and *Singletons* to the number of observations that are the only ones to reside in a given commune or canton-city. These observations are effectively dropped in the regressions using city fixed effects. Data from the censuses (1962–2006). See the Data Appendix for a definition of ZIUPs, EZs, communes, and canton-cities. The censuses 2007–2012 contain a similar number of households and units as the census of 2006. Acronyms: ZIUP = Zone of Industrial and Urban Population; EZ = Economic Zone; Obs = Observations; Def = Definition.

Table B.2. Parents and Daughters Born in the Same Département
Extended Labor Force Surveys 2005–2012

Dependent variable	Employed					
	(1)	(2)	(3)	(4)	(5)	(6)
Military death rate	0.78** [0.32]	0.72** [0.33]	0.96*** [0.36]	0.86** [0.36]	0.87** [0.36]	0.82** [0.36]
Birth year FE	Yes	Yes	Yes	Yes	Yes	Yes
Birth region FE	Yes	Yes	Yes	Yes	Yes	Yes
Pre-war controls (1911)	Yes	Yes	Yes	Yes	Yes	Yes
Residence département FE	Yes	Yes	Yes	Yes	Yes	Yes
Husband and household controls	No	Yes	No	Yes	No	Yes
Département of birth same as						
Mother's	Yes	Yes	No	No	Yes	Yes
Father's	No	No	Yes	Yes	Yes	Yes
Clusters						
Birth département	92	92	92	92	92	92
Residence département	92	92	92	92	92	92
Observations	73,675	73,675	70,205	70,205	51,386	51,386
Outcome mean	0.77	0.77	0.78	0.78	0.78	0.78

Notes: This table reports OLS coefficients from estimating specification 1 on the extended version of the labor force surveys 2005–2012. All regressions contain survey-year indicators. Husband and household controls include husbands' income, age, age squared, educational attainment, an indicator for whether the household owns its housing, and the number of rooms in the home. Standard errors are clustered at the level of individuals' départements of birth and residence. The sample consists of migrant married women aged 30 to 59 with at least one parent born in the same département as the respondent. The estimates are computed using the sample weights provided in the labor force surveys. Data from the extended labor force surveys (2005–2012).

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

C. The Role of World War II

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 départements died during WWII—ten times fewer than WWI military fatalities (1.3 million).⁹

To explore this possibility in more details, I collect the number of French soldiers who died because of WWII for each département from the *Mémoire des Hommes* (MDH) archive. Analogous to WWI military death rates, the WWII military death rate in a département is the ratio of the number of deceased soldiers born in the département 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 départements 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.¹⁰ I report estimates from regressing WWII military death rates on pre-WWI

⁹According 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.

¹⁰About 650,000 French soldiers were affected to war factories at the mobilization in Septem-

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 départements was due to similar factors than that in WWI military death rates, both measures are correlated: départements that experienced high (20 percent) rather than low (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 1 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 (panel B of Figure C.1).

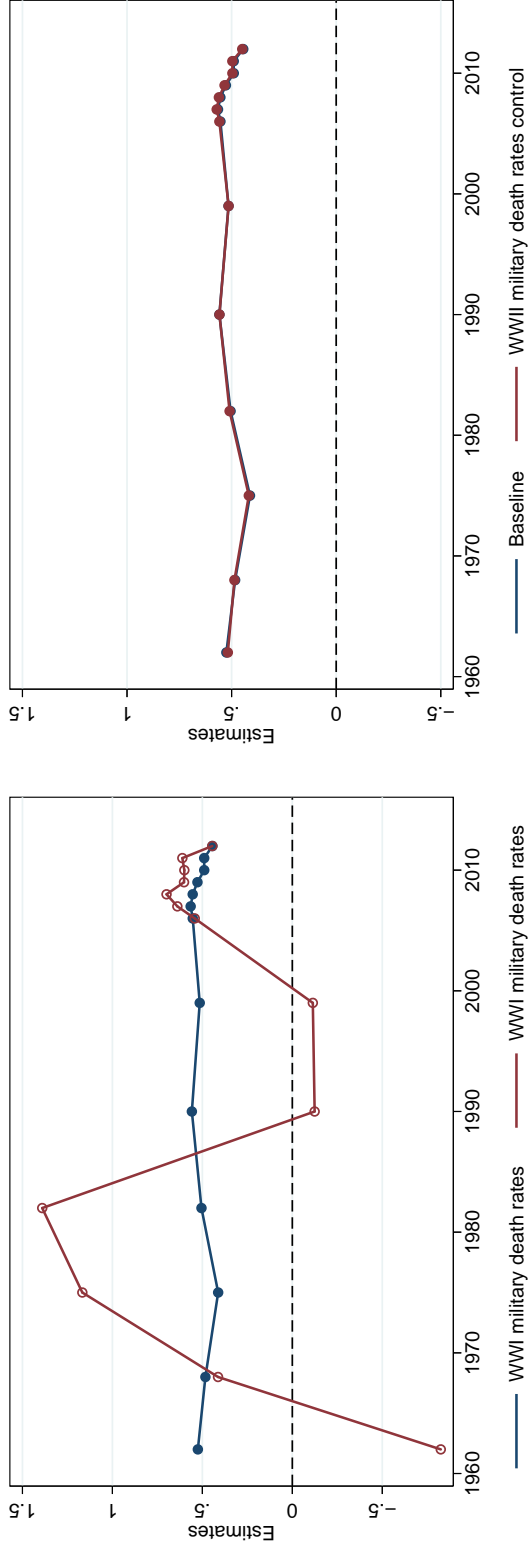
ber 1939, representing 14 percent of the 4.7 million mobilized soldiers (Garraud, 2005). This is comparable to the share of recalled soldiers into war factories during WWI.

Table C.1. WWI and WWII Military Death Rates

Dependent variable:	military death rate					
	WWI			WWII		
	(1)	(2)	(3)	(4)	(5)	(6)
WWI military death rate					0.07***	-0.01 [0.02]
Pre-WWI characteristics (1911)						
Share rural population	0.12*** [0.01]	0.14*** [0.03]	0.01* [0.00]	0.00 [0.00]	0.01 [0.00]	0.01 [0.00]
Share born in département	0.12*** [0.03]	0.16*** [0.04]	0.01** [0.01]	0.00 [0.00]	0.00 [0.01]	0.00 [0.01]
Other characteristics	No	Yes	No	Yes	No	Yes
Military region FE	No	Yes	No	Yes	No	Yes
Départements	87	87	87	87	87	87
R ²	0.739	0.819	0.281	0.841	0.260	0.840
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 département 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. ** Significant at the 5 percent level. * Significant at the 10 percent level.



(a) WWI Versus WWII
 (b) WWII Control
 Figure C.1. The Impact of WWI and WWII Military Fatalities on FLPF
 Dependent Variable: Employed

Notes: Panel A reports OLS coefficients from estimating specification 1 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 individuals' départements of birth and residence. The sample consists of migrant women aged 30 to 49. The estimates are computed using the sample weights provided in the censuses. Data from the censuses (1962-2012).

