

Vienna Institute of  
Demography  
Austrian Academy of Sciences  
Wittgenstein Centre for  
Demography and Global  
Human Capital

Welthandelsplatz 2, level 2  
1020 Vienna, Austria  
Phone +43 1 31336 7702  
[www.oeaw.ac.at/vid](http://www.oeaw.ac.at/vid)  
[www.oeaw.ac.at/wic](http://www.oeaw.ac.at/wic)



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## Childlessness Trends in Europe

**Éva Beaujouan, Tomáš Sobotka, Zuzanna Brzozowska  
and Kryštof Zeman**

*Trends in childlessness in Europe varied greatly in the course of the 20th century. Éva Beaujouan, Tomáš Sobotka, Zuzanna Brzozowska and Kryštof Zeman study changes in childlessness in different European regions, and discuss how it has varied by women's education.*

Women born at the beginning of the century experienced high childlessness rates all over Europe. Subsequently, childlessness declined steadily and women born around 1940 experienced historically low levels of childlessness (Rowland 2007). More recently, many women especially in Western Europe appear to have steered away from having children, and childlessness started rising again.

Studying how childlessness levels change over time and across countries is challenging. Indeed, different data sources frequently give contradictory accounts on childlessness levels. Differences in questions asked in censuses and surveys, various assumptions employed when combining vital statistics or assembling register-based data, as well as selectivity of respondents, non-response, and misreporting in surveys can bias the resulting childlessness estimates (Ní Bhrolcháin et al. 2011).

### *U-shaped trend in childlessness over the 20th century*

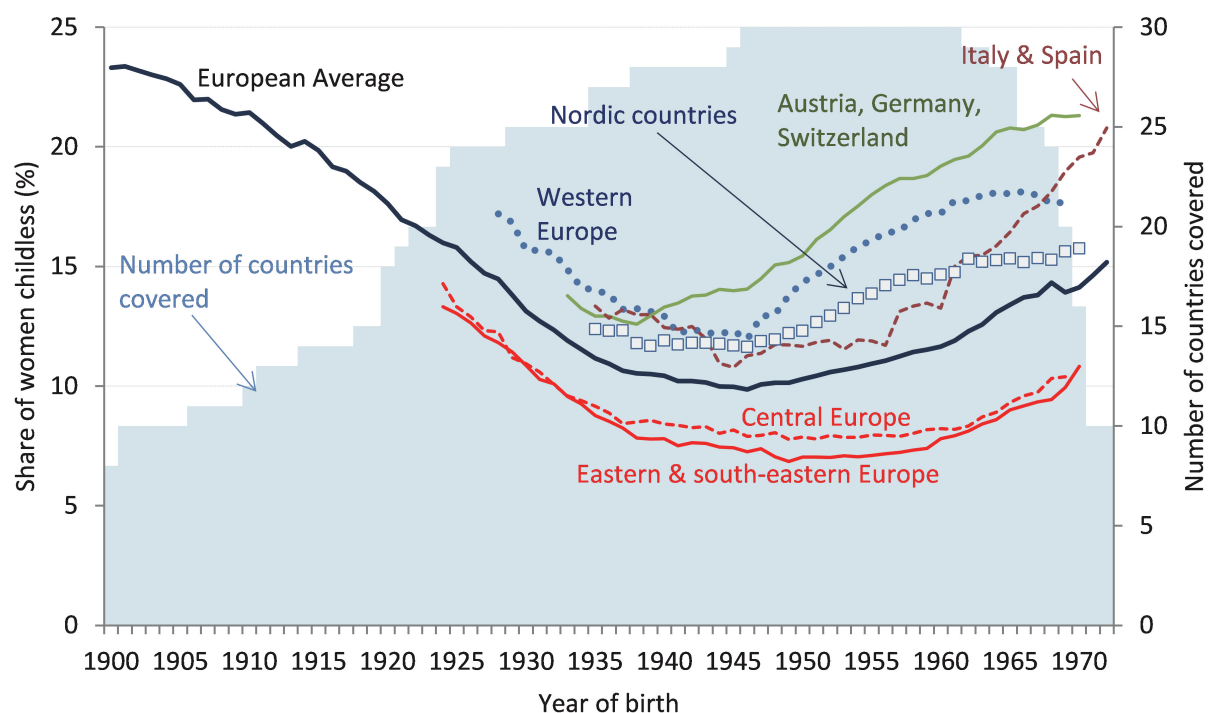
The reconstruction of European-wide trends in childlessness among women born since the early 20th century (Figure 1) reveals three major findings. First, childlessness was very high in the past, reaching around 20-25% among women born in the first

