Cross-National Variations in Abortion Patterns of Europeans: Divergence or Convergence?

Motivation and research questions

In the late 1980s the East–West divide by birth control was identified in Europe as both parts differed by contraceptive practices and abortion rates (Blayo 1991; Macura et al. 2001). This East- West resulted from divergent historical trends between the two regions (Troitskaia et al. 2009). "Abortion culture" was the term used to characterize the nature of birth regulating behaviour in the formerly socialist countries of Soviet block, i.e. Eastern Europe up to the end of the 1980s (Stloukal 1999; Agadjanian 2002). Liberal abortion legislation made induced abortions easily accessible as well as socially acceptable. Modern contraceptives (hormonal contraception) were less available and of poor quality, thus most couples relied on traditional methods (Stloukal 1999). On the contrary, in Western Europe modern contraceptives were widely available and registered abortion rates in Western European countries were significantly lower than in Eastern European countries (Frejka 2008). Some studies show that abortion rates still vary widely between European countries (Fiala et al. 2022, Kocourková 2016) but an overall up-to-date assessment of developments is lacking. **The aim was to investigate changes in abortion behaviour up to 2019. The research questions were: "whether the East – West divide in abortion behaviour remained relevant by 2019". Has the former East-West divide remained or has the new one emerged? If new diversity has developed can we distinguish different patterns of abortion behaviour**? **Can similar differences be found also in attitudes towards abortion?**

Data and methods

Data sources on abortion and birth control method are of different quality, therefore, several international data sources were used – Eurostat, UN World Contraceptive Use 2022. Furthermore, cross country differences in abortion legislation including completeness of available data were taken into account when making comparison. Only 21 EU countries with liberal legislation and available data on abortions were considered for analysis. **Cluster analysis** of birth control indicators was used to give more detailed insight into current typology of abortion behaviour in the EU (general abortion rate in 2019, abortion rate of women aged 15-19 years in 2019, ratio of abortion rates of women in age group 20-24 to 25-29 years in 2019, contraceptive prevalence rate of modern methods (latest available data). Finally, attitudes towards abortion were analysed using data from European Value Survey (EVS) in 2017 and applying **binary logistic regression**.

Dramatic decline

Changes in cross-national variations in abortion rate can be assessed when plotting EU countries according both values in 1989 and 2019 (Fig. 1). Interestingly, group of Eastern European (EE) countries could be clearly separated from Western European (WE) countries which suggests continuation of East-West divide. It is apparent that EE countries differed from the West region by both level of abortion rates and abortion trends between 1989 and 2019. **As all EE countries registered profound decline in abortion rates during this period, variations in abortion rate across East region were significantly reduced.** While the general abortion rate in 1989 ranged between 30 (in **Slovenia)** and 73 (**in Estonia**) abortions per 1000 women aged 15-

49, in 2019 it was only between 5 (**Slovakia)** and 15 (**Bulgari**a) abortions per 1000 women aged 15-49. Interestingly, abortion rate did not fall most precipitously in the countries that had the highest incidence of abortion, but in **Lithuania, Slovakia and the Czechia**. In most of the countries the decline in abortion rate occurred predominantly in the 1990s and after 2003 the pace of the decrease slowed down (Sedgh et all 2011).
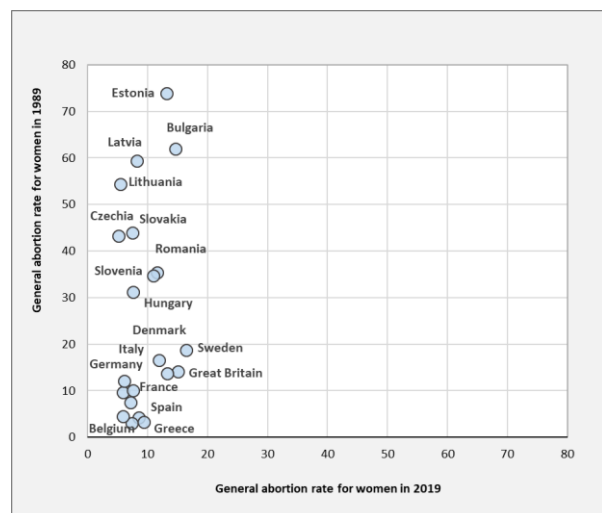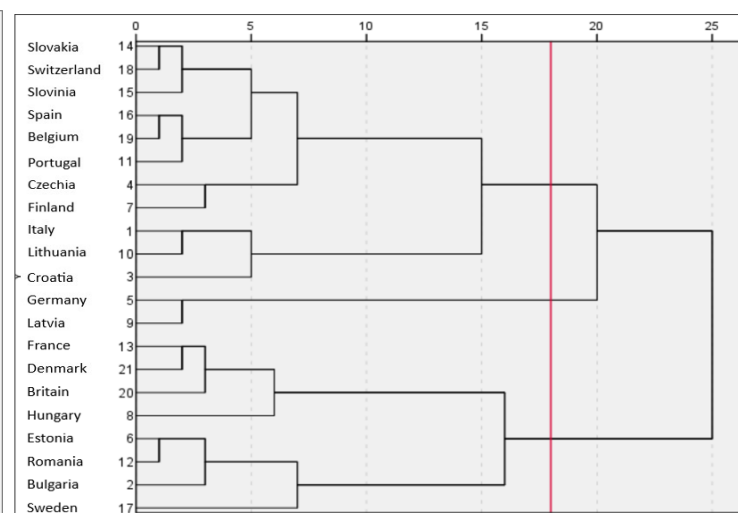
Figure 1   *Figure 2 Typology of abortion behaviour based on cluster analysis*

