

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

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DATA APPENDIX

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## A. World War I Military Death Rates

I assemble a novel dataset to build a precise measure of WWI military death rates at the département level. I collected data for all French soldiers who died because of the war from the *Mémoire des Hommes* (MDH) archive made available by the French Ministry of Defense.<sup>1</sup> The archive contains information about soldiers who received the mention “Mort pour la France” (“Died for France”), and those who did not. The mention “Mort pour la France” was given to all soldiers who died because of the war, except to those who died following an execution by the French military due to treason, desertion, or mutiny. More precisely, the mention “Mort pour la France” was created by the law of July 2, 1915. This first article of the this law stipulates that “[t]he death certificate of a servicemen of the army or the navy killed in combat or dead from injuries or a disease sustained on the battle field [...] shall [...] contain the mention: ‘Died for France’ ” (*Journal Officiel de la République Française, Lois et Décrets, 47(184), p. 4653, July 9, 1915*). I recorded all soldiers from the MDH archive and extract first name, last name, date of birth, and place of birth. I then cleaned the dataset, excluding soldiers born outside of France, and removing any duplicate.<sup>2</sup> An example of a military record available in the MDH archive is shown in Figure A.1 below.

<sup>1</sup>This dataset is also used in Boehnke and Gay (2020). The original archive is accessible at <http://www.memoiredeshommes.sga.defense.gouv.fr>.

<sup>2</sup>Officers were more likely to have duplicate records.

PARTIE A REMPLIR PAR LE CORPS.

Nom DUPONT  
Prénoms Jacques  
Grade 1<sup>er</sup> classe  
Corps 31<sup>e</sup> Bataillon de Chasseurs à Pied  
N° 2922 au Corps. — Cl. 1904  
Matricule. 36 au Recrutement Chalons/Seine  
Mort pour la France le 15 juillet 1918  
à La Butte du Mesnil (Marne)  
Genre de mort tué à l'ennemi  
Né le 7 Décembre 1884  
à Sennecey-le-Grand Département Saône et Loire  
Arr<sup>e</sup> municipal (p<sup>r</sup> Paris et Lyon), }  
à défaut rue et N°.

Cette partie n'est pas à remplir par le Corps.  
Judgement rendu le \_\_\_\_\_  
par le Tribunal de \_\_\_\_\_  
acte ou jugement transcrit le 7 février 1919  
à Sennecey le Grand  
N° du registre d'état civil Saône et Loire

101-708-1922. [26434]

Figure A.1. Example of Military Record

Notes: Military record from the Mémoire des Hommes archive made available by the Ministry of Defense.

## B. Pre-World War I Data

**Population (total, by sex and age)** Data for the population by sex and age used to compute sex ratios by age group in 1911 and 1921 and for the population in 1911 are from the censuses of 1911 and 1921:

- 1911: *Résultats Statistiques du Recensement de la Population* 1911, Partie 2, Tableau VII, “Population présente totale suivant le sexe, l’état matrimonial et l’année de naissance, par département” (pp. 98–137).
- 1921: *Résultats Statistiques du Recensement de la Population* 1921, Partie 2, Tableau V, “Population présente totale suivant le sexe, l’âge et le degré d’instruction” (pp. 84–91).

**Share of rural population** The share of rural population in 1911 combines the total population with the rural population—the population that resides in cities with fewer than 2,000 residents. It is from the census of 1926: *Résultats Statistiques du Recensement de la Population* 1926, Partie 1, Tableau V, “Population urbaine et rurale par département, en 1872, 1911, 1921 et 1926” (p. 102).

**Share of population born in the département** The share of population born in the département in 1911 combines the total population born in the département and the total population. It is from the census of 1911: *Résultats Statistiques du Recensement de la Population* 1911, Partie 2, Tableau VIII, “Population présente totale par département suivant le lieu de naissance des Français et la nationalité des étrangers” (pp. 138–141).

**Female labor force participation** Female labor force participation rates in 1911 are computed as the ratio of working women to women aged 15 and above. As detailed in Boehnke and Gay (2020), I subtract female *chefs d’établissement* in farming. This measure is from the census of 1911: *Résultats Statistiques du Recensement de la Population* 1911, Partie 3, Tableau XXVII, “Population active par grandes catégories professionnelles, suivant la position par département” (pp. 156–167).

**Share of girls aged 5 to 19 in school** The share of girls aged 5 to 19 in school in 1911 combines the number of girls in elementary and secondary public and private schools and the number of girls aged 5 to 19. Data are from the *Annuaire Statistique de la France* 1912, Partie 2, Section E, Instruction, Tableau II, “Écoles primaires élémentaires et supérieures en 1911–1912” (p. 19).

**Total fertility rate** The total fertility rate in 1911 is computed as the sum of five-year age-specific birth rates times 5, where an age-specific birth rate is computed as  $(\text{birth}_x / \text{population}_x) \times 1000$ .  $\text{birth}_x$  is the number of live births to mothers in age group  $x$  and  $\text{population}_x$  is the number of women in age group  $x$ . Age groups for  $\text{birth}_x$  are: under 15, 15–19, 20–24, 25–29, 30–34, 35–39, 40–44, and above 45. Age groups for  $\text{population}_x$  are: 10–14, 15–19, 20–24, 25–29, 30–34, 35–39, 40–44, and 45–49. Data for the number of live births are from the *Statistique du Mouvement de la Population* 1911–1913, Tableau XLIII, “Naissances d’après l’âge de la mère” (pp. 116–119). Population data are from the census of 1911: *Résultats Statistiques du Recensement de la Population* 1911, Partie 2, Tableau VII, “Population présente totale suivant le sexe, l’état matrimonial et l’année de naissance, par département” (pp. 98–137).

**Personal wealth per inhabitant** Total personal wealth in Francs per inhabitants aggregates 13 different wealth indicators in 1908—government stocks, obligations and bonds, stocks, interests, life insurance, savings accounts, banking accounts, buildings, etc. This variable is from Cornut (1963, p. 411).

**Age** Average age in 1911 is computed as a weighted average, where weights are the shares of the population in each 5-years bin provided by the census and where I assign the midpoint of the age bin as the relevant age for the bin. Data are from the census of 1911: *Résultats Statistiques du Recensement de la Population* 1911, Partie 2, Tableau VII, “Population présente totale suivant le sexe, l’état matrimonial et l’année de naissance, par département” (pp. 98–137).

**Height (cm)** Average height in 1911 corresponds to average height of conscripts drafted in the army in 1911. Height measures are available in one-centimeter inter-

vals. Hence, I compute a weighted average height, where weights are shares of the population in each height bin. Data are from the *Compte Rendu sur le Recrutement de l'Armée dans l'Année 1912*, Tableau O, “Énumération des différents degrés de taille des jeunes gens de la classe 1911 maintenus sur les tableaux de recensement” (pp. 90–91).

**Share of active male population in the industrial sector** The share of active male population in the industrial sector in 1911 is from the census of 1911: *Résultats Statistiques du Recensement de la Population 1911*, Partie 3, Tableau XXVII, “Population active par grandes catégories professionnelles, suivant la position par département” (pp. 156–167).

**Share of literate population** The share of literate population in 1911 corresponds to the share of conscripts that are literate at the time of recruitment in 1911. Data are from the *Annuaire Statistique de la France 1912*, Partie 2, Section E, a, Tableau I, “Degré d’instruction des jeunes gens de la classe de 1911 maintenus sur les listes de tirages” (pp. 15–16).

**Direct taxes (France per inhabitant)** Amounts of direct taxes collected in Francs per inhabitant in 1911 are from the *Annuaire Statistique de la France 1911*, Partie 5, Section E, c, Tableau II, “Montant des contributions directes, par département, pour l’année 1911” (pp. 296–299).

**Bilateral migration flows** The number of residents born in each other départements are from the census of 1911: *Résultats Statistiques du Recensement de la Population 1911*, Partie 4, Tableau I.

**Support to Female Suffrage in June 1914** Data for députés’ support to female suffrage in June 1914 are from an open letter written by several women’s rights organizations addressed to the Assemblée Nationale. This letter was found at the Bibliothèque Marguerite Durand (cited in Bouglé-Moalic, 2012).

**Votes on the Extension of Suffrage and Eligibility to Women in Labor Courts** Data for députés’ votes on the extension of suffrage and eligibility to

women in labor courts (*conseils de prud'hommes*) in February 1901 are from the *Journal Officiel de la République Française, Débats Parlementaires*, 7e Législature, Session ordinaire de 1901, pp. 397–410, February 13, 1901. I focus on votes on article 5, paragraph 5 of the law instituting labor courts, which specifically extends the franchise and eligibility to women. The law itself passed on March 27, 1907.

## C. World War II Data

### *C.1. World War II military death rates*

To build a measure of WWII military death rates at the département level, I collected the number of deceased soldiers born in each département who are registered in the MDH archive.<sup>3</sup> I exclude individuals whose mention is “unknown” or “undecided,” as these have not been recognized as fatalities resulting from WWII. Soldiers comprise those who fought in the French army between September 1939 and June 1940, in the *France Libre* between July 1940 and May 1945, in the Vichy army between June 1940 and November 1942, in the French Resistance between June 1940 and February 1944, and in the French Forces of the Interior between February 1944 and August 1944.