two decades of the 20th century. This was the case in all countries with available data except Slovakia (Sobotka 2017). Childlessness among women born in 1900-1915 was actually more common than among women born around 1970. Second, all regions went through a U-shaped trend in childlessness across the 20th century. Women born in the early 1940s experienced the lowest childlessness levels, with one in ten remaining childless. These women were forming their families in the 1960s, at the end of the baby boom era in the Western countries, and they were also the last generation who had generally higher fertility rates and low rates of non-marriage (Sobotka 2017). Third, childlessness levels and trends differed between

### KEY FINDINGS

- » U-shaped trend in childlessness over the 20<sup>th</sup> century
- » Childlessness among women born between 1900 and 1920 was more common than among women born around 1970
- » Italy and Spain experience the sharpest rise in childlessness in Europe
- » Women with university education continue having the highest levels of childlessness

**Figure 1** Average childlessness levels in Europe and in broader European regions (left-hand axis) and the number of countries covered (right-hand axis); women born in 1900-1972 (simple average based on data for all available countries)



## DATA

We present long-term changes and cross-country differences in childlessness for women from 30 European countries aged 40 or above and born between 1900 and 1972. These data are based on population censuses (different years, 1961-2011), long series of vital statistics data that allow reconstructing cohort fertility histories, data from population registers, and, in a few countries (especially France and Italy), large-scale survey data. For most of the data analysed, we used two databases: the Human Fertility Database (HFD) and the Cohort Fertility and Education (CFE) database. “Low” level of education corresponds to primary or lower secondary education (ISCED 0-2), “medium” to higher secondary and post-secondary non-tertiary education (ISCED 3-4), and “high” to university degree (ISCED 5-6). Due to lower data availability and higher uncertainty about childlessness among men we focus on childlessness among women only.

### Data sources:

CFE. 2015. Cohort Fertility and Education database. Census data on cohort parity distribution for different countries. <http://www.cfe-database.org>

HFD. 2015. Human Fertility Database. Input data tables on women by age and parity (selected censuses and register-based data).

[www.humanfertility.org](http://www.humanfertility.org)

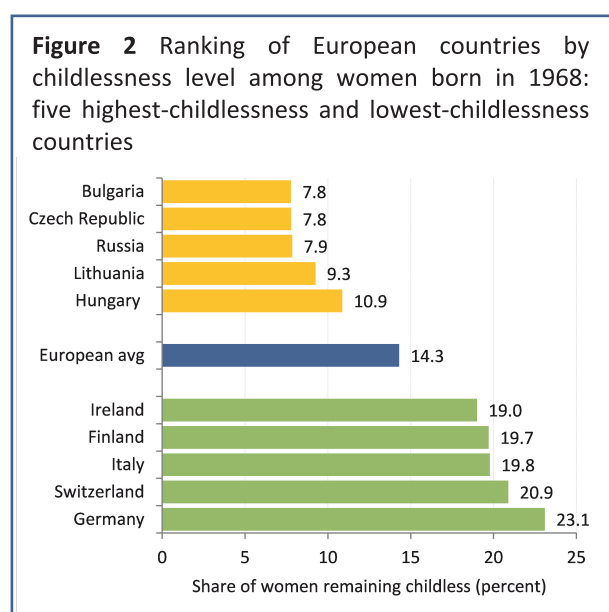
the East and the West of Europe, with Central and Eastern European (CEE) countries reaching particularly low and stable childlessness levels averaging 7-8% among women born in 1940-65. These women lived their prime reproductive years during the era of state socialism, when marriage and reproduction were taking place relatively early and voluntary childlessness was rare. The available data do not allow firm conclusions on whether the East-West contrasts in childlessness preceded the post-war political division of Europe: among women born at the beginning of the 20th century childlessness levels were lower in some Eastern countries than in the West, but elsewhere (including Romania) they were as high as in the West (Sobotka 2017).