In contrast to East region, variation in abortion rates within West region in 1989 was not large as WE countries mostly registered low abortion rates, between 3 (**Greece**) and 18 (**Sweden**) abortions per 1000 women aged 15-49 (Fig. 1). Furthermore, abortion rate did not change in **GB and France**, it increased in **Greece, Spain, and Belgium**, and **Italy together with Germany, Finland and Denmark** registered decline in abortion rate. **The steepest rise was registered in Spain which was attributed to the rapidly growing immigrant population**. Abortions are requested from foreign-born women, largely those of non-European origin (Sedgh et al 2011).
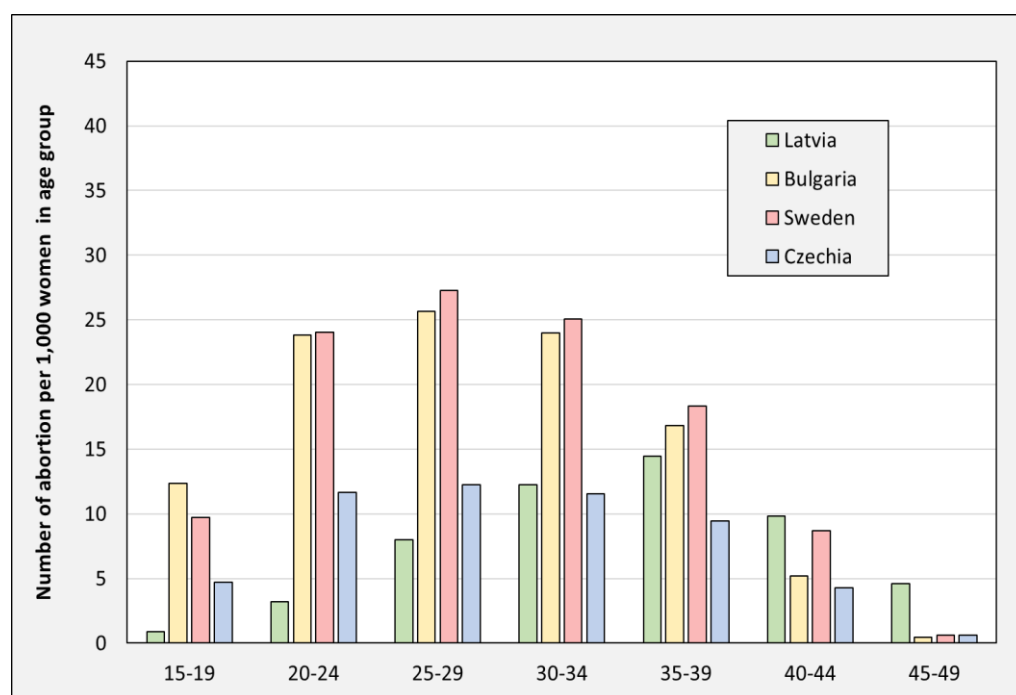
Three patterns of abortion behaviour in Europe

Cluster analysis based on birth control indicators of 21 EU countries in 2019 revealed the existence **of three clusters of countries** that differ by both level and structure of abortion as well as by contraceptive prevalence rate of modern method (Fig. 2). These clusters are characterised by differences in average values **of general abortion rate, abortion rate of teenage women, ratio of abortion rate of women aged 20-24 and 25-29, and contraceptive prevalence rate of modern method**. All the clusters are mix of countries form WE and EE.