### *C.2. World War II destruction measures*

**Area with land mines (hectares)** The area that needs to be cleaned of land mines after WWII is from the map IV (insert), “Superficies à Déminer”, in *Commission Consultative des Dommages et des Réparations* (1951).

**Buildings destroyed** The share of buildings that were partially or totally destroyed during WWII is from map II, “Destructions Immobilières au 1-12-47”, in *Commission Consultative des Dommages et des Réparations* (1951).

**Factories destroyed** Share of factories that were destroyed during WWII is from Flaus (1947, p. 367). This source only provides the data for 27 départements that experienced most destruction of factories (i.e., at least 1 percent). I assign value 0 to all other départements.

<sup>3</sup>The original archive is accessible at <http://www.memoiredeshommes.sga.defense.gouv.fr>.



## D. Contemporaneous Data

I detail sources and definitions of contemporaneous variables used in the analysis. I describe the censuses (1962–2012), the labor force surveys (1982–2013), the extended version of the labor force surveys (2005–2012), and the Gender and Generation survey (2005).

### D.1. Censuses 1962–2012

#### D.D.1.1. Census of 1962

**Source** The census of 1962 was produced by the INSEE and is disseminated by the ADISP-CMH: *Recensement de la population 1962: fichier détail au 1/20*.

**Sample selection** The sample used throughout the analysis comprises French women living in ordinary housing and not in group quarters, aged 30 to 49, that are internal migrants. This corresponds to the following selection criteria:<sup>4</sup>

- Housing category = ordinary housing (CL = 1).
- Population category = ordinary households (1954 definition) (CP = 0).
- Nationality = French (NC = 0).
- Age = 30–49 (AD = 30–49).
- Sex = female (S = 2).
- Birth département ! = residence département (DN ! = DR).

I further remove individuals born outside metropolitan France, those born or residing in the three départements that France recovered after WWI—Bas-Rhin (67), Haut-Rhin (68), and Moselle (57).

## Variables

<sup>4</sup>The variable names and codes correspond to those in the original censuses.

- Labor force participant: activity type = active (TA = 1–7). Based on question 11 of the individual bulletin: “Indicate the occupation or job you are currently holding. A woman taking care of her household will reply ‘no occupation.’” Also uses answers to questions 16 and 17.
- Employed: activity type = employed (TA = 1). Based on question 11 of the individual bulletin: “Indicate the occupation or job you are currently holding. A woman taking care of her household will reply ‘no occupation.’” Also uses answers to questions 16 and 17.
- Education levels. Based on question 10 of the individual bulletin: “Among the following diplomas, indicate all of which you possess.”
  - Primary or lower secondary education: general or superior education diploma = *certificat d’études primaires* or *BEPC ou brevet élémentaire* or *aucune déclaration* (EGI = 1, 2, or 9) and professional or technical education diploma = *aucune déclaration* (FPTD = 9).
  - Technical secondary education: professional or technical education diploma ! = *aucune déclaration* (FPTD ! = 9) and general or superior education diploma ! = *baccalauréat ou brevet supérieur* or *diplômes de niveau supérieur au 2e baccalauréat* (EGI ! = 3 or 4).
  - High school: general or superior education diploma = *baccalauréat ou brevet supérieur* (EGI = 3).
  - Higher education: general or superior education diploma = *diplômes de niveau supérieur au 2e baccalauréat* (EGI = 4).
- Migrated before previous census: département of residence ! = département of residence in the census of 1954 (DR ! = DRA).
- Number of children: number of children of the family in the household (NE24).
- Home owner: occupation status = owner of house or building or owner of housing in a building (SO = 1–2).
- Rooms: number of rooms (HC1).
- Housing quality:

- 1: characteristics of housing = hard walls and ceiling, electricity, water, toilets, shower (CEL = 1–4).
  - 2: characteristics of housing = hard walls and ceiling, electricity, water, toilets, no shower (CEL = 5–7).
  - 3: characteristics of housing = hard walls and ceiling, electricity, water, no toilets, no shower (CEL = 8–10).
  - 4: characteristics of housing = hard walls and ceiling, electricity, no water (CEL = 11–13).
  - 5: characteristics of housing = hard walls and ceiling, no electricity, no water (CEL = 14–16).
  - 6: characteristics of housing = no hard walls or ceiling (CEL = 17–18).
  - 7: characteristics of housing = other (CEL ! = 1–18).
- Married: marital status = married (M = 2).
  - Local labor market of residence: *zone de peuplement industriel ou urbain* (ZPIU).
  - Commune of residence: *commune* (CR).
  - Sample weight: *sondage* (SOND).

**Matching couples** To match partners within households, I keep adult (LINK = 1–2) family members (AF = 1) in single-family households (NFPM = 2), in which both partners are present (CONJFB = 1). I use the following variables to create unique family identifiers: NUMGEO, NUMLOG, and NUMFAM.

**Local labor markets (ZIUP)** The zones of industrial or urban population (ZI-UPs) were created in 1962 to measure the influence of urban areas on surrounding rural areas. Each ZIUP comprised one urban area together with surrounding rural municipalities with one or more industrial, commercial, or administrative establishments with 20 workers or more, with a total of at least 100 workers. It also comprised surrounding rural municipalities that had a large share of workers commuting to the urban area. ZIUPs were redefined at each census, and disappeared with the census of 1999.

### *D.D.1.2. Census of 1968*

**Source** The census of 1968 was produced by the INSEE and is disseminated by the ADISP-CMH: *Recensement de la population 1968: fichier détail au 1/4*.

**Sample selection** The sample used throughout the analysis comprises French women living in ordinary housing and not in group quarters, aged 30 to 49, that are internal migrants. This corresponds to the following selection criteria:

- Housing category = ordinary housing (CL = 1).
- Population category = ordinary households (CPD = 0).
- Nationality = French (NC = 0–1).
- Age = 30–49 (AD = 30–49).
- Sex = female (S = 2).
- Birth département ! = residence département (DN ! = D).

I further remove individuals born outside metropolitan France, those born or residing in the three départements that France recovered after WWI—Bas-Rhin (67), Haut-Rhin (68), and Moselle (57).

### **Variables**

- Labor force participant: activity type = active (TA = 1–3 or 6). Based on question 12 of the individual bulletin: “Indicate the occupation or job you are currently holding. A woman taking care of her household will reply ‘no occupation.’” Also uses answers to questions 17 and 18.
- Employed: activity type = employed (TA = 1–2). Based on question 12 of the individual bulletin: “Indicate the occupation or job you are currently holding. A woman taking care of her household will reply ‘no occupation.’” Also uses answers to questions 17 and 18.
- Education levels. Based on question 11 of the individual bulletin: “Among the following diplomas, indicate ALL of which you possess.”

- Primary or lower secondary education: general education diploma = *certificat d'études primaires (CEP)* or *brevet d'études du premier cycle (BEPC)*, *brevet élémentaire (BE)* ou *brevet d'enseignement primaire supérieur (BEPS)* or *aucune diplôme déclaré* (EG = 1, 2, or 9) and professional or technical education diploma = *aucune déclaration* (FPT = 9).
- Secondary technical education: professional or technical education diploma != *aucune déclaration* (FPT != 9) and general education diploma != *baccalauréat ou brevet supérieur* or *diplômes de niveau supérieur ou baccalauréat complet* (EG != 3 or 4).
- High school: general education diploma = *baccalauréat ou brevet supérieur* (EG = 3).
- Higher education: general education diploma = *diplômes de niveau supérieur ou baccalauréat complet* (EG = 4).
- Migrated before previous census: département of residence != département of residence in the census of 1962 (D != DRA).
- Number of children: number of children of the family in the household (NEF).
- Home owner: occupation status = owner of house or building or owner of housing in a building (SO = 1–2).
- Rooms: number of rooms (HC).
- Housing quality:
  - 1: characteristics of housing = hard walls and ceiling, electricity, water, toilets, shower (CEL = 1–4).
  - 2: characteristics of housing = hard walls and ceiling, electricity, water, toilets, no shower (CEL = 5–7).
  - 3: characteristics of housing = hard walls and ceiling, electricity, water, no toilets, no shower (CEL = 8–10).
  - 4: characteristics of housing = hard walls and ceiling, electricity, no water (CEL = 11–13).

- 5: characteristics of housing = hard walls and ceiling, no electricity, no water (CEL = 14–16).
- 6: characteristics of housing = no hard walls or ceiling (CEL = 17–18).
- 7: characteristics of housing = other (CEL ! = 1–18).
- Married: marital status = married (M = 2).
- Local labor market of residence: *zone de peuplement industriel ou urbain* (ZPIU).
- Commune of residence: *commune* (C).
- Sample weight: *sondage* (SOND).

**Matching couples** To match partners within households, I keep adult (LINK = 1–2) family members (AF = 1) in single-family households (NFM = 2), in which both partners are present (PCF = 1). I use the following variables to create unique family identifiers: C, NUMLOG, and NFAM.

#### *D.D.1.3. Census of 1975*

**Source** The census of 1975 was produced by the INSEE and is disseminated by the ADISP-CMH: *Recensement de la population 1975: fichier détail au 1/5*.