- 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 département 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 départements could have induced a relative decline in the demand for labor in these départements, biasing downward the estimated impact of WWI military fatalities on female labor force participation in these départements. Alternatively, the reconstruction effort in these départements 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 collect data that capture the extent of destruction from WWII at the département level: the share of a département’s area that needed to be cleared from land mines, the share of a département’s buildings that were partially or totally destroyed, and the share of a département’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. Départements 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 1 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 Destruction

	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 destruction across all 87 départements for which WWI military fatalities are available. *Share buildings destroyed* is the sum of the share of buildings partially and totally destroyed.

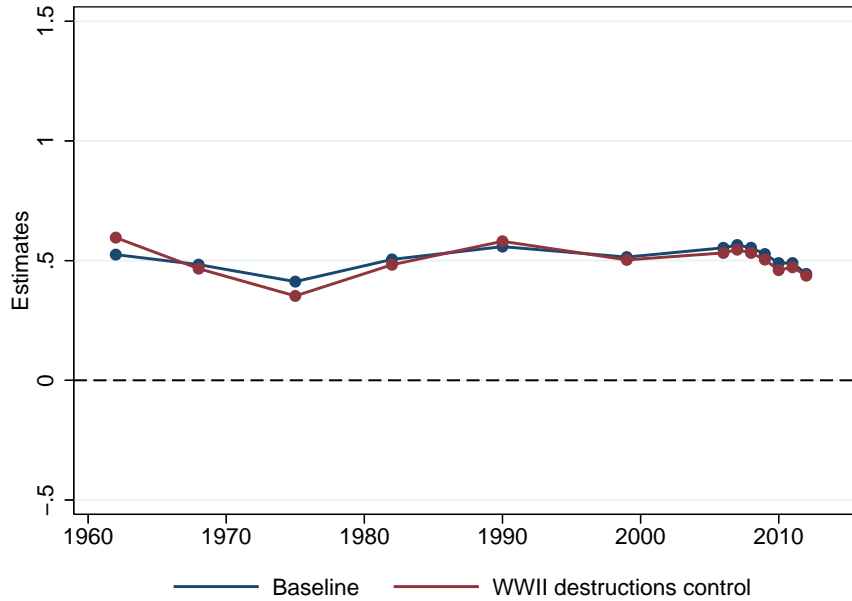


Figure C.2. The Impact of WWI Military Fatalities on FLFP Control for WWII Destruction

Notes: This figure reports the OLS coefficients from estimating baseline specification 1 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 individuals' départements of birth and residence. The sample consists of migrant women aged 30 to 49. The estimates are computed using the sample weights provided in the censuses. Data from the censuses (1962–2012).

• significant at the 1 percent level.

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

Dependent variable:	WWI military death rates				
	(1)	(2)	(3)	(4)	(5)
WWII destruction measures					
Share land with mines	-0.97*** [0.30]			-0.78** [0.35]	0.09 [0.23]
Share buildings destroyed		-0.09 [0.06]		0.04 [0.07]	0.01 [0.06]
Share factories destroyed			-0.50** [0.19]	-0.38* [0.23]	-0.02 [0.21]
Pre-WWI characteristics (1911)					
Share rural population					0.15*** [0.04]
Share born in département					0.16*** [0.05]
Other characteristics	No	No	No	No	Yes
Military region FE	No	No	No	No	Yes
Départements	87	87	87	87	87
R ²	0.129	0.010	0.094	0.152	0.810

Notes: This table reports OLS coefficients from regressing WWI military death rates on WWII destruction measures and various pre-WWI département 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 the literate 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. ** Significant at the 5 percent level. * Significant at the 10 percent level.

D. Further Results

D.1. Alternative Outcomes

As discussed in section 3.4, fertility and education choices do not appear to mediate the relationship between WWI military fatalities 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 départements that experienced greater military death rates do not make different fertility or education choices.¹¹ Moreover, they do not marry at different rates, except perhaps in 1982 (Figure D.3). Replicating the analysis on the labor force surveys 1982–2013 generates similar results (Tables D.1 and D.2).

D.2. Household-Level Analysis

Husbands and wives can be matched in the censuses, which enables a household-level analysis. I estimate the baseline specification when including husband and household characteristics. Husband characteristics include husbands age and age squared, indicators for their educational attainment, and an indicator for their employment status.¹² 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 capture how wealthy a household is.¹³ I report results in Figure D.4. Estimates are similar to the baseline, suggesting that women born in départements that experienced greater military death rates do not choose husbands that differ along these characteristics. Furthermore, there is no substitution between wives’ and husbands’ market work since husbands of women born in départements that experienced greater military death rates are not more likely to be working (panel A of Figure D.5).¹⁴ As a result, these households are slightly more likely to

¹¹I also ran analyses showing that women born in départements that experienced greater military death rates do not choose more technical curricula or more male-biased occupations.

¹²Educational attainment indicators include primary or lower secondary education (excluded), technical secondary education, high school, and higher education.

¹³The 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.

¹⁴Figure D.5 reveals that husbands of women born in départements 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 départements that

own their housing (panel B of Figure D.5).

D.3. Heterogeneity Across Categories of Women

To assess the extent of heterogeneity in the labor supply response to WWI military fatalities across categories of women, I estimate the baseline specification along with a set of interaction terms. I analyze heterogeneity along four types of characteristics: number of children in the household, education, position in the life cycle, and marital status. First, I explore whether women with more children respond more to WWI military fatalities. I augment the baseline specification with number of children in the household together with an interaction term. I report results in panel A of Figure D.6. As expected, women with more children are less likely to be employed. However, their labor supply does not respond more to WWI military fatalities.¹⁵ Similarly, I find no heterogeneity in the impact of WWI military fatalities on the labor supply of women aged 40 to 49 relative to those aged 30 to 39 (Panel C) or of married women relative to unmarried women (Panel D). However, the labor supply of high school graduates does respond more to WWI military fatalities from the 1960s to the 1980s: while women without a high school degree born in départements that experienced high (20 percent) rather than low (10 percent) military death rates were 4 percentage points more likely to be working on average between 1962 and 1982, those with a high school degree were 11 percentage points more likely to be working. Nevertheless, this heterogeneous impact concerned very few women as only 14 percent of them were high school graduates during this period.

experienced high (20 percent) rather than low (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.

¹⁵The labor supply of women with more children does respond slightly more to WWI military fatalities during the 2000s. However, this differential impact is small: while women with no children born in départements that experienced high (20 percent) rather than low (10 percent) military death rates were 4 percentage points more likely to be working on average between 2006 and 2012, those at the mean of the data (1.7 children) were 5 percentage points more likely to be working.

D.4. Cohort-Specific Estimates

I estimate the baseline specification separately on each decennial cohort present in the censuses—the cohorts 1910 to 1970. I pool all censuses together and include census-year fixed effects. Table D.3 reports the results (see also panel A of Figure D.7). 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 of Figure D.7).

D.5. Placebo Test with the Male Sample

I replicate the baseline analysis using the sample of married men aged 30 to 49. 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.8).