### *Southern Europe, the new hotspot of childlessness?*

Figure 1 also sheds light on recent contrasts in childlessness trends between broad European regions. In CEE childlessness started increasing among women born in the 1960s, although from a low level, reflecting a shift towards lower and later fertility after the political regime change in 1989-1990. A rapid rise in childlessness is now underway in Italy and Spain. This trend suggests that Southern European countries are becoming the new “hotspots” of childlessness in Europe. Childlessness has reached high levels in the three predominantly German-speaking countries, where around one out of five women remains childless,

but, in contrast to Southern Europe, the long-term rise in childlessness in this region appears to be coming to an end among women born after 1970. In addition, childlessness appears to have peaked in Western Europe at 18% and has been rising only mildly in the Nordic countries, where it averaged 15% in the late 1960s cohorts (but close to 20% in Finland).

All in all, among the youngest cohorts analysed, childlessness in CEE is still far below the European average, with only 8% of women from Bulgaria, Czechia and Russia born in 1968 remaining permanently childless as compared with the European-wide average of 14% (Figure 2). In contrast, Germany and Switzerland stand out for their high childlessness level of over 20%.



Interestingly the demographic legacy of the geopolitical division of Europe before 1990 still shows up in Germany: eastern German women born in 1968 have considerably lower childlessness (16%) than their western German counterparts (24%) (Sobotka 2016).

#### *Women with university degree continue having elevated childlessness levels*

The twentieth century has seen a broad expansion of education. The defining feature among the cohorts of women analysed here is the continuous rise of the secondary education, sometimes complemented by short-track post-secondary specialisation programmes. So the population of medium-educated women grew very fast, while that of low-educated women was shrinking, and high education was spreading slowly and mostly in the youngest cohorts (Beaujouan et al. 2016).

Figure 3 compares the proportion of low and high-educated women remaining childless with the proportion among medium-educated (see interpretation note). Separate graphs are shown for the countries in the East and in the West of