**Sample selection** The sample used throughout the analysis comprises French women living in ordinary housing and not in group quarters, aged 30 to 49, that are internal migrants. This corresponds to the following selection criteria:

- Housing category = ordinary housing (CL = 1).
- Population category = ordinary households (CPD = 0).
- Nationality = French (NC = 1–2).
- Age = 30–49 (AD = 30–49).
- Sex = female (S = 2).
- Birth département ! = residence département (DN ! = D).

I further remove individuals born outside metropolitan France, those born or residing in the three départements that France recovered after WWI—Bas-Rhin (67), Haut-Rhin (68), and Moselle (57).

## Variables

- Labor force participant: activity type = active (TA = 1,3 or 6). Based on question 11 of the individual bulletin: “Indicate the occupation or job you are currently holding. A woman taking care of her household will reply ‘no occupation.’” Also uses answers to questions 17 and 18.
- Employed: activity type = employed (TA = 1). Based on question 11 of the individual bulletin: “Indicate the occupation or job you are currently holding. A woman taking care of her household will reply ‘no occupation.’” Also uses answers to questions 17 and 18.
- Education levels. Based on question 8 of the individual bulletin: “Among the following diplomas, indicate all of which you possess.”
  - Primary or lower secondary education: general education = *certificat d’études primaires, diplôme de fin d’études obligatoires* or *brevet d’études du premier cycle (BEPC), brevet élémentaire (BE) ou brevet d’enseignement primaire supérieur (BEPS)* or *aucun diplôme déclaré* (EGS = 1, 2, or 9) and professional and technical education = *aucun diplôme déclaré* (FPT = 9).
  - Technical secondary education: professional and technical education != *Bac de technicien, BTS, DUT, DEST, diplômes paramédicaux et sociaux*, and *aucun diplôme déclaré*, (FPT != 4–6, 9) and general education != *baccalauréat ou brevet supérieur* or *diplômes de niveau supérieur ou baccalauréat complet* (EGS != 3 or 4).
  - High school: general education = *baccalauréat ou brevet supérieur* (EGS = 3) and professional and technical education != *BTS, DUT, DEST* or *diplômes paramédicaux et sociaux* (FPT != 5–6), or professional and technical education = *bac de technicien* (FPT = 4) and general education != *diplômes de niveau supérieur ou baccalauréat complet* (EGS != 4).

- Higher education: general education = *diplômes de niveau supérieur ou baccalauréat complet* (EGS = 4) or professional and technical education = *BTS, DUT, DEST* or *diplômes paramédicaux et sociaux* (FPT = 5–6).
- Migrated before previous census: département of residence ! = département of residence in the census of 1968 (D ! = DRA).
- Number of children: number of children of the family in the household (NEF).
- Home owner: occupation status = owner of house or building or owner of housing in a building (SO = 1).
- Rooms: number of rooms (HCL).
- Housing quality:
  - 1: characteristics of housing = hard walls and ceiling, electricity, water, toilets, shower (CEL = 1–4).
  - 2: characteristics of housing = hard walls and ceiling, electricity, water, toilets, no shower (CEL = 5–7).
  - 3: characteristics of housing = hard walls and ceiling, electricity, water, no toilets, no shower (CEL = 8–10).
  - 4: characteristics of housing = hard walls and ceiling, electricity, no water (CEL = 11–16).
  - 6: characteristics of housing = no hard walls or ceiling (CEL = 17–18).
  - 7: characteristics of housing = other (CEL ! = 1–18).
- Married: marital status = married (M = 2).
- Local labor market of residence: *zone de peuplement industriel ou urbain* (ZPIU).
- Commune of residence: *commune* (C).
- Sample weight: *sondage* (SOND).



**Matching couples** To match partners within households, I keep adult (LINK = 1–2) family members in single-family households (NFSM = 0), in which both partners are present (PCF = 1). I use the following variables to create unique family identifiers: D and NUMLOG.

#### *D.D.1.4. Census of 1982*

**Source** The census of 1982 was produced by the INSEE and is disseminated by the ADISP-CMH: *Recensement de la population 1982: fichier détail au 1/4*.

**Sample selection** The sample used throughout the analysis comprises French women living in ordinary housing and not in group quarters, aged 30 to 49, that are internal migrants. This corresponds to the following selection criteria:

- Housing category = ordinary housing (CL = 1).
- Population category = ordinary households (CPD = 0).
- Nationality = French (N = \*\*).
- Age = 30–49 (AD = 30–49).
- Sex = female (S = 2).
- Birth département ! = residence département (DN ! = D).

I further remove individuals born outside metropolitan France, those born or residing in the three départements that France recovered after WWI—Bas-Rhin (67), Haut-Rhin (68), and Moselle (57).

#### **Variables**

- Labor force participant: activity type = active (TA = 1,3 or 6). Based on question 12a of the individual bulletin: “Indicate the occupation or job you are currently holding.” Also uses answer to question 16.
- Employed: activity type = employed (TA = 1). Based on question 12a of the individual bulletin: “Indicate the occupation or job you are currently holding.” Also uses answer to question 16.

- Education levels. Based on question 10 of the individual bulletin: “Indicate all the diplomas you possess.”
  - Primary or lower secondary education: general education diploma = *certificat d’études primaires (CEP)*, *diplôme de fin d’études obligatoire (DFEO)* or *brevet d’études du 1er cycle (BEPC)*, *brevet élémentaire (BE)*, *brevet d’enseignement primaire supérieur (BEPS)* (DEG = 1–2).
  - Technical secondary education: technical education diploma ! = blank and *baccalauréat de technicien*, *brevet de technicien*, *brevet supérieur d’enseignement commercial (BSEC)*, *capacité en droit (DET ! = blank and 4)* and general education diploma ! = *baccalauréat*, *brevet supérieur*, *certificat de fin d’études secondaires (CFES)* (DEG ! = 3).
  - High school: general education diploma = *baccalauréat*, *brevet supérieur*, *certificat de fin d’études secondaires (CFES)* (DEG = 3) or technical education diploma = *baccalauréat de technicien*, *brevet de technicien*, *brevet supérieur d’enseignement commercial (BSEC)*, *capacité en droit (DET = 4)*.
  - Higher education: superior education diploma ! = blank (DES ! = blank).
- Migrated before previous census: département of residence ! = département of residence in the census of 1975 (D ! = DRA).
- Number of children: number of children of the family in the household (NEF).
- Home owner: occupation status = owner of house or building or owner of housing in a building (SO = 1).
- Rooms: number of rooms (HC).
- Housing quality:
  - 1: characteristics of housing = water, toilets, shower (CFL = 4–5).
  - 2: characteristics of housing = water, toilets, no shower (CFL = 2).
  - 3: characteristics of housing = water, no toilets, shower (CFL = 3).
  - 4: characteristics of housing = water, no toilets, no shower (CFL = 1).

- 5: characteristics of housing = no water (CFL = 0).
- Married: marital status = married (M = 2).
- Local labor market of residence: *zone de peuplement industriel ou urbain* (ZPIU).
- Commune of residence: *commune* (C).
- Sample weight: *sondage* (SOND).

**Matching couples** To match partners within households, I keep adult (LINK = 1–2) family members in single-family households (NFM = 1), in which both partners are present (PCF = 1). I use the following variables to create unique family identifiers: D, C and NUMMEN.

#### *D.D.1.5. Census of 1990*

**Source** The census of 1990 was produced by the INSEE and is disseminated by the ADISP-CMH: *Recensement de la population 1990: fichier détail au 1/4*.

**Sample selection** The sample used throughout the analysis comprises French women living in ordinary housing and not in group quarters, aged 30 to 49, that are internal migrants. This corresponds to the following selection criteria:

- Housing category = ordinary housing (CATL = 1).
- Population category = ordinary households (CATP = 0).
- Nationality = French (NAT1 = 11–12).
- Age = 30–49 (AGE = 30–49).
- Sex = female (SEXE = 2).
- Birth département ! = residence département (DPNAI ! = D).

I further remove individuals born outside metropolitan France, those born or residing in the three départements that France recovered after WWI—Bas-Rhin

(67), Haut-Rhin (68), and Moselle (57).

## Variables

- Labor force participant: activity type = active (TACT = 11–12). Based on question 12 of the individual bulletin: “Current occupation.” Also uses answers to questions 9 and 11.
- Employed: activity type = employed (TACT = 11). Based on question 12 of the individual bulletin: “Current occupation.” Also uses answers to questions 9 and 11.
- Education levels. Based on question 8 of the individual bulletin: “Indicate your highest diploma.”
  - Primary or lower secondary education: diploma = *aucun diplôme déclaré, certificat études primaires (CEP)*, or *brevet élémentaire, brevet des collèges (BEPC)* (DIPL = 1–3).
  - Technical secondary education: diploma = *certificat d’aptitudes professionnelles (CAP)* or *brevet d’études professionnelles (BEP)* (DIPL = 4–5).
  - High school: diploma = *baccalauréat (BAC)*, *brevet professionnel ou de technicien (BEA, BEC, BEI)* (DIPL = 6).
  - Higher education: diploma = *diplôme universitaire de 1e cycle (BTS, DUEST, DUT)*, *diplôme des professions sociales ou de la santé* or *diplôme universitaire de 2e ou 3e cycle, d’ingénieur ou d’une grande école* (DIPL = 7–8).
- Migrated before previous census: département of residence ! = département of residence in the census of 1982 (D ! = DRAN).
- Number of children: number of children of the family in the household (NENF).
- Home owner: occupation status = owner of house or building or owner of housing in a building (STOC = 1).
- Housing quality:

- 1: housing comfort = toilets, shower (CONF = 4–5).
  - 2: housing comfort = no toilets, shower (CONF = 3).
  - 3: housing comfort = toilets, no shower (CONF = 2).
  - 4: housing comfort = no toilets, no shower (CONF = 1).
- Married: marital status = married (MATR = 2).
  - Local labor market of residence: *zone de peuplement industriel ou urbain* (ZPIU).
  - Commune of residence: *commune* (C).
  - Sample weight: *sondage* (SOND).

**Matching couples** To match partners within households, I keep adult (LINK = 1–2) family members in single-family households (NFAM = 1), in which both partners are present (SFM = 30–34). Unfortunately, the INSEE did not keep unique family identifiers for the census of 1990. I generate those by combining all the common family variables in the censuses: D, C, IDIMM, IDLOG, IDFAM, CTL, TYPF, NE16F, NENF, NPERF, AGEF, CRANF, CS8F, DELTF, DIPLF, DPNAIF, FRANF, EMPLF, LPRMF, MATRF, SEXEF, TACTF, TTRAVF, AGEPF, CRANPF, CS8PF, DELTPF, DIPLPF, DPNAIPF, DRANPF, EMPLPF, MATRPF, NBSALPF, TACTPF, TTRAVPF, AGEMF, CRANMF, CS8MF, DELTMF, DIPLMF, DPNAIMF, DRANMF, EMPLMF, MATRMF, TACTMF, and TTRAVMF.

#### *D.D.1.6. Census of 1999*

**Source** The census of 1999 was produced by the INSEE and is disseminated by the ADISP-CMH: *Recensement de la population 1999: fichier détail au 1/20*.

**Sample selection** The sample used throughout the analysis comprises French women living in ordinary housing and not in group quarters, aged 30 to 49, that are internal migrants. This corresponds to the following selection criteria:

- Housing category = ordinary housing (CATL = 1).
- Population category = blank (CATC = blank).

- Nationality = French (INAT21 = 1).
- Age = 30–49 (AGE = 30–49).
- Sex = female (SEXE = 2).
- Birth département ! = residence département (DPNAI ! = D).

I further remove individuals born outside metropolitan France, those born or residing in the three départements that France recovered after WWI—Bas-Rhin (67), Haut-Rhin (68), and Moselle (57).

## Variables

- Labor force participant: activity type = active (TACT = 11–13). Based on question 15 of the individual bulletin: “Current occupation.” Also uses answers to questions 12 and 13.
- Employed: activity type = employed (TACT = 11). Based on question 15 of the individual bulletin: “Current occupation.” Also uses answers to questions 12 and 13.
- Education levels. Based on question 10 of the individual bulletin: “Indicate your latest diploma.”
  - Primary or lower secondary education: last diploma obtained = *aucun diplôme, certificat études primaires, or BEPC, brevet élémentaire, brevet des collèges* (DIPL = 0–2).
  - Technical secondary education: last diploma obtained = *CAP or BEP* (DIPL = 3–4).
  - High school: last diploma obtained = *baccalauréat général or baccalauréat technologique ou professionnel, brevet professionnel ou de technicien, capacité en droit* (DIPL = 5–6).
  - Higher education: last diploma obtained = *diplôme universitaire de 1e cycle (BTS, DUT), diplôme des professions sociales ou de la santé or diplôme universitaire de 2e ou 3e cycle, d’ingénieur ou d’une grande école* (DIPL = 7–8).

- Migrated before previous census: département of residence ! = département of residence in the census of 1990 (D ! = DRA).
- Number of children: number of children of the family in the household (NENF).
- Home owner: occupation status = owner of house or building or owner of housing in a building (STOC = 1).
- Rooms: number of rooms (NBPI).
- Housing quality:
  - 1: housing comfort = toilets, shower (CONF = 4–5).
  - 2: housing comfort = no toilets, shower (CONF = 3).
  - 3: housing comfort = toilets, no shower (CONF = 2).
  - 4: housing comfort = no toilets, no shower (CONF = 1).
- Married: marital status = married (MATR = 2).
- Local labor market of residence: *zone emploi* (ZE).
- Commune of residence: *commune* (COM).
- Sample weight: *sondage* (SOND).

**Matching couples** To match partners within households, I keep adult (LINK = 1–2) family members in single-family households (NFAM = 1), in which both partners are present (SFM = 30–34). I use the following variables to create unique family identifiers: D, C, IRIS2000, LOG, FAM.

**Local labor markets (EZ)** Employment zones (EZs) are zones in which most active individuals reside and work, and in which establishments can find most of their necessary labor force. The zoning is based on home-work commuting patterns in each census.

#### *D.D.1.7. Censuses of 2006*

**Source** The census of 2006 was produced and disseminated by the INSEE: *Recensement de la population, fichier détail 2006*. It is available at the following address: <https://www.insee.fr/fr/information/2894421>. This census is the first one among annual census surveys. Its collection methodology differs from that of the previous censuses. “Since 2004, French census data have been collected through annual surveys. Under this rolling census system, the ‘census’ is based on an aggregated set of five annual surveys dated for the median year. Every five years, all of the municipalities with a population under 10,000—representing around half of the total resident population—are exhaustively surveyed, along with at least 40 percent of dwellings in municipalities with a population over 10,000 (8 percent each year). The results of the ‘primary analysis’ of all collected census forms are therefore based on a sample of around 70 percent of dwellings, aggregated under the median census year. The first complete results of the new census were therefore dated 2006 and were based on the samples of the 2004–2008 survey rounds.” (Toulemon, 2012).

**Sample selection** The sample used throughout the analysis comprises French women living in ordinary housing and not in group quarters, aged 30 to 49, that are internal migrants. This corresponds to the following selection criteria:

- Housing category = ordinary housing (CATL = 1).
- Population category = household population (CATCPC = 0).
- Nationality = French (INATC = 1).
- Age = 30–49 (AGED = 30–49).
- Sex = female (SEXE = 2).
- Birth département ! = residence département (DNAI ! = DEPT).

I further remove individuals born outside metropolitan France, those born or residing in the three départements that France recovered after WWI—Bas-Rhin (67), Haut-Rhin (68), and Moselle (57).

#### **Variables**



- Labor force participant: activity type = active (TACT = 11–12). Based on question 10 of the individual bulletin: “What is your main situation?”
- Employed: activity type = employed (TACT = 11). Based on question 10 of the individual bulletin: “What is your main situation?”
- Education levels. Based on question 9 of the individual bulletin: “Which diploma(s) do you possess?”
  - Primary or lower secondary education: highest diploma = *pas de scolarité, aucun diplôme mais scolarité jusqu’en école primaire ou au collège, aucun diplôme mais scolarité au-delà du collège, certificat d’études primaires*, or *BEPC, brevet élémentaire, brevet des collèges* (DIPL = 1–3, 11–12).
  - Technical secondary education: highest diploma = *certificat d’aptitu-des professionnelles, brevet de compagnon* or *brevet d’études professionnelles* (DIPL = 13–14).
  - High school: highest diploma = *baccalauréat général, brevet supérieur* or *bac technologique ou professionnel, BEC, BEI, BEH, capacité en droit* (DIPL = 15–16).
  - Higher education: highest diploma = *diplôme universitaire de 1er cycle, BTS, DUT, diplôme des professions sociales ou de santé* or *diplôme universitaire de 2e ou 3e cycle, d’ingénieur, de grande école* (DIPL = 17–18).
- Migrated before previous census: indicator of residence in 2001 = *dans le même logement, dans un autre logement de la même commune*, or *dans une autre commune du département* (IRAN = 1–3).
- Number of children: the number of children in a family is calculated using the SFM and NPERR variables, which describe the family structure of each household and the number of persons in a household.
- Home owner: occupation status = *propriétaire* (STOCD = 10).
- Housing area in m2: SURF.

- Married: marital status = married (`MATR = 2`).
- Commune of residence: *canton-ville* (`CANTVILLE`).
- Sample weight: *poids de l'individu* (`IPONDI`).

**Local labor market of residence** To assign a local labor market of residence to a respondent, I match the geographic code of 2006—which contains employment zones and *canton-villes*—to the census of 2006 based on *canton-villes*.<sup>5</sup>

**Matching couples** To match partners within households, I keep adult (`LINK = 1–2`) family members in single-family households (`TYPMC = 4`, `TYPFC = 2`, and `INFAM = 1`), in which both partners are present (`COUPLE = 1`). I use the following variables to create unique family identifiers: `CANTVILLE` and `NUMMI`.

#### *D.D.1.8. Censuses of 2007*

**Source** The census of 2007 was produced and disseminated by the INSEE: *Recensement de la population, fichier détail 2007*. It is available at the following address: <https://www.insee.fr/fr/information/2893468>.

**Sample selection** The sample used throughout the analysis comprises French women living in ordinary housing and not in group quarters, aged 30 to 49, that are internal migrants. This corresponds to the following selection criteria:

- Housing category = ordinary housing (`CATL = 1`).
- Population category = household population (`CATPC = 0`).
- Nationality = French (`INATC = 1`).
- Age = 30–49 (`AGED = 30–49`).
- Sex = female (`SEXE = 2`).
- Birth département ! = residence département (`DNAI ! = DEPT`).

<sup>5</sup>The geographic code of 2006 is produced and distributed by the INSEE and is available at the following address: <https://www.insee.fr/fr/information/2560651>.

I further remove individuals born outside metropolitan France, those born or residing in the three départements that France recovered after WWI—Bas-Rhin (67), Haut-Rhin (68), and Moselle (57).

## Variables

- Labor force participant: activity type = active (TACT = 11–12). Based on question 10 of the individual bulletin: “What is your main situation?”
- Employed: activity type = employed (TACT = 11). Based on question 10 of the individual bulletin: “What is your main situation?”
- Education levels. Based on question 9 of the individual bulletin: “Which diploma(s) do you possess?”
  - Primary or lower secondary education: highest diploma = *pas de scolarité, aucun diplôme mais scolarité jusqu’en école primaire ou au collège, aucun diplôme mais scolarité au-delà du collège, certificat d’études primaires, or BEPC, brevet élémentaire, brevet des collèges* (DIPL = 1–3, 11–12).
  - Technical secondary education: highest diploma = *certificat d’aptitu-des professionnelles, brevet de compagnon or brevet d’études professionnelles* (DIPL = 13–14).
  - High school: highest diploma = *baccalauréat général, brevet supérieur or bac technologique ou professionnel, BEC, BEI, BEH, capacité en droit* (DIPL = 15–16).
  - Higher education: highest diploma = *diplôme universitaire de 1er cycle, BTS, DUT, diplôme des professions sociales ou de santé or diplôme universitaire de 2e ou 3e cycle, d’ingénieur, de grande école* (DIPL = 17–18).
- Migrated before previous census: indicator of residence in 2002 = *dans le même logement, dans un autre logement de la même commune, or dans une autre commune du département* (IRAN = 1–3).

- Number of children: the number of children in a family is calculated using the `SFM` and `NPERR` variables, which describe the family structure of each household and the number of persons in a household.
- Home owner: occupation status = *propriétaire* (`STOCD` = 10).
- Housing area in m2: `SURF`.
- Married: marital status = married (`MATR` = 2).
- Commune of residence: *canton-ville* (`CANTVILLE`).
- Sample weight: *poids de l'individu* (`IPONDI`).

**Local labor market of residence** To assign a local labor market of residence to a respondent, I match the geographic code of 2007—which contains employment zones and *canton-villes*—to the census of 2007 based on *canton-villes*.<sup>6</sup>

**Matching couples** To match partners within households, I keep adult (`LINK` = 1–2) family members in single-family households (`TYPMC` = 4, `TYPFC` = 2, and `INFAM` = 1), in which both partners are present (`COUPLE` = 1). I use the following variables to create unique family identifiers: `CANTVILLE` and `NUMMI`.

#### *D.D.1.9. Censuses of 2008*

**Source** The census of 2008 was produced and disseminated by the INSEE: *Recensement de la population, fichier détail 2008*. It is available at the following address: <https://www.insee.fr/fr/information/2891452>.

**Sample selection** The sample used throughout the analysis comprises French women living in ordinary housing and not in group quarters, aged 30 to 49, that are internal migrants. This corresponds to the following selection criteria:

- Housing category = ordinary housing (`CATL` = 1).
- Population category = household population (`CATPC` = 0).

<sup>6</sup>The geographic code of 2007 is produced and distributed by the INSEE and is available at the following address: <https://www.insee.fr/fr/information/2560646>.

- Nationality = French (INATC = 1).
- Age = 30–49 (AGED = 30–49).
- Sex = female (SEXE = 2).
- Birth département ! = residence département (DNAI ! = DEPT).

I further remove individuals born outside metropolitan France, those born or residing in the three départements that France recovered after WWI—Bas-Rhin (67), Haut-Rhin (68), and Moselle (57).

## Variables

- Labor force participant: activity type = active (TACT = 11–12). Based on question 10 of the individual bulletin: “What is your main situation?”
- Employed: activity type = employed (TACT = 11). Based on question 10 of the individual bulletin: “What is your main situation?”
- Education levels. Based on question 9 of the individual bulletin: “Which diploma(s) do you possess?”
  - Primary or lower secondary education: highest diploma = *pas de scolarité, aucun diplôme mais scolarité jusqu’en école primaire ou au collège, aucun diplôme mais scolarité au-delà du collège, certificat d’études primaires*, or *BEPC, brevet élémentaire, brevet des collèges* (DIPL = 1–3, 11–12).
  - Technical secondary education: highest diploma = *certificat d’aptitu-des professionnelles, brevet de compagnon* or *brevet d’études professionnelles* (DIPL = 13–14).
  - High school: highest diploma = *baccalauréat général, brevet supérieur* or *bac technologique ou professionnel, BEC, BEI, BEH, capacité en droit* (DIPL = 15–16).
  - Higher education: highest diploma = *diplôme universitaire de 1er cycle, BTS, DUT, diplôme des professions sociales ou de santé* or *diplôme*

*universitaire de 2e ou 3e cycle, d'ingénieur, de grande école* (DIPL = 17–18).

- Migrated before previous census: indicator of residence in 2003 = *dans le même logement, dans un autre logement de la même commune, or dans une autre commune du département* (IRAN = 1–3).
- Number of children: number of children of the family (NENFR).
- Home owner: occupation status = *propriétaire* (STOCD = 10).
- Housing area in m2: SURF.
- Married: marital status = married (MATR = 2).
- Commune of residence: *canton-ville* (CANTVILLE).
- Sample weight: *poids de l'individu* (IPONDI).

**Local labor market of residence** To assign a local labor market of residence to a respondent, I match the geographic code of 2008—which contains employment zones and *canton-villes*—to the census of 2008 based on *canton-villes*.<sup>7</sup>

**Matching couples** To match partners within households, I keep adult (LINK = 1–2) family members in single-family households (TYPMC = 4, TYPFC = 2, and INFAM = 1), in which both partners are present (COUPLE = 1). I use the following variables to create unique family identifiers: CANTVILLE and NUMMI.

#### *D.D.1.10. Censuses of 2009*

**Source** The census of 2009 was produced and disseminated by the INSEE: *Recensement de la population, fichier détail 2009*. It is available at the following address: <https://www.insee.fr/fr/information/2876034>.

**Sample selection** The sample used throughout the analysis comprises French women living in ordinary housing and not in group quarters, aged 30 to 49, that are internal migrants. This corresponds to the following selection criteria:

<sup>7</sup>The geographic code of 2008 is produced and distributed by the INSEE and is available at the following address: <https://www.insee.fr/fr/information/2560640>.

- Housing category = ordinary housing (CATL = 1).
- Population category = household population (CATPC = 0).
- Nationality = French (INATC = 1).
- Age = 30–49 (AGED = 30–49).
- Sex = female (SEXE = 2).
- Birth département ! = residence département (DNAI ! = DEPT).

I further remove individuals born outside metropolitan France, those born or residing in the three départements that France recovered after WWI—Bas-Rhin (67), Haut-Rhin (68), and Moselle (57).

## Variables

- Labor force participant: activity type = active (TACT = 11–12). Based on question 10 of the individual bulletin: “What is your main situation?”
- Employed: activity type = employed (TACT = 11). Based on question 10 of the individual bulletin: “What is your main situation?”
- Education levels. Based on question 9 of the individual bulletin: “Which diploma(s) do you possess?”
  - Primary or lower secondary education: highest diploma = *pas de scolarité, aucun diplôme mais scolarité jusqu’en école primaire ou au collège, aucun diplôme mais scolarité au-delà du collège, certificat d’études primaires*, or *BEPC, brevet élémentaire, brevet des collèges* (DIPL = 1–3, 11–12).
  - Technical secondary education: highest diploma = *certificat d’aptitu-des professionnelles, brevet de compagnon* or *brevet d’études professionnelles* (DIPL = 13–14).
  - High school: highest diploma = *baccalauréat général, brevet supérieur* or *bac technologique ou professionnel, BEC, BEI, BEH, capacité en droit* (DIPL = 15–16).

- Higher education: highest diploma = *diplôme universitaire de 1er cycle, BTS, DUT, diplôme des professions sociales ou de santé* or *diplôme universitaire de 2e ou 3e cycle, d'ingénieur, de grande école* (DIPL = 17–18).
- Migrated before previous census: indicator of residence in 2004 = *dans le même logement, dans un autre logement de la même commune, or dans une autre commune du département* (IRAN = 1–3).
- Number of children: number of children of the family (NENFR).
- Home owner: occupation status = *propriétaire* (STOCD = 10).
- Housing area in m2: three categories (SURF).
- Married: marital status = married (MATR = 2).
- Commune of residence: *canton-ville* (CANTVILLE).
- Sample weight: *poids de l'individu* (IPONDI).

**Local labor market of residence** To assign a local labor market of residence to a respondent, I match the geographic code of 2009—which contains employment zones and *canton-villes*—to the census of 2009 based on *canton-villes*.<sup>8</sup>

**Matching couples** To match partners within households, I keep adult (LINK = 1–2) family members in single-family households (TYPMC = 4, TYPFC = 2, and INFAM = 1), in which both partners are present (COUPLE = 1). I use the following variables to create unique family identifiers: CANTVILLE and NUMMI.

#### *D.D.1.11. Censuses of 2010*

**Source** The census of 2010 was produced and disseminated by the INSEE: *Recensement de la population, fichier détail 2010*. It is available at the following address: <https://www.insee.fr/fr/information/2887348>.

<sup>8</sup>The geographic code of 2009 is produced and distributed by the INSEE and is available at the following address: <https://www.insee.fr/fr/information/2560635>.



**Sample selection** The sample used throughout the analysis comprises French women living in ordinary housing and not in group quarters, aged 30 to 49, that are internal migrants. This corresponds to the following selection criteria:

- Housing category = ordinary housing (CATL = 1).
- Population category = household population (CATPC = 0).
- Nationality = French (INATC = 1).
- Age = 30–49 (AGED = 30–49).
- Sex = female (SEXE = 2).
- Birth département ! = residence département (DNAI ! = DEPT).

I further remove individuals born outside metropolitan France, those born or residing in the three départements that France recovered after WWI—Bas-Rhin (67), Haut-Rhin (68), and Moselle (57).

## Variables

- Labor force participant: activity type = active (TACT = 11–12). Based on question 10 of the individual bulletin: “What is your main situation?”
- Employed: activity type = employed (TACT = 11). Based on question 10 of the individual bulletin: “What is your main situation?”
- Education levels. Based on question 9 of the individual bulletin: “Which diploma(s) do you possess?”
  - Primary or lower secondary education: highest diploma = *pas de scolarité, aucun diplôme mais scolarité jusqu’en école primaire ou au collège, aucun diplôme mais scolarité au-delà du collège, certificat d’études primaires*, or *BEPC, brevet élémentaire, brevet des collèges* (DIPL = 1–3, 11–12).
  - Technical secondary education: highest diploma = *certificat d’aptitu-des professionnelles, brevet de compagnon* or *brevet d’études professionnelles* (DIPL = 13–14).

- High school: highest diploma = *baccalauréat général, brevet supérieur* or *bac technologique ou professionnel, BEC, BEI, BEH, capacité en droit* (DIPL = 15–16).
  - Higher education: highest diploma = *diplôme universitaire de 1er cycle, BTS, DUT, diplôme des professions sociales ou de santé* or *diplôme universitaire de 2e ou 3e cycle, d'ingénieur, de grande école* (DIPL = 17–18).
- Number of children: number of children of the family (NENFR).
  - Home owner: occupation status = *propriétaire* (STOCD = 10).
  - Housing area in m2: three categories (SURF).
  - Married: marital status = married (MATR = 2).
  - Commune of residence: *canton-ville* (CANTVILLE).
  - Sample weight: *poids de l'individu* (IPONDI).

**Local labor market of residence** To assign a local labor market of residence to a respondent, I match the geographic code of 2010—which contains employment zones and *canton-villes*—to the census of 2010 based on *canton-villes*.<sup>9</sup>

**Matching couples** To match partners within households, I keep adult (LINK = 1–2) family members in single-family households (TYPMC = 4, TYPFC = 2, and INFAM = 1), in which both partners are present (COUPLE = 1). I use the following variables to create unique family identifiers: CANTVILLE and NUMMI.

#### *D.D.1.12. Censuses of 2011*

**Source** The census of 2011 was produced and disseminated by the INSEE: *Recensement de la population, fichier détail 2011*. It is available at the following address: <https://www.insee.fr/fr/information/2884434>.

<sup>9</sup>The geographic code of 2010 is produced and distributed by the INSEE and is available at the following address: <https://www.insee.fr/fr/information/2560630>.

**Sample selection** The sample used throughout the analysis comprises French women living in ordinary housing and not in group quarters, aged 30 to 49, that are internal migrants. This corresponds to the following selection criteria:

- Housing category = ordinary housing (CATL = 1).
- Population category = household population (CATPC = 0).
- Nationality = French (INATC = 1).
- Age = 30–49 (AGED = 30–49).
- Sex = female (SEXE = 2).
- Birth département ! = residence département (DNAI ! = DEPT).

I further remove individuals born outside metropolitan France, those born or residing in the three départements that France recovered after WWI—Bas-Rhin (67), Haut-Rhin (68), and Moselle (57).

## Variables

- Labor force participant: activity type = active (TACT = 11–12). Based on question 10 of the individual bulletin: “What is your main situation?”
- Employed: activity type = employed (TACT = 11). Based on question 10 of the individual bulletin: “What is your main situation?”
- Education levels. Based on question 9 of the individual bulletin: “Which diploma(s) do you possess?”
  - Primary or lower secondary education: highest diploma = *pas de scolarité, aucun diplôme mais scolarité jusqu’en école primaire ou au collège, aucun diplôme mais scolarité au-delà du collège, certificat d’études primaires*, or *BEPC, brevet élémentaire, brevet des collèges* (DIPL = 1–3, 11–12).
  - Technical secondary education: highest diploma = *certificat d’aptitu-des professionnelles, brevet de compagnon* or *brevet d’études professionnelles* (DIPL = 13–14).

- High school: highest diploma = *baccalauréat général, brevet supérieur* or *bac technologique ou professionnel, BEC, BEI, BEH, capacité en droit* (DIPL = 15–16).
  - Higher education: highest diploma = *diplôme universitaire de 1er cycle, BTS, DUT, diplôme des professions sociales ou de santé* or *diplôme universitaire de 2e ou 3e cycle, d'ingénieur, de grande école* (DIPL = 17–18).
- Number of children: number of children of the family (NENFR).
  - Home owner: occupation status = *propriétaire* (STOCD = 10).
  - Housing area in m2: three categories (SURF).
  - Married: marital status = married (MATR = 2).
  - Commune of residence: *canton-ville* (CANTVILLE).
  - Sample weight: *poids de l'individu* (IPONDI).

**Local labor market of residence** To assign a local labor market of residence to a respondent, I match the geographic code of 2011—which contains employment zones and *canton-villes*—to the census of 2011 based on *canton-villes*.<sup>10</sup>

**Matching couples** To match partners within households, I keep adult (LINK = 1–2) family members in single-family households (TYPMC = 4, TYPFC = 2, and INFAM = 1), in which both partners are present (COUPLE = 1). I use the following variables to create unique family identifiers: CANTVILLE and NUMMI.

#### *D.D.1.13. Censuses of 2012*

**Source** The census of 2012 was produced and disseminated by the INSEE: *Recensement de la population, fichier détail 2012*. It is available at the following address: <https://www.insee.fr/fr/information/2882311>.

<sup>10</sup>The geographic code of 2011 is produced and distributed by the INSEE and is available at the following address: <https://www.insee.fr/fr/information/2560625>.

**Sample selection** The sample used throughout the analysis comprises French women living in ordinary housing and not in group quarters, aged 30 to 49, that are internal migrants. This corresponds to the following selection criteria:

- Housing category = ordinary housing (CATL = 1).
- Population category = household population (CATPC = 0).
- Nationality = French (INATC = 1).
- Age = 30–49 (AGED = 30–49).
- Sex = female (SEXE = 2).
- Birth département ! = residence département (DNAI ! = DEPT).

I further remove individuals born outside metropolitan France, those born or residing in the three départements that France recovered after WWI—Bas-Rhin (67), Haut-Rhin (68), and Moselle (57).

## Variables

- Labor force participant: activity type = active (TACT = 11–12). Based on question 10 of the individual bulletin: “What is your main situation?”
- Employed: activity type = employed (TACT = 11). Based on question 10 of the individual bulletin: “What is your main situation?”
- Education levels. Based on question 9 of the individual bulletin: “Which diploma(s) do you possess?”
  - Primary or lower secondary education: highest diploma = *pas de scolarité, aucun diplôme mais scolarité jusqu’en école primaire ou au collège, aucun diplôme mais scolarité au-delà du collège, certificat d’études primaires*, or *BEPC, brevet élémentaire, brevet des collèges* (DIPL = 1–3, 11–12).
  - Technical secondary education: highest diploma = *certificat d’aptitu-des professionnelles, brevet de compagnon* or *brevet d’études professionnelles* (DIPL = 13–14).

- High school: highest diploma = *baccalauréat général, brevet supérieur* or *bac technologique ou professionnel, BEC, BEI, BEH, capacité en droit* (DIPL = 15–16).
  - Higher education: highest diploma = *diplôme universitaire de 1er cycle, BTS, DUT, diplôme des professions sociales ou de santé* or *diplôme universitaire de 2e ou 3e cycle, d'ingénieur, de grande école* (DIPL = 17–18).
- Number of children: number of children of the family (NENFR).
  - Home owner: occupation status = *propriétaire* (STOCD = 10).
  - Housing area in m2: three categories (SURF).
  - Married: marital status = married (MATR = 2).
  - Commune of residence: *canton-ville* (CANTVILLE).
  - Sample weight: *poids de l'individu* (IPONDI).

**Local labor market of residence** To assign a local labor market of residence to a respondent, I match the geographic code of 2012—which contains employment zones and *canton-villes*—to the census of 2012 based on *canton-villes*.<sup>11</sup>

**Matching couples** To match partners within households, I keep adult (LINK = 1–2) family members in single-family households (TYPMC = 4, TYPFC = 2, and INFAM = 1), in which both partners are present (COUPLE = 1). I use the following variables to create unique family identifiers: CANTVILLE and NUMMI.

<sup>11</sup>The geographic code of 2012 is produced and distributed by the INSEE and is available at the following address: <https://www.insee.fr/fr/information/2560620>.

## ***D.2. Labor Force Surveys 1982–2013***

In section 3, I combined all thirty-two annual labor force surveys from 1982 to 2013 to corroborate baseline results obtained with the censuses. These surveys can be divided into three internally consistent series: the 1982–1989 series, the 1990–2002 series, and the 2003–2013 series.

### *D.D.2.1. Labor Force Surveys 1982–1989*

**Source** The annual labor force surveys from 1982 to 1989 were produced by the INSEE and are disseminated by the ADISP-CMH: *Enquêtes Emploi 1982–1989*. A full description for the 1982 survey is available at the following address: <http://www.progedo-adisp.fr/enquetes/XML/lil-0020.xml>.

**Sample selection** The sample used in the analysis comprises of French women living in ordinary housing and not in group quarters, aged 30 to 49, that are internal migrants. This corresponds to the following selection criteria:

- Population category = ordinary households (CA = 0).
- Nationality = French (N = 1).
- Age = 30–49 (AG = 30–49).
- Sex = female (S = 2).
- Birth département ! = residence département (NAIDEP ! = DEP).

I further remove individuals born outside metropolitan France, those born or residing in the three départements that France recovered after WWI—Bas-Rhin (67), Haut-Rhin (68), and Moselle (57).

## **Variables**

- Labor force participant: activity type = active (FI = 1–2). Based on question 8 of the individual bulletin: “Current occupation.”<sup>12</sup>

<sup>12</sup>The reference questionnaire is the one relative to the labor force survey of 1982.

- Employed: activity type = employed ( $FI = 1$ ). Based on question 8 of the individual bulletin: “Current occupation.”
- Ever worked: past activity != never worked ( $AA != 2$ ). Based on question 9 of the individual bulletin: “Did you ever had a professional activity?”
- Usual hours worked:  $HHAB$ . Based on question 26c of the individual bulletin: “How many hours do you usually work per week?”
- Months in firm:  $ANCENTR$ . Based on question 17c of the individual bulletin: “When did you start working for the firm that is currently employing you, or that you currently manage?”
- Wage: midpoints across 18 monthly wage categories in French Francs, converted into 2015 Francs using a CPI deflator ( $SALTR$ ). Based on question 27 of the individual bulletin: “What is your net monthly salary in your main occupation, including bonuses?”
- Education levels. Based on question 43 of the individual bulletin: “Which diploma(s) did you obtain?”
  - Primary or lower secondary education: highest diploma = *BEPC seul*, *CEP*, or *aucun diplôme* ( $DIPL = 60, 70, 71$ ).
  - Technical secondary: highest diploma = *BP*, *BEI*, *BEC*, *BEA*, *CAP*, *BEP et BEPC*, or *CAP*, *BEP seul* ( $DIPL = 50, 51, 60$ ).
  - High school: highest diploma = *baccalauréat général et diplôme technique secondaire*, *baccalauréat seul*, or *baccalauréat de technicien seul* ( $DIPL = 40-42$ ).
  - Higher education: highest diploma = *2e ou 3e cycle universitaire*, *grande école*, *diplôme d’ingénieur*, *1e cycle universitaire*, *BTS*, *DUT*, or *paramédical ou social* ( $DIPL = 10, 11, 30-33$ ).
- Number of children: number of children in the household ( $NENFM$ ).
- Home owner: occupation status = *household owner of housing* ( $SO = 1-2$ ).
- Rooms:  $PIECES$ .



- Married: marital status = married ( $M = 2$ ).
- Sample weight: *coefficient de pondération pour les individus* (**EXTRI**).

**Matching couples** To match partners within households, I keep adult ( $LCM = 1-2$ ) that are in a couple ( $LPRM = 1-2$ ). I use the following variables to create unique family identifiers: **IDENTM** and **DEA**.

#### *D.D.2.2. Labor Force Surveys 1990–2002*

**Source** The annual labor force surveys from 1990 to 2002 were produced by the INSEE and are disseminated by the ADISP-CMH: *Enquêtes Emploi 1990–2002*. A full description for the 1990 survey is available at the following address: <http://www.progedo-adisp.fr/enquetes/XML/lil.php?lil=lil-0028>.

**Sample selection** The sample used in the analysis comprises French women living in ordinary housing and not in group quarters, aged 30 to 49, that are internal migrants. This corresponds to the following selection criteria:

- Population category = ordinary households ( $CA = 0$ ).
- Nationality = French ( $N = 1$ ).
- Age = 30–49 ( $AG = 30-49$ ).
- Sex = female ( $S = 2$ ).
- Birth département  $\neq$  residence département ( $DEPNAI \neq DEP$ ).

I further remove individuals born outside metropolitan France, those born or residing in the three départements that France recovered after WWI—Bas-Rhin (67), Haut-Rhin (68), and Moselle (57).

## **Variables**

- Labor force participant: activity type = active ( $FI = 1-2$ ). Based on question Q2 of the individual bulletin: “What is your current occupation?”<sup>13</sup>

<sup>13</sup>The reference questionnaire is the one relative to the labor force survey of 1990.

- Employed: activity type = employed (FI = 1). Based on question Q2 of the individual bulletin: “What is your current occupation?”
- Ever worked: past activity != never worked (AA != 2). Based on question Q3c of the individual bulletin: “Did you ever had a professional activity?”
- Usual hours worked: HH. Based on question A13 of the individual bulletin: “What number of hours do you usually work per week?”
- Months in firm: ANCENTR. Based on question A8e of the individual bulletin: “When did you start working for the firm for which you are currently working, or that you manage?”
- Wage: monthly wage categories in French Francs, converted into 2015 Francs using a CPI deflator (SALTRED). Based on question A20a of the individual bulletin: “What monthly salary do you get from your main occupation, including bonuses?”
- Education levels. Based on question C3b of the individual bulletin: “What diploma(s) did you obtain?”
  - Primary or lower secondary education: highest diploma = *BEPC seul*, *CEP*, or *aucun diplôme* (DIPL = 60, 70, 71).
  - Technical secondary education: highest diploma = *BEI*, *BEC*, *BEA*, *CAP*, *BEP et BEPC*, or *CAP*, *BEP seul* (DIPL = 43, 50, 51).
  - High school: highest diploma = *baccalauréat général et diplôme technique secondaire*, *baccalauréat seul*, or *baccalauréat technologique* (DIPL = 40–42).
  - Higher education: highest diploma = *2e ou 3e cycle universitaire*, *grande école*, *diplôme d’ingénieur*, *1e cycle universitaire*, *BTS*, *DUT*, or *paramédical ou social* (DIPL = 10, 11, 30–33).
- Number of children: number of children in the household (ENFC90).
- Home owner: occupation status = *household owner of housing* (SO = 1–2).
- Rooms: PIECES.

- Married: marital status = married ( $M = 2$ ).
- Sample weight: *coefficient de pondération pour les individus* (EXTRI).

**Matching couples** To match partners within households, I keep adult (LCM = 1–2) that are in a couple (COHAB = 1, LPRM = 1–2). I use the following variables to create unique family identifiers: IDENTM and DEA.

### *D.D.2.3. Labor Force Surveys 2003–2013*

**Source** The annual labor force surveys from 2003 to 2013 were produced by the INSEE and are disseminated by the ADISP-CMH: *Enquêtes Emploi en Continu 2003–2013*. A full description for the 2003 survey is available at the following address: <http://www.progedo-adisp.fr/enquetes/XML/lil-0246.xml>.

**Sample selection** The sample used in the analysis comprises French women living in ordinary housing and not in group quarters, aged 30 to 49, that are internal migrants. This corresponds to the following selection criteria:

- Population category = ordinary households ( $CA = 0$ ).
- Nationality = French ( $NAT28 = 10$ ).
- Age = 30–49 ( $AG = 30–49$ ).
- Sex = female ( $S = 2$ ).
- Birth département  $\neq$  residence département ( $DEPNAI \neq DEP$ ).

I further remove individuals born outside metropolitan France, those born or residing in the three départements that France recovered after WWI—Bas-Rhin (67), Haut-Rhin (68), and Moselle (57).

## **Variables**

- Labor force participant: activity type = active ( $ACTEU = 1–2$ ). Based on question A1 of the individual bulletin: “Do you have an occupation currently?”<sup>14</sup>

<sup>14</sup>The reference questionnaire is the one relative to the labor force survey of 2003.

- Employed: activity type = employed ( $ACTEU = 1$ ). Based on question A1 of the individual bulletin: “Do you have an occupation currently?”
- Ever worked: past activity != never worked ( $AAC != 2$ ). Based on question E1 of the individual bulletin: “Did you ever hold a professional activity?”
- Usual hours worked:  $HHC$ . Based on question B38 of the individual bulletin: “In your main occupation, how many hours do you usually work per week?”
- Months in firm:  $ANCENTR$ . Based on question B62 of the individual bulletin: “When did you start working in this firm?”
- Wage: monthly wage categories in Euros, converted into 2015 Francs using a CPI deflator ( $SALRED$ ). Based on question B56 of the individual bulletin: “What is your income from your main occupation?”
- Education levels.
  - Primary or lower secondary education: highest diploma = *brevet des collèges*, *certificat d’études primaires*, or *sans diplôme* ( $DIP = 60, 70, 71$ ).
  - Technical secondary: highest diploma = *brevet de technicien*, *brevet professionnel*, or *CAP, BEP* ( $DIPL = 44, 50$ ).
  - High school: highest diploma = *bac général*, *bac technologique*, or *bac professionnel* ( $DIPL = 41-43$ ).
  - Higher education: highest diploma = *troisième cycle universitaire*, *écoles niveau licence et au-delà*, *1e cycle universitaire*, *maîtrise*, *licence*, *BTS*, *DUT*, or *paramédical et social* ( $DIPL = 10, 12, 22, 21, 30-33$ ).
- Number of children: number of children in the household ( $NBENFC$ ).
- Home owner: occupation status = *household owner of housing* ( $SO = 1-2$ ).
- Rooms:  $PIECES$ .
- Married: marital status = married ( $M = 2$ ).
- Sample weight: *coefficient de pondération pour les individus* ( $EXTRI$ ).

**Matching couples** To match partners within households, I keep adult (LCM = 1-2) that are in a couple (COHAB = 1, LPR = 1-2). I use the following variables to create unique family identifiers: IDENT, ANNEE, and TRIM.

### ***D.3. Extended Labor Force Surveys 2005–2012***

**Source** The extended labor force surveys from 2005 to 2012 were produced by the INSEE and are disseminated by the ADISP-CMH: *Enquêtes Emploi en Continu (version FRP) 2005–2012*. A full description for the 2005 survey is available at the following address: <http://www.progedo-adisp.fr/enquetes/XML/lil.php?lil=lil-0317b>.

**Sample selection** The sample used in the analysis comprises French women living in ordinary housing and not in group quarters, aged 30 to 59, that are second generation migrants. This corresponds to the following selection criteria:

- Population category = ordinary households (CA = 0).
- Nationality = French (NAT28 = 10).
- Age = 30–59 (AG = 30–59).
- Sex = female (S = 2).
- Birth département = residence département (DEPNAI != DEP).
- Mother birth département or father birth département != birth département (DNAIM or DNAIP != DEPNAI)

### **Variables**

- Father high social class: father socio-professional category = higher-status (CSPP = 21–48 or 72–75). Based on question J2 of the individual bulletin: “What was the occupation of your father when you finished your initial studies?”
- Mother worked: mother socio-professional category = active or previously active (CSPM = 10–78). Based on question J4 of the individual bulletin: “What was the occupation of your mother when you finished your initial studies?”

#### *D.4. Gender and Generation Survey 2005*

**Source** The first wave of the French component of the Generation and Gender Survey (GGS) was conducted in 2005 by the INSEE and the INED, and disseminated by the INED. A full description of the survey is available at the following address: <https://erfi.site.ined.fr/en>.

**Sample selection** The sample used in the analysis comprises French citizens in a couple with a partner present in the household, aged 18 to 79, that are internal migrants, and who grew up in metropolitan France with their mothers and fathers. This corresponds to the following selection criteria:

- Nationality = French (`MA_NATIOR = 1`).
- Birth département != residence département (`MA_DEPNAIS != DEP`).
- Place of childhood = metropolitan France (`PF_DEPENF != 97, 99`).
- Partner present: `EA_VERIFC = 1`.
- Adults: `MOCO != 11 & MOCO != 12`.

#### **Variables**

- Preferences and beliefs statements:
  - Role of women in the labor force:
    - \* “If a woman earns more than her partner, it is bad for their relationship”: `VA_REVFEE`.
    - \* “Women should be able to decide how to spend the money they earned without asking their partners”: `VA_DEPFEE`. This statement is reversed for the purpose of the analysis.
    - \* “In an economic crisis, men should keep their jobs in priority”: `VA_HOMPRIO`.
    - \* “Taking care of one’s home or family is as fulfilling as working for pay”: `VA_FOYEPAN`. This variable is not included in the main cultural index.

- Religion:
  - \* “A religious event is important for a newborn”: VA\_BAPT.
  - \* “A religious marriage is important for those who marry”: VA\_MARIA.
  - \* “A religious event is important for a funeral”: VA\_ENTER.
- Marriage:
  - \* “Marriage is an outdated institution”: VA\_MARIDEP. This statement is reversed for the purpose of the analysis.
  - \* “It is good for an unmarried couple to live together even if they do not intend to get married”: VA\_COHAB. This statement is reversed for the purpose of the analysis.
  - \* “If individuals are unhappy as a couple, they may divorce, even if they have children”: VA\_DIVORC. This statement is reversed for the purpose of the analysis.
  - \* “Marriage is a lifelong commitment that should never be broken”: VA\_MARITJS. This statement is reversed for the purpose of the analysis.
- Family:
  - \* “To thrive, a woman must have children”: VA\_FEMENF.
  - \* “To thrive, a man must have children”: VA\_HOMENF.
  - \* “To grow up happy, a child needs a home with a mother and a father”: VA\_DEUXPAR.
  - \* “If parents divorce, it is better for the child to stay with the mother rather than the father”: VA\_DIVGARD.
  - \* “A woman can have and raise a child by herself if she does not want to have a stable relationship with a man”: VA\_MERSEUL.
- Household tasks:
  - Household chores:
    - \* Who cooks: OA\_REPAS.
    - \* Who washes the dishes: OA\_VAISS.
    - \* Who does the groceries: OA\_ALIME.



- \* Who irons: OA\_LINGE.
- \* Who vacuums: OA\_ASPIR.
- Child care:
  - \* Who dresses the children: EA\_HAB.
  - \* Who puts the children to bed: EA\_LIT.
  - \* Who stays with the children when they are sick: EA\_MAL.
  - \* Who plays with the children: EA\_JOUE.
  - \* Who aids children with their homework: EA\_AID.
  - \* Who brings children to their activities: EA\_EMM.
- Employed: activity = working (MA\_ACT = 1–3).
- Mother active: employment status of the mother ! = never worked (PF\_STATUTM = 1–7).
- Partner income: RJ\_MREVE.
- Type of housing: TYPLOG.
- Rooms: MB\_NBPIECES.
- Housing owner: MB\_STOC = 1–3.
- Education levels:
  - Primary or lower secondary education: highest diploma = *aucun diplôme* or *CEP* (MC\_DIPLOME = 1, 2).
  - Technical secondary education: highest diploma = *brevet des collèges*, *BEPC* or *CAP, BEP* (MC\_DIPLOME = 3, 4).
  - High school: highest diploma = *baccalauréat technologique ou professionnel* or *baccalauréat général, brevet supérieur*, or *capacité en droit, DAEU* (MC\_DIPLOME = 5, 6).
  - Higher education: highest diploma = *diplôme de niveau Bac + 2*, or *diplôme de niveau supérieur à Bac + 2* (MC\_DIPLOME = 7, 8).
- Number of children: NBENFTOTM.

- Father high social class: father higher socio-professional category (PF\_PCSP8 = 2–4).
- Mother education levels:
  - Primary or lower secondary education: highest diploma = *aucun diplôme* or *CEP* (PF\_DIPLM = 1, 2).
  - Technical secondary education: highest diploma = *brevet des collèges*, *BEPC* or *CAP*, *BEP* (PF\_DIPLM = 3, 4).
  - High school: highest diploma = *baccalauréat technologique ou professionnel* or *baccalauréat général*, *brevet supérieur*, or *capacité en droit*, *DAEU* (PF\_DIPLM = 5, 6).
  - Higher education: highest diploma = *diplôme de niveau Bac + 2*, or *diplôme de niveau supérieur à Bac + 2* (PF\_DIPLM = 7, 8).
- Father education levels:
  - Primary or lower secondary education: highest diploma = *aucun diplôme* or *CEP* (PF\_DIPLF = 1, 2).
  - Technical secondary education: highest diploma = *brevet des collèges*, *BEPC* or *CAP*, *BEP* (PF\_DIPLF = 3, 4).
  - High school: highest diploma = *baccalauréat technologique ou professionnel* or *baccalauréat général*, *brevet supérieur*, or *capacité en droit*, *DAEU* (PF\_DIPLF = 5, 6).
  - Higher education: highest diploma = *diplôme de niveau Bac + 2*, or *diplôme de niveau supérieur à Bac + 2* (PF\_DIPLF = 7, 8).
- Weight: POIDS12.

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