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

To corroborate results obtained with the censuses, I combine all thirty-two annual labor force surveys from 1982 to 2013. They provide respondents' départements of residence and birth. Labor force surveys have both drawbacks and advantages over the censuses. On the one hand, information about respondents' départements 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, number of months since in current firm, and monthly wage rate.¹⁶

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.4. They are similar to those when using the censuses: for instance, the coefficient for *Employed* is 0.57

¹⁶Summary statistics are available in the Supplementary Appendix.

(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 départements 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 départements that experienced high (20 percent) rather than low (10 percent) military death rates work 1.3 less hours per week (4 percent of mean hours), and remain 16 months longer in their firm (13 percent of mean months in firm). These results suggest that women born in départements 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 départements 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 restricted sample of working women in the labor force surveys 1982–2013. I report results in Table D.5. The coefficient on military death rates is close to zero and non-significant. Controlling for educational attainment does not alter results. I replicate the analysis using 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.¹⁷ Results are similar to those obtained with the restricted sample. 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.

¹⁷Results are similar when using number of children in the selection equation.

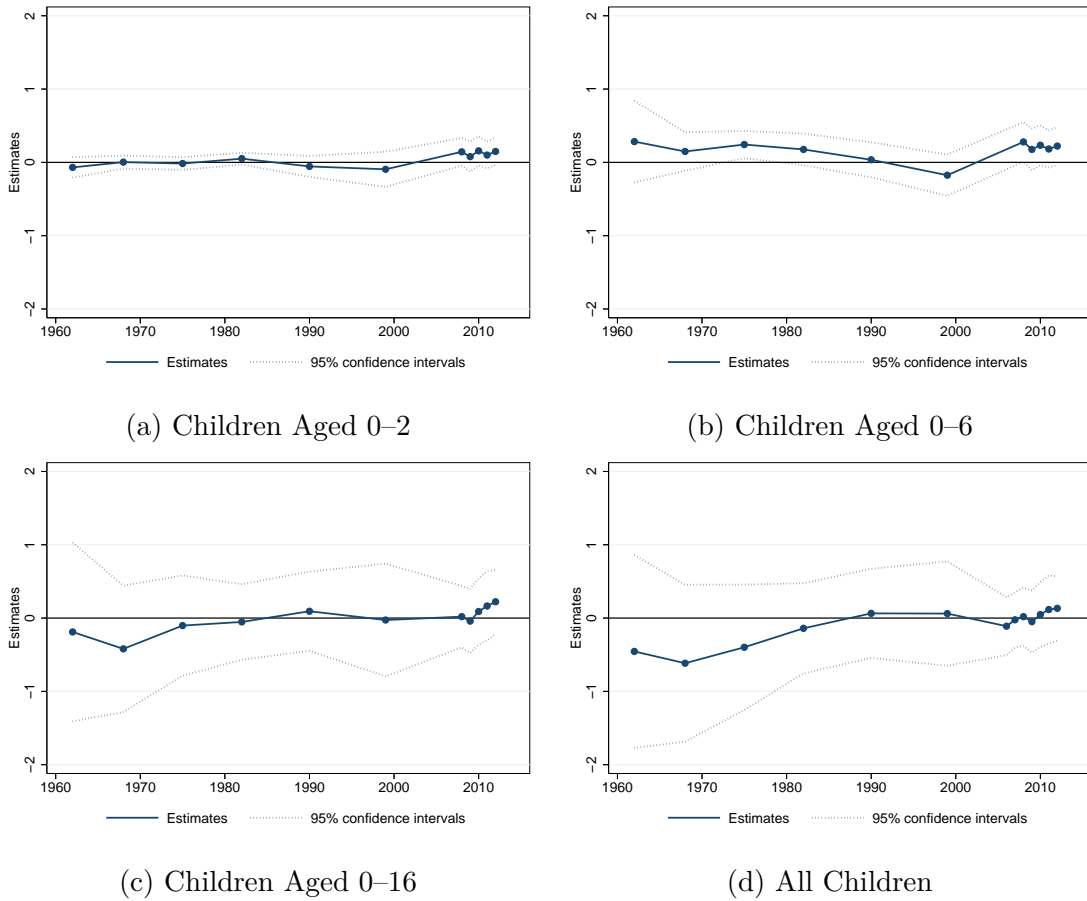
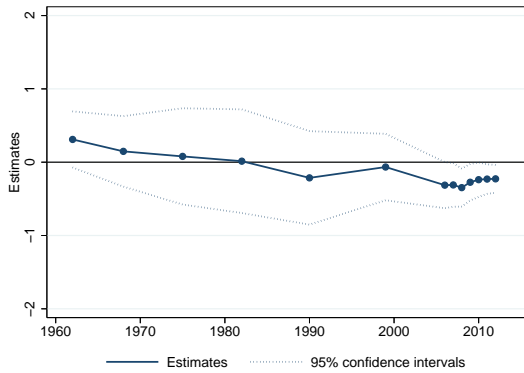
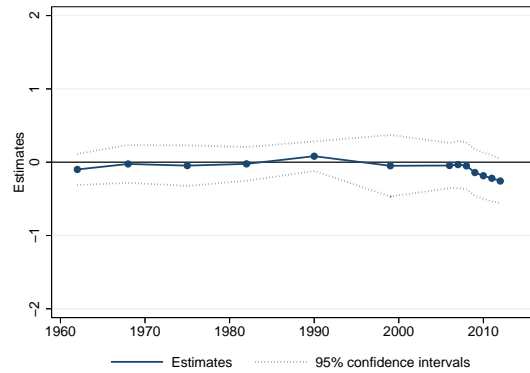


Figure D.1. Number of Children

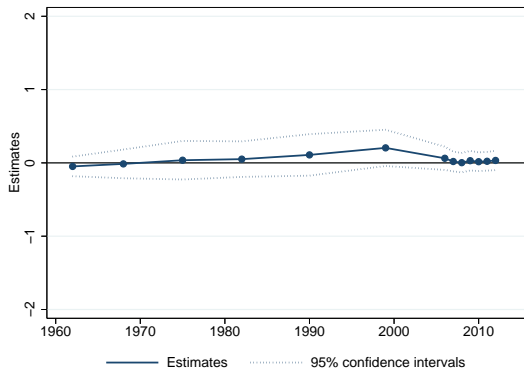
Notes: This figure presents OLS coefficients from estimating equation 1 with the number of own children in the household as outcomes. The censuses of 2006 and 2007 do not provide the number of children by age, so they are excluded from panels A, B, and C. In panel A, the number of children is for ages 0–3 for the censuses of 1990 and 2008–2012. In panel C, the number of children is for ages 0–18 for the censuses of 2008–2012. Standard errors are clustered both at the level of the individuals' départements of birth and départements of residence. The sample consists of migrant married women aged 30 to 49. The estimates are computed using the sample weights provided in the censuses. Data from the censuses (1962–2012).