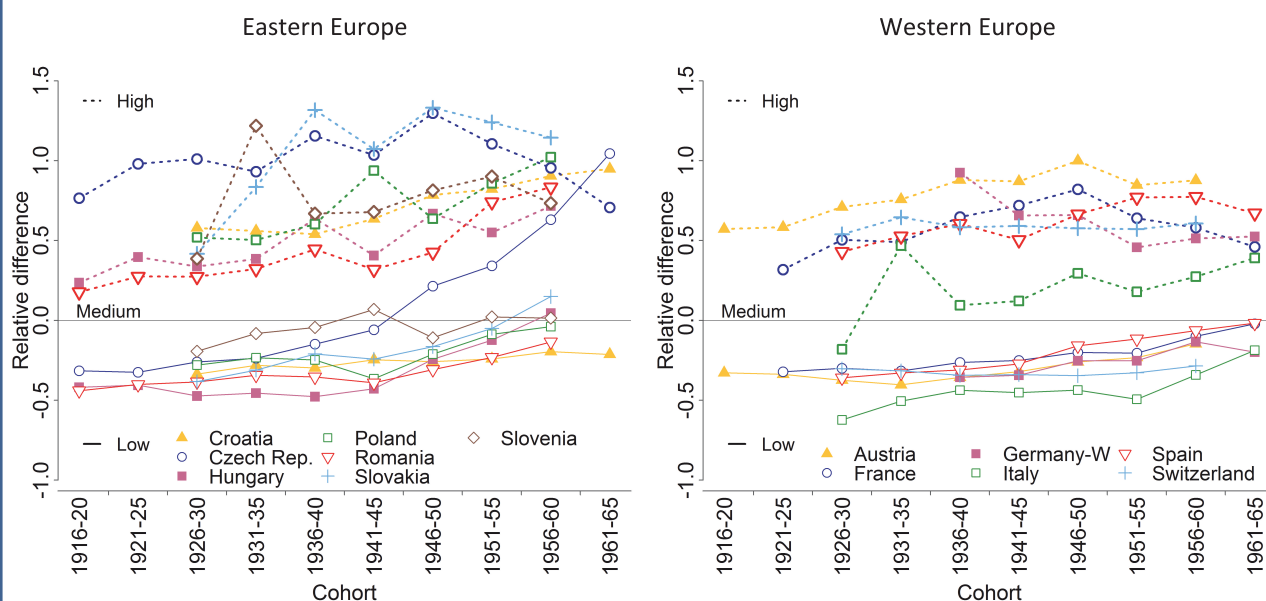
Europe. Highly educated women always stayed childless more often than the medium-educated, whereas the low-educated remained childless less frequently in most countries and cohorts in both regions. However, two broad trends can be noticed. The low- and the medium-educated women have become ever more similar over time, so that in the youngest cohorts childlessness levels were the same in both groups in most countries. At the same time, the difference in childlessness between high- and medium-educated women has not diminished. In the East childlessness levels in these two groups have moved further apart in many countries. In the West, after an initial slight increase, the difference in childlessness between the high- and the medium-educated has remained rather stable. Italy is a major exception where the two groups, initially similar, became more distinct as childlessness was increasing rapidly among women born in the 1950s and 1960s.

#### *Past, present and future of childlessness*

Current childlessness has a different character than the historical childlessness observed among women born in the early 20th century. For them, childlessness was closely linked to non-marriage, poor health and living conditions, but also wars and economic insecurity. Among women born around 1970 childlessness is more varied, often resulting from a mixture of lifestyle choices and adverse circumstances, including not finding a (suitable) partner. Many of the economic and cultural trends of the last half-century appear at odds with family formation. Reliable contraception, increased acceptance of voluntary childlessness, extended education, delayed union formation and childbearing, high family instability, and economic uncertainty, seem to foster voluntary as well as involuntary childlessness. The difference between women with intermediate and high education has persisted even as higher education was becoming more common, and has even increased in the CEE countries where the overall childlessness levels remained low in the 1960s cohorts. Highly educated women have always been specific: they might have encountered challenges in reconciling their professional ambitions and family plans. It is possible that when the share of the highly educated becomes dominant, their family size becomes similar to that of other groups.

While childlessness has broadly stabilised in Western and Northern Europe, it is likely to continue rising fast in Southern Europe, where up to one quarter of women in the 1970s may remain childless. Childlessness is also likely to increase fast in CEE countries, where a new pattern of delayed reproduction has been taking hold since the 1990s. Highly educated are at the vanguard of that change. As a result, this region will certainly experience an erosion of its distinct low-

**Figure 3** Relative difference in childlessness levels between low-/high- and medium-educated women, in 13 countries of Eastern and Western Europe, women born 1916–65



Interpretation: In the 1916-20 birth cohort in Austria, the share of women childless by age 40 among the high-educated was 55% higher than among the medium-educated, whereas among the low-educated it was 30% lower than among the medium-educated.

childlessness pattern. At the same time, the rise in childlessness may be slowed down in many CEE countries by the continuing negative perception of voluntary childlessness (Merz & Liefbroer 2012).

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