The **first cluster** emerged as a new one and consists of mix of countries, from WE: Italy, Spain, Portugal, Belgium, Finland, and from EE: Lithuania, Slovenia, Slovakia, **Czechia**. These countries have low abortion rate combined with high contraceptive prevalence of modern methods in common. It can be identified as "low abortion pattern". The **second cluster** consists of two countries – Germany and **Latvia** where the low abortion rate is also typical for these countries, but with lower use of modern contraceptives. The **third cluster of countries** is also a mix of countries characterised by high abortion. It includes **Bulgaria**, Romania, Estonia, and Hungary, i.e. the EE countries. Abortion rate was reduced in these countries; however it is still high in all age

groups in comparison with other EU countries. In this cluster there are also countries of WE: Denmark, **Sweden,** GB, and France. This cluster is also characterised by lower use of modern contraceptives.

Looking at those clusters in more detail three patterns of abortion behaviour in EU countries can be better identified (Fig. 3). **Two countries** were selected as representatives from **the third cluster of currently characterised by rather high abortion** (general abortion rate of 6 ‰): **Sweden as representative of the former Western "early abortion pattern"** characterised by high abortion rate among women younger than 25 years and particularly among teenage women. It is connected with the highest propensity to end an unwanted pregnancy among young woman, suggesting the increase in demand for fertility control due to a delay in fertility has not been sufficiently met yet. **Bulgaria was selected from the Eastern Europe as the representative of the former Eastern "high abortion pattern"** (Fig. 3). Women aged 20-34 years accounted for the highest frequency of abortions. Interestingly, abortion rate of youngest Bulgarian women aged 15-19 is comparable with that of Sweden women in this age group. Behind the high abortion rate there are rather low improvements in modern contraceptive practice.

Figure 3 Age specific induced abortion rates in 2019

The second cluster is very specific. In **Latvia** despite a decline in abortion rate it seems that **the previous "late abortion pattern"** characteristic for the EE has continued. Highest abortion rates are registered for women in their 30s, thus abortions are still used to limit family size once certain parity has been reached. Abortion was the most frequently requested by married women with two or more children. **The Czechia** could be taken as a representative **of the first cluster of low abortion pattern,"** with high contraceptive prevalence of modern methods (68 %) and low general abortion rate (6 ‰). The fall in abortion rates was most pronounced in the age group with traditionally highest rates of abortion, i.e. between 20 and 34 years, which resulted in diminishing the differences in abortion rates between all age groups. The main characteristic of this cluster is based on the

strong effect of improvement of contraceptive prevalence in the countries of EE that previously registered high abortion rates.

Liberal attitudes are connected with abortion justification

We analysed the attitudes towards abortion in these four selected representatives using EVS data from 2017. The abortion justification was found significantly associated with liberal attitudes towards homosexuality and with no religiosity in all four countries (Tab. 1). Interestingly, gender proved to be a statistically significant predictor only in Czechia where women are less likely to justify abortion. In Sweden, on the other side, those with higher education are two times more likely to justify abortion.

Table 1 Effect of individual characteristics on abortion justification (odds ratio)

Society's attitudes towards abortion		Latvia	Bulgaria	Sweden	Czechia
		Exp (B)	Exp (B)	Exp (B)	Exp (B)
Sex					
	Man	1	1	1	1
	Woman	0,961	1,350	1,302	0,649**
Age group					
	18–29	1	1	1	1
	30–44	0,647	1,077	0,923	1,568
	45–59	0,565	0,819	1,459	1,490
	60+	0,592	0,502	0,910	1,058
Education					
	Low	1	1	1	1
	Medium	0,942	1,310	1,991**	1,167
	High	1,338	1,219	2,055 **	0,915
Justification of homosexuality					
	Yes	20,216***	13,082***	8,290***	9,201***
	No	1	1	1	1
Faithful person					
	Yes	1	1	1	1
	No	1,874*	1,832*	1,653**	1,581**

Data source: European Value Survey 2017, Note: Dependent value: 1 = always or high justification; 0 = no or low justificatiaon

Conclusion

The main results could be summed up as follows: (1) The East-West divide in abortion behaviour was distorted, but not fully eliminated. Besides the former Eastern and Western abortion patterns the new "low abortion" pattern has emerged. (2) Within the EU countries convergent trends towards lower abortion level was identified since 1990. However, as regards structure of abortions a pattern of divergence has been apparent due to differences in transition to modern contraception use. (3) Attitudes towards abortion are influenced by similar individual characteristics: Liberal attitudes towards homosexuality and no religion are connected with abortion justification in all selected countries.