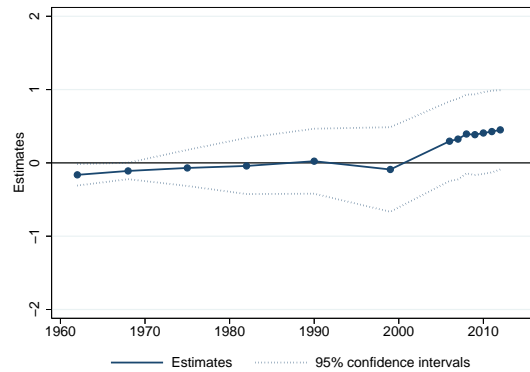
(a) Primary or Lower Secondary



(b) Technical Secondary



(c) High School



(d) Higher Education

Figure D.2. Education

Notes: This figure presents OLS coefficients from estimating equation 1 with indicators for educational attainment as outcomes. Standard errors are clustered both at the level of the individuals' départements of birth and départements of residence. The sample consists of migrant married women aged 30 to 49. The estimates are computed using the sample weights provided in the censuses. Data from the censuses (1962–2012).

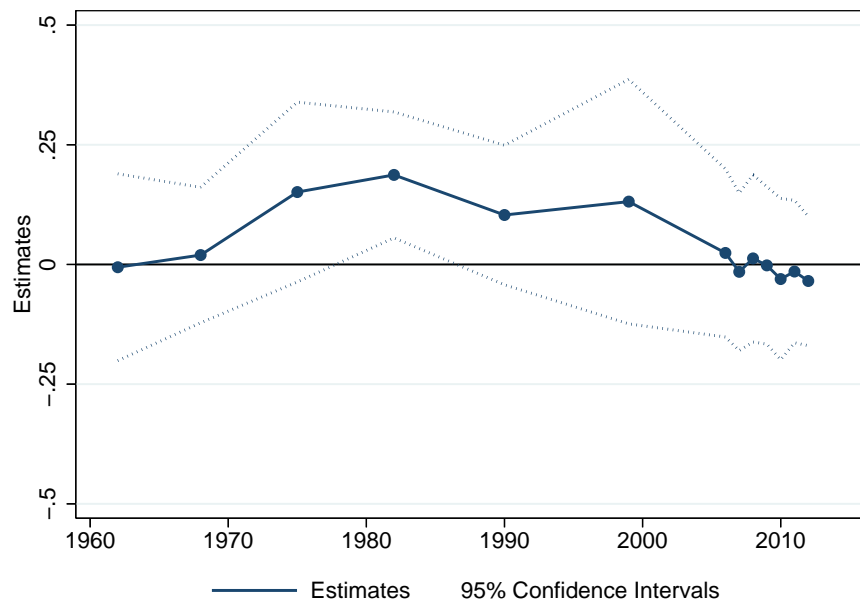


Figure D.3. Marital Status

Notes: This figure presents OLS coefficients from estimating equation 1 with an indicator for being married as the outcome. Standard errors are clustered both at the level of the individuals' départements of birth and départements of residence. The sample consists of migrant women aged 30 to 49. The estimates are computed using the sample weights provided in the censuses. Data from the censuses (1962–2012).

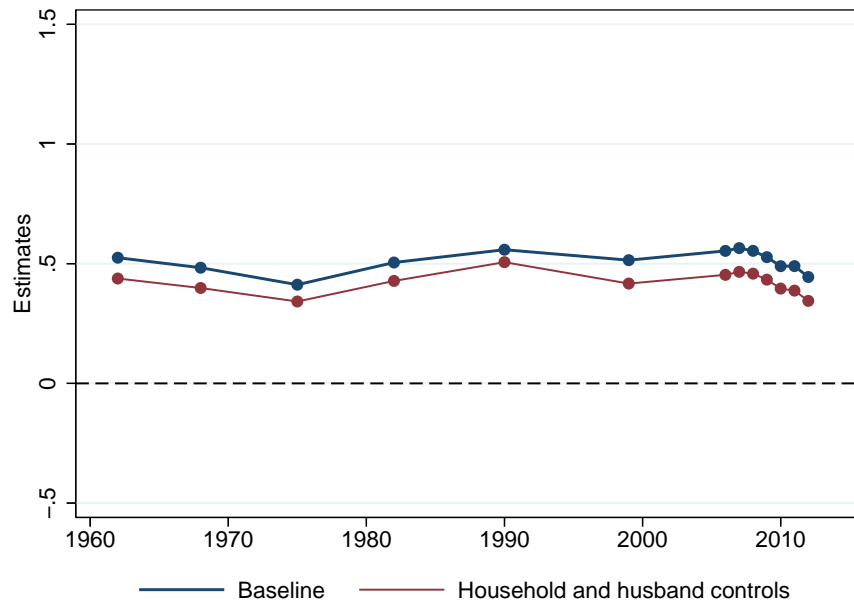
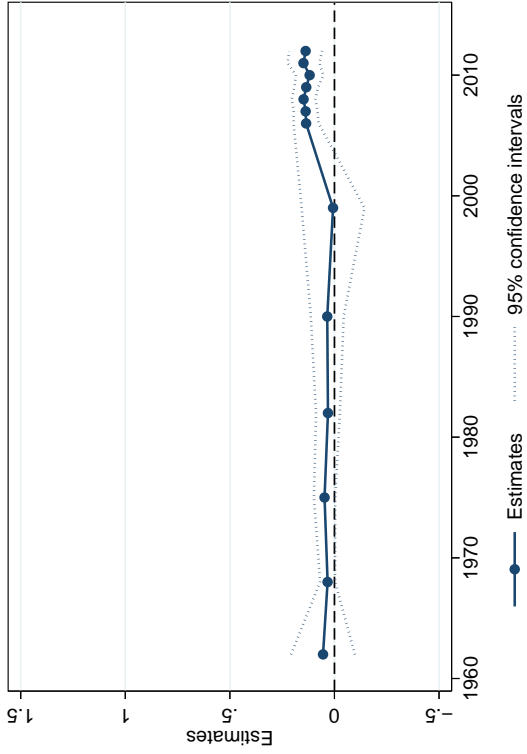


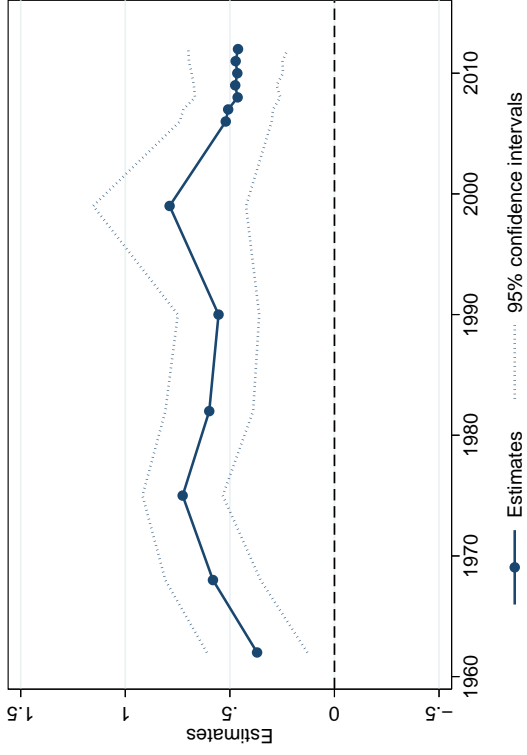
Figure D.4. Household and Husband Controls

Notes: This figure reports OLS coefficients from estimating equation 1 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 individuals' départements of birth and départements of residence. The sample consists of migrant married women aged 30 to 49. The estimates are computed using the sample weights provided in the censuses. Data from the censuses (1962–2012).

