From Pill Dominance to Diversification: The Czech Contraceptive Transition

In the 1990s, Czechia experienced the fastest increase in the proportion of women using hormonal contraception among all Eastern European countries (Kocourková and Fait, 2011). This expansion was closely followed by a rapid decline in abortion rates. The widespread and swift adoption of effective contraception enabled women to postpone childbearing to higher ages while simultaneously reducing the number of unintended pregnancies (Kocourková and Fait, 2011). Nowhere else did fertility decline and postponement proceed so rapidly without a parallel rise in abortion rates. In this respect, Czechia was unique not only within Eastern Europe but also globally.

After reaching a peak of almost 50% of women using hormonal contraception in 2007, the prevalence declined to around 30% by 2021. Unlike in many Western European countries, this trend was not compensated by an increased use of intrauterine devices (IUDs). On the contrary, the share of registered IUD users among women of reproductive age fell from 10.5% in 1993 to 8.4% in 2021. Despite these declines, the gradual decrease in abortion rates continued (Idlbeková and Kocourková, 2025).

The post-2007 development indicates that the further decline in abortion rates can no longer be attributed solely to increased use of modern contraception (Kocourková, 2016). Meanwhile, the postponement of childbearing to later reproductive ages has intensified, particularly after the fertility downturn following 2021 (Slabá and Šťastná, 2025). These recent trends in Czechia mirroring those observed across most European countries suggest a lengthening interval before the onset of reproduction and, consequently, an increasing importance of effective contraceptive use. However, a more detailed understanding of contraceptive practices remains lacking. This study contributes to clarifying how fertility control strategies are changing amid continued fertility postponement in countries experiencing record-low fertility. It also addresses the potential risk of rising abortion rates, with implications for reproductive health policies.

The analysis draws on data from the Generations and Gender Programme – Czech Family 2020–2022 survey (GGS II, Wave 1) (Kreidl et al., 2023a). Respondents under age 50 who were not pregnant, did not have a pregnant partner, and were not actively trying to conceive were asked: *"Do you or your partner currently use any of the following methods to prevent pregnancy? Please mark all that apply."* The list included: condom, hormonal contraception (pill, injection, implant, post-coital pill), IUD, withdrawal, rhythm method, and other methods (such as pessary, vaginal ring, female condom, gel). For comparison, data from the 2008 GGS survey were also used, though the earlier survey excluded single women. These data make it possible to address the following research questions: Among which groups of women has the use of the pill declined? To what extent has the reduced use of the pill been accompanied by increased use of other reliable contraceptive methods? Has there been a shift toward less effective methods that may increase the risk of unintended pregnancy? Is there evidence of growing diversification in contraceptive method use?

For several decades, the use of hormonal contraception, particularly the oral contraceptive pill, was positively associated with women's educational attainment. During the early diffusion of the pill in Europe, better-educated women were the first to adopt modern contraceptive methods, reflecting greater access to medical services, higher health literacy, and financial resources (Sobotka, 2008; Stloukal, 1999). This pattern aligned with the classical diffusion-of-innovation model, in which new medical technologies initially spread

through higher-status social groups. Numerous studies confirmed this positive association between education and contraceptive use (Spinelli et al., 2000; Serbanescu et al., 2004; Moreau et al., 2006; Mosher and Jones, 2010; Janevic et al., 2012). Conversely, less reliable methods such as withdrawal were less prevalent among higher-educated women, while the likelihood of using no contraception at all showed a negative gradient with education (Dereuddre et al., 2017).

However, recent evidence suggests that this educational gradient has been reversing in some contexts. Formerly, better-educated women were more likely to use hormonal contraception; today, they are more likely to discontinue it, responding to increased awareness of potential risks and to the growing availability of non-hormonal alternatives. A French study (Le Guen et al., 2020) found that after media coverage of risks associated with third- and fourth-generation pills, women with higher education responded more quickly and switched to other methods (second-generation pills, IUDs, condoms), while lