Population Structure and Population Development in Europe

Franz Rothenbacher

Übung für Fortgeschrittene
„Empirisch-vergleichende Sozialstrukturstrukturanalyse Europas“

2006
1. First and second demographic transition

- European average: 21 countries, whole Western Europe incl. Poland, Czechoslovakia and Hungary

- 19th century: Fertility in Germany higher than in Europe

- Interwar period: first strong birth decline; population policy of the Third Empire

- Since World War II: second demographic transition; mainly cohort and behavioural effects of the persons born in the interwar period

- Post 1970: birth decline below replacement level of the population

- GDR: population surplus in the 1950s and 1960s; decline ca. 1975; reincrease due to family policies in the 1980s; since 1990 „demographic revolution“ (W. Zapf) with strong birth decline

- France: exception to the model of the demographic transition; weak population growth during the 19th century; only family policy legislation in 1946 caused sufficient number of births
2. Mortality

- Long-term decline in infant mortality main cause of increase in life expectancy
- Fight against deaths of mothers at birth-giving increased life expectancy of females
- Since the 19th century mortality surplus of men increases; nevertheless divergence between sexes is slowing down due to slower improvements for women
- Most recent development: large gains in life expectancy for the oldest population
- In international comparison Germany is in the middle field with respect to life expectancy despite high health expenditures; Sweden is at the top in Europe with the best health status
- Life expectancy in the GDR and FRG more or less at the same level
Life expectancy, West Germany 1949/51-1996/98

Life expectancy, East Germany 1952-1996/98
3. Fertility

- Legitimate fertility in Germany during the 19th century above the European average

- During the interwar period legitimate fertility was below the European average

- During the after-war period legitimate fertility below the European average as well

- The legitimate fertility in the GDR was lower than in the FRG; higher importance of the illegitimate fertility

- The illegitimate fertility in Germany was always high until the decline during the second demographic transition caused by the declining age at marriage; reincrease in the 1970s; deinstitutionalization of marriage

- In the FRG illegitimate fertility below the European average, in the GDR strongly above the European average; similarity to Scandinavia

- Illegitimacy-/legitimacy ratio shows the weight of illegitimacy in relationship to legitimacy
Legitimacy rate, Germany, Federal Republic of Germany, German Democratic Republic, and Europe

Live births within marriage per 100 married women 15-44; moving averages.

Source: Eurodata.
Illegitimate births rate, Germany (Empire and Federal Republic)
Illegitimacy rate, Germany, Federal Republic of Germany, German Democratic Republic, and Europe

Live births out of wedlock per 1,000 unmarried women 15-44; moving averages.

Source: Eurodata.
Illegitimacy/legitimacy ratio, Germany, Federal Republic of Germany, German Democratic Republic, and Europe

a Illegitimacy rate / legitimacy rate x 100.
Source: Eurodata.
Figure I. Total fertility rate by contraceptive prevalence in 104 countries

Total fertility rate (TFR)

\[
TFR = 7.37 - 0.074 \text{(prevalence)}
\]

\[R^2 = 0.86\]

Percentage using contraception

* Caribbean  x Western Asia
Figure 1: World population, 1950-2050 (projected)

Source: UN Population Division
4. Nuptiality

- Nuptiality in Germany during the 19th century and during the interwar period above the European average.

- In the post-war period in the FRG nuptiality was high during the second demographic transition; afterwards marriage as an institution lost some importance; factors among others: rising age at marriage.

- The celibacy rate in Germany was always high. John Hajnal’s “European Marriage Pattern.”

- The legitimacy rate only declined during the post World War II period with the “marriage boom” of the 1960s.

- Since that time reincrease of the celibacy rate.

- Mean age at marriage in Germany was always high; exception: decline during the 1960s.

- In the GDR the mean age at marriage and the mean age of women at first birth was strongly lower than in the FRG.
Marriage rate, Germany, Federal Republic of Germany, German Democratic Republic, and Europe

*Source: Eurodata.*

*a Number of persons marrying per 1,000 unmarried population 15 and over; moving averages.*
Proportion married, Germany (Empire and Federal Republic)
Celibacy rate (proportion of women aged 45-54 never married)
Mean age at all marriages, Prussia and Germany (Federal Republic)
Mother’s age at childbirth

Source: Eurodata.
5. Divortality

- Long-term logistic growth of divorces to an upper limit

- In Western Germany influence of the reform of the divorce law of 1977: principle of marriage breakdown introduced („incidence“)

- Divorces in Germany since the 19th century were more frequent than in the European average

- In the GDR divorces were very much more frequent than in the FRG

- Consequences of the increase in divorces: increase of lone parents

- In the 1990s saturation of the divorce rate
Divorces per 10,000 existing marriages
Divorce rate, Germany, Federal Republic of Germany, German Democratic Republic, and Europe

Number of persons divorcing per 10,000 married population 15 and over; moving averages.

Source: Eurodata.
6. Remarriages

Widowed persons:

- Long-term decrease of remarriages of widowed persons
- Cause: increase in life expectancy
- Remarriages by men constantly more frequent than remarriages by women

Divorced persons:

- Remarriages of divorced persons increased until 1945; since that time remarriages decline
- The chances of a remarriage are higher for men compared to women
- In international comparison the remarriage rate is high in those countries where there are few divorces: indicator for the social importance of the institution of marriage
Remarriage rate of widowed women/men, Prussia and Federal Republic of Germany 1867-1987

- Remarriage rate widowed men
- Remarriage rate widowed women
Remarriage rate of divorced women/men, Prussia and Federal Republic of Germany 1867-1987

Remarriage rate divorced men

Remarriage rate divorced women
7. Population growth and migration

FRG:

• Population gains by positive net migration; until the 1960s mainly from the GDR
• During the 1960s guest workers; in the 1970er employment stop for guest workers; in the beginning of the 1980s asylum seekers; since 1990 strong immigration from the former GDR

GDR:

• Zero population growth or even negative population growth, mainly caused by strong emigration; opposite development to West Germany
• Strong emigration after the reunification of 1990
8. Ageing of the population

- Sexual proportion of widowed persons aged 65+ is constantly increasing („female surplus“)

- Ageing of the population: from the population pyramid to the population bell

- Change of the population by marital status caused by late age at marriage, frequent divorces and „surplus“ of widowed women

- In the GDR from the beginning big problems with a balanced age structure:
  - Emigration of the „young“ and the men
  - Small immigration
  - Strong fluctuations of the birth frequency
  - „Demographic revolution“ since the 1990s (W. Zapf)

- Consequence: in future strong ageing of the population in the new Federal States respectively their effects on the total German population
Sexual proportion widowed 65+, Germany (Empire and Federal Republic)
Population by age, sex and marital status
(per 10,000 of total population)

Germany, 1880
Population by age, sex and marital status (per 10,000 of total population)

East Germany, 1946

Population by age, sex and marital status (per 10,000 of total population)

East Germany, 2000
Population by age, sex and marital status (per 10,000 of total population)

West Germany, 1950

Population by age, sex and marital status (per 10,000 of total population)

West Germany, 2000
Figure 2: Proportion of population over 65 by region, 2000 and 2050 (projected)

9. Glossary

- Definitions of main demographic indicators are given by:
10. Literature


10. Literature (cont.)


The Societies of Europe

The European Population 1850-1945

The European Population since 1945