● significant at the 1 percent level.



(a) Husband Employment



(b) Home Ownership

Figure D.5. Husband Employment and Home Ownership

Notes: Panel A reports OLS coefficients from estimating equation 1. The dependent variable is an indicator for whether the respondent's husband is working. This regression also controls for husbands' age and educational attainment. Panel B reports OLS coefficients from estimating a similar specification. The dependent variable is an indicator for whether the household owns its housing. This regression also controls for husbands' age, educational attainment, and employment status. Standard errors are clustered both at the level of individuals' départements of birth and départements of residence. The sample consists of migrant married women aged 30 to 49. Data from the censuses (1962–2012).

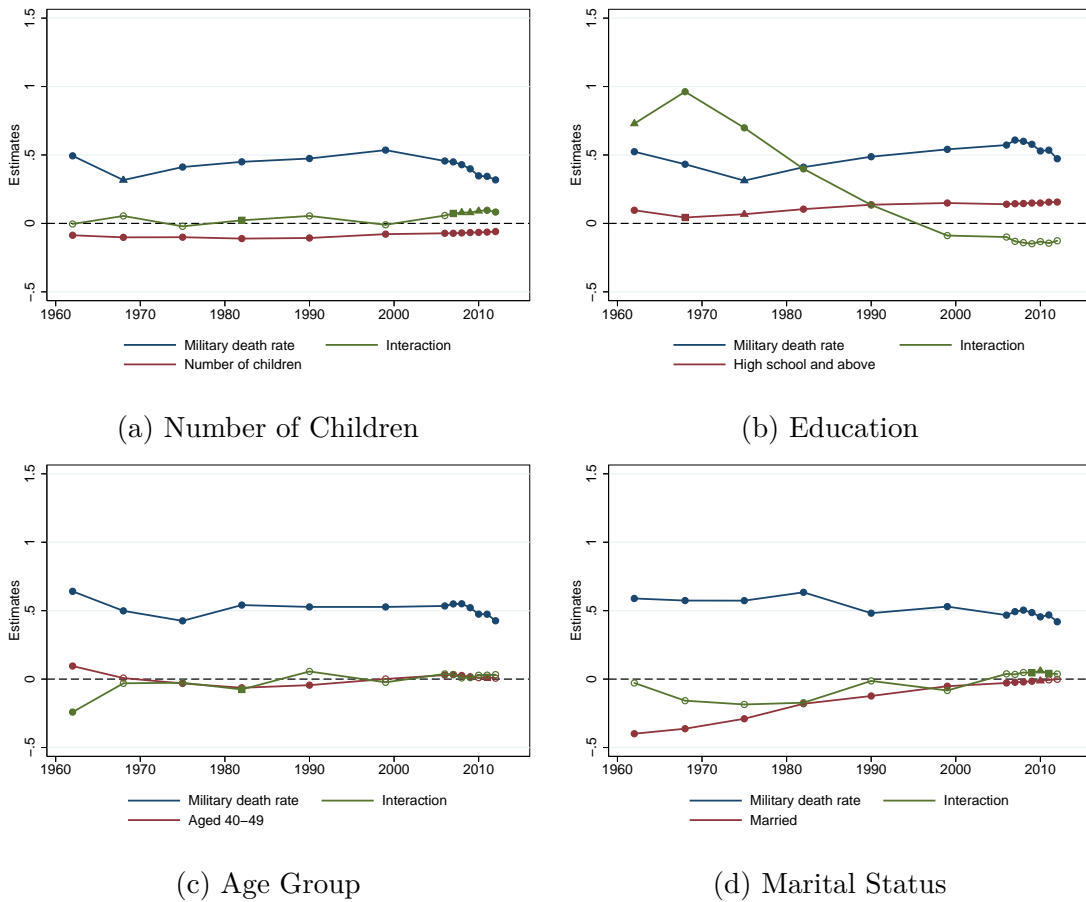
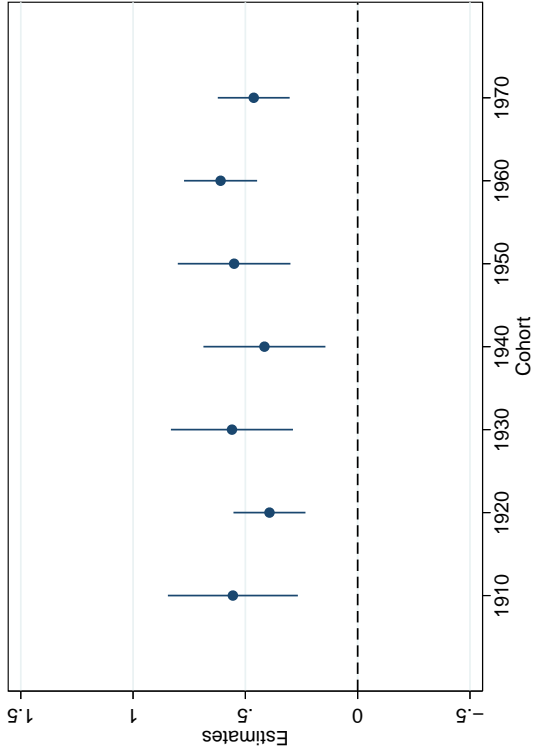
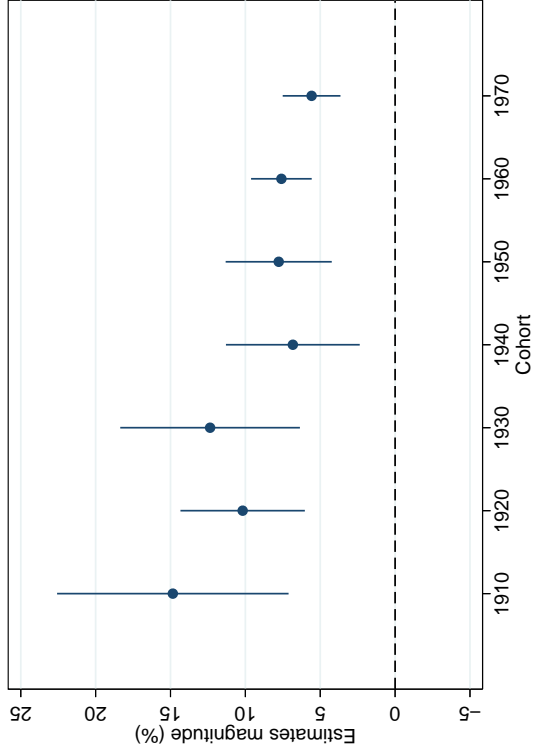


Figure D.6. Heterogeneity Across Characteristics

Notes: This figure presents OLS coefficients from estimating equation 1 together with interactions for various characteristics. 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 département 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 adds an indicator variable for whether the respondent is aged 40–49 together with the interaction term; 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' départements of birth and départements of residence. The sample consists of migrant married women aged 30 to 49 except in panel D where the sample consists of all migrant women aged 30 to 49. The estimates are computed using the sample weights provided in the censuses. Data from the censuses (1962–2012). ● significant at the 1 percent level. ▲ significant at the 5 percent level. ■ significant at the 10 percent level. ○ not significant at conventional levels.



(a) Estimates



(b) Magnitude Relative to the Mean

Figure D.7. Cohort-Specific Estimates

Notes: Panel A reports OLS coefficients from estimating equation 1 separately for each cohort on the pooled censuses 1962–2012 along with 95% confidence intervals around the estimates. All regressions include census-year fixed effects. The dependent variable is an indicator for whether the individual is working. Standard errors are clustered both at the level of individuals' départements of birth and départements of residence. The sample consists of migrant married women aged 30 to 49. See Table D.3 for details about sample sizes for each regression. 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 département exposed to a military death rate of 10 percent to a département exposed to a military death rate of 20 percent. Data from the censuses (1962–2012).

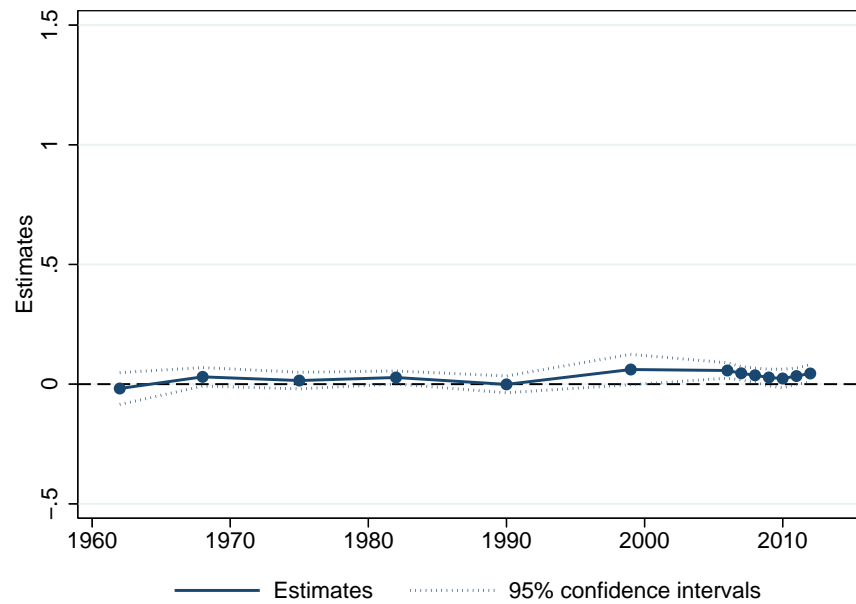


Figure D.8. Male Placebo

Notes: This figure presents OLS coefficients from estimating equation 1 on the male sample. Standard errors are clustered both at the level of the individuals' départements of birth and départements of residence. The sample consists of 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. The Impact of WWI Military Fatalities on Fertility
Labor Force Surveys 1982–2013

Dependent variable	Number of children			
	0–3	0–6	0–18	All
Children age group	(1)	(2)	(3)	(4)
Military death rate	-0.01 [0.09]	0.31 [0.19]	-0.61 [0.42]	-0.46 [0.40]
Birth year FE	Yes	Yes	Yes	Yes
Birth region FE	Yes	Yes	Yes	Yes
Pre-war controls (1911)	Yes	Yes	Yes	Yes
Residence département FE	Yes	Yes	Yes	Yes
Observations	247,317	247,317	247,317	247,317
Clusters				
Départements of birth	92	92	92	92
Départements of residence	92	92	92	92
Outcome mean	0.16	0.40	1.43	1.70

Notes: This table reports OLS coefficients from estimating equation 1 for the number of children in the household as outcomes. All regressions include survey-year fixed effects. Standard errors are in brackets and are clustered both at the level of respondents' départements of birth and départements of residence. The sample consists of migrant married women aged 30 to 49. The estimates are computed using the sample weights provided in the labor force surveys. Data from the labor force surveys (1982–2013).

Table D.2. The Impact of WWI Military Fatalities on Education
Labor Force Surveys 1982–2013

Dependent variable	Educational attainment			
	Primary	Tech. sec.	High sch.	Higher ed.
	(1)	(2)	(3)	(4)
Military death rate	-0.33 [0.29]	0.13 [0.21]	-0.23 [0.15]	0.42 [0.29]
Birth year FE	Yes	Yes	Yes	Yes
Birth region FE	Yes	Yes	Yes	Yes
Pre-war controls (1911)	Yes	Yes	Yes	Yes
Residence département FE	Yes	Yes	Yes	Yes
Observations	246,664	246,664	246,664	246,664
Clusters				
Départements of birth	92	92	92	92
Départements of residence	92	92	92	92
Outcome mean	0.24	0.23	0.16	0.37

Notes: This table reports OLS coefficients from estimating equation 1 for educational attainment as outcomes. *Primary:* primary education; *Tech. Sec.:* technical secondary education; *High sch.:* high school; *Higher ed.:* higher education. All regressions include survey-year fixed effects. Standard errors are in brackets and are clustered both at the level of respondents' départements of birth and départements of residence. The sample consists of migrant married women aged 30 to 49. The estimates are computed using the sample weights provided in the labor force surveys. Data from the labor force surveys (1982–2013).

Table D.3. Cohort-Specific Estimates

Dependent variable	Employed						
	1910	1920	1930	1940	1950	1960	1970
Military death rate	0.56*** [0.15]	0.39*** [0.08]	0.56*** [0.14]	0.42*** [0.14]	0.55*** [0.13]	0.61*** [0.08]	0.46*** [0.08]
Birth year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Birth region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Pre-war controls (1911)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Residence département FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Censuses	1962–1968	1962–1975	1962–1982	1975–1990	1982–2009	1990–2012	2006–2012
Observations	30,347	319,798	512,126	552,815	601,109	2,121,343	2,135,687
Clusters							
Départements of birth	92	92	92	92	92	92	92
Départements of residence	92	92	92	92	92	92	92
Outcome mean	0.37	0.39	0.45	0.61	0.71	0.80	0.83

Notes: This table reports OLS coefficients from estimating equation 1 separately for each cohort on the pooled censuses 1962–2012. All regressions include census-year fixed effects. Standard errors are in brackets and are clustered both at the level of respondents' départements of birth and départements of residence. The sample consists of migrant married women aged 30 to 49. The estimates are computed using the sample weights provided in the censuses. Data from the censuses (1962–2012).

*** Significant at the 1 percent level.

Table D.4. The Impact of WWI Military Fatalities on FLFP
Labor Force Surveys 1982–2013

Dependent variable	Employed	Active	Ever worked	Hours	Months in firm
	(1)	(2)	(3)	(4)	(5)
Military death rate	0.57*** [0.15]	0.45*** [0.14]	0.05 [0.05]	-12.6** [5.4]	155*** [48]
Birth year FE	Yes	Yes	Yes	Yes	Yes
Birth region FE	Yes	Yes	Yes	Yes	Yes
Pre-war controls (1911)	Yes	Yes	Yes	Yes	Yes
Residence département FE	Yes	Yes	Yes	Yes	Yes
Sample	All	All	All	Working	Working
Observations	247,317	247,317	245,742	173,337	181,312
Clusters					
Départements of birth	92	92	92	92	92
Départements of residence	92	92	92	92	92
Outcome mean	0.76	0.82	0.98	35.3	116

Notes: This table reports OLS coefficients from estimating equation 1 across various labor market outcomes. All regressions include survey-year fixed effects. Standard errors are in brackets and are clustered both at the level of respondents' départements of birth and départements of residence. The sample consists of migrant married women aged 30 to 49. The estimates are computed using the sample weights provided in the labor force surveys. Data from the labor force surveys (1982–2013).

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

Table D.5. The Impact of WWI Military Fatalities on Wage Labor Force Surveys 1982–2013

Dependent variable	<i>Log monthly wage rate</i>					
	OLS			Heckman		
	(1)	(2)	(3)	(4)	(5)	(6)
Military death rate	-0.02 [0.40]	-0.29 [0.25]	-0.32 [0.22]	-0.06 [0.36]	-0.27 [0.24]	-0.30 [0.22]
Birth year FE	Yes	Yes	Yes	Yes	Yes	Yes
Birth region FE	Yes	Yes	Yes	Yes	Yes	Yes
Pre-war controls (1911)	Yes	Yes	Yes	Yes	Yes	Yes
Residence département FE	Yes	Yes	Yes	Yes	Yes	Yes
Years of education	No	Yes	No	No	Yes	No
Education category FE	No	No	Yes	No	No	Yes
Observations	78,567	78,567	78,567	130,223	130,223	130,223
Censored observations				51,656	51,656	51,656
Clusters						
Départements of birth	92	92	92	92	92	92
Départements of residence	92	92	92	92	92	92
Outcome mean	8.41	8.41	8.41	8.41	8.41	8.41

Notes: This table presents coefficients from estimating equation 1. All regressions include survey-year fixed effects. Education categories consist of no schooling (excluded), primary education, secondary education, and higher education. In columns 4–6, 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' départements of birth and départements of residence. The sample consists of migrant married women aged 30 to 49. The estimates are computed using the sample weights provided in the labor force surveys. Data from the labor force surveys (1982–2013).

E. Homogamy in Military Death Rates

I provide evidence for homogamy in military death rates: women born in départements that experienced greater military death rates are more likely to marry men born in départements that experienced greater military death rates, and vice versa. For consistency with the rest of the analysis, I restrict the sample to migrant married women aged 30 to 49. Using the censuses 1962 to 2012, I estimate the following specification:

$$(E.1) \quad \begin{aligned} \text{death_rate}_{ijhbrt}^{\text{husb}} &= \beta \text{death_rate}_b + \gamma_1 \mathbf{X}'_i + \gamma_2 \mathbf{X}'_{hj} + \gamma_3 \widetilde{\mathbf{X}}'_{1911,b} \\ &+ \gamma_4 \widetilde{\mathbf{X}}'_{1911,h} + \delta_r + \eta \text{Same}_{bh} + \mu \text{ldist}_{bh} + \varepsilon_{ijhbrt}, \end{aligned}$$

where $\text{death_rate}_{ijhbrt}^{\text{husb}}$ denotes the military death rates exposure of the département of birth of husband h of wife i in household j . \mathbf{X}_{hj} contains the same set of husband and household characteristics as those used in section 3: husbands' age, age squared, indicators for their educational attainment, an indicator for their employment status, an indicator for home ownership, the number of rooms in the home, and a measure for housing quality. $\widetilde{\mathbf{X}}_{1911,b}$ and $\widetilde{\mathbf{X}}_{1911,h}$ contain the set of pre-war controls corresponding to wives' and husbands' départements of birth, respectively. Wives' and husbands' military death rates are positively correlated as individuals born in the same département are more likely to marry with one another—this is the case for 17 to 37 percent of couples in the regression sample, 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 département, I include an indicator variable (Same_{bh}) for whether spouses were born in the same département. I also include the log distance between wives' and husbands' départements of birth (ldist_{bh}) and département of residence fixed effects, δ_r . I cluster standard errors at the levels of wives' départements of birth and residence, and also at the level of their husbands' départements of birth.

I report results in Figure E.1. There is a positive correlation between spouses birth départements' military death rates: each additional percentage point in military death rates exposure of wives' départements of birth is associated with an increase of 0.27 to 0.50 percentage point in the military death rates exposure of their husbands', with a downward trend from 1962 to 2012. In section 5, 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.

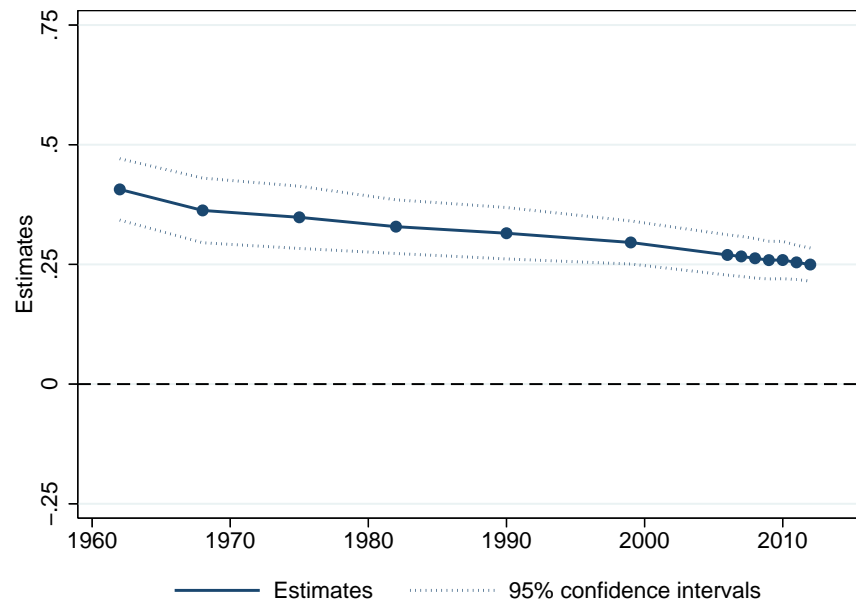


Figure E.1. Homogamy in Military Death Rates

Notes: This figure reports OLS coefficients from estimating specification E.1. Standard errors are clustered at the level of wives' départements of birth, départements of residence, and also at the level of their husbands' départements of birth. The sample consists of migrant women aged 30 to 49. The estimates are computed using the sample weights provided in the censuses. Data from the censuses (1962–2012).

F. The Distribution of Household Tasks

The Generation and Gender Survey (GGS) of 2005 contains questions related to the distribution of household tasks for individuals with a partner present in the household: 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 performs 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 an opposite coding scheme when the respondent is a man; higher values indicate a more progressive distribution of tasks in the household (men doing a larger share of household chores). I aggregate these statements and standardize them on a one-point scale. I report summary statistics for the household chores index in Table F.1 and for the child care index in Table F.2.¹⁸ Table F.3 replicates the analysis of section 5 with both indexes as outcome variables. Estimates imply that although women are more likely to perform household tasks, WWI military fatalities had no impact on the distribution of tasks in the household.

¹⁸Interestingly, men report doing more household tasks than women do.

Table F.1. Distribution of Household Chores

INTERPRETATION: HIGHER VALUES INDICATE THAT WOMEN DO LESS CHORES

Chore	Men	Women
1 Cooking	0.26 (0.28)	0.20 (0.25)
2 Washing Dishes	0.39 (0.29)	0.33 (0.28)
3 Do the Groceries	0.40 (0.29)	0.31 (0.27)
4 Ironing	0.16 (0.26)	0.13 (0.23)
5 Vacuuming	0.35 (0.30)	0.29 (0.28)
Household chores index (five-points scale)	1.57 (0.91)	1.26 (0.82)
Household chores index (one-point scale)	0.31 (0.18)	0.25 (0.16)
Observations	779	994

Notes: This table presents summary statistics for the distribution of household chores using the GGS dataset. Higher values indicate that women do less chores. Standard deviations are in parentheses. The sample consists of French internal migrants born in metropolitan France. Data from the GGS (2005).

Table F.2. Distribution of Child Care

INTERPRETATION: HIGHER VALUES INDICATE THAT WOMEN DO LESS CHILD CARE

Chore	Men	Women
1 Dressing children	0.33 (0.20)	0.28 (0.23)
2 Putting children to bed	0.43 (0.20)	0.37 (0.21)
3 Staying with children when sick	0.33 (0.25)	0.23 (0.25)
4 Playing with children	0.47 (0.15)	0.43 (0.18)
5 Aiding children with homework	0.40 (0.20)	0.37 (0.23)
6 Bringing children to activities	0.41 (0.23)	0.34 (0.25)
Child care index (five-points scale)	2.38 (0.73)	2.01 (0.84)
Child care index (one-point scale)	0.48 (0.15)	0.40 (0.17)
Observations	281	399

Notes: This table presents summary statistics for the distribution of child care using the GGS dataset. Higher values indicate that women do less child care. Standard deviations are in parentheses. The sample consists of French internal migrants born in metropolitan France. Data from the GGS (2005).

Table F.3. The Impact of WWI Military Fatalities on Household Tasks

Dependent variable	Household tasks index (one-point scale)			
	Chores		Children	
	(1)	(2)	(3)	(4)
Military death rate	-0.24 [0.30]	-0.17 [0.32]	0.07 [0.37]	0.17 [0.47]
Female	-0.07*** [0.01]	-0.06* [0.03]	-0.08*** [0.01]	-0.06 [0.04]
Military death rate \times Female		-0.11 [0.21]		-0.13 [0.25]
Birth year FE	Yes	Yes	Yes	Yes
Residence département FE	Yes	Yes	Yes	Yes
Pre-war controls (1911)	Yes	Yes	Yes	Yes
Clusters				
Residence département	94	94	94	94
Birth département	86	86	76	76
Observations	1,801	1,801	676	676
Outcome mean	0.28	0.28	0.44	0.44

Notes: This table presents OLS coefficients from estimating specification 9 with the household chores and the child care indexes as outcomes. Standard errors are clustered at the level of départements of birth and of residence. The sample consists of internal migrants. The estimates are computed using the sample weights provided in the GGS (2005).

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

G. Pre-War Differences in Attitudes Toward Gender Roles

In this appendix, I use rough proxies of attitudes toward gender roles to show that there were no pre-war differences in attitudes across départements that experienced varying military death rates.¹⁹ To capture local attitudes, I rely on legislative behaviors of *députés* in the Assemblée Nationale, France’s lower house.

I analyze two 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 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.²⁰

To assess whether local attitudes toward gender roles were correlated with the distribution of WWI military fatalities, I regress military death rates on département-level supports for each of these two bills (Table G.1). Results imply that neither was correlated with the residual variation in military death rates used through the paper, suggesting that results in Section 5 are not driven by pre-war differences in attitudes toward gender roles.

¹⁹Some elements of this analysis are from Boehnke and Gay (2019, pp. 25–26).

²⁰The 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

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
Départements	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. *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 département, 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.

References

- Boehnke, Jörn, and Victor Gay.** 2019. “The Missing Men: World War I and Female Labor Force Participation.” <http://victorgay.me>.
- Commission Consultative des Dommages et des Réparations.** 1951. *Dom-mages Subis par la France et l’Union Française du Fait de la Guerre et de l’Occupation Ennemie (1939–1945)*. Paris: Imprimerie nationale.
- Flaus, Lucien.** 1947. “Les Destructions d’Immeubles d’Habitation et d’Usines en France au Cours de la Guerre 1939–1945.” *Journal de la Société Française de Statistique*, 88: 353–381.
- Fontaine, Arthur.** 1924. *L’Industrie Française Pendant la Guerre*. Paris: Presses Universitaires de France.
- Garraud, Philippe.** 2005. “La Politique Française de Réarmement de 1936 à 1940: Priorités et Contraintes.” *Guerres Mondiales et Conflits Contemporains*, 219(3): 87–102.
- Greenwood, Jeremy, Nezh Guner, and Guillaume Vandembroucke.** 2017. “Family Economics Writ Large.” *Journal of Economic Literature*, 55(4): 1346–1434.
- Lagrou, Pieter.** 2002. “Les Guerres, les Morts et le Deuil: Bilan Chiffré de la Seconde Guerre Mondiale.” In *La Violence de Guerre, 1914–1945. Approches Comparées des Deux Conflits Mondiaux*, edited by Stéphane Audouin-Rouzeau, Annette Becker, Christian Ingrao and Henry Rousso, 313–327. Bruxelles: Complexe; Paris: IHTP-CNRS.
- White, Michael J., and David P. Lindstrom.** 2005. “Internal Migration.” In *Handbook of population*, edited by Dudley L. Poston and Michael Micklin, 311–346. New York: Springer.
- White, Paul E.** 1989. “Internal Migration in the Nineteenth and Twentieth Centuries.” In *Migrants in Modern France*, edited by Philip E. Ogden and Paul E. White, 21–35. London: Routledge.
- Willemez, Laurent.** 2015. “-Elire des Juges et Représenter le Monde du Travail-” *Travail et emploi*, (4): 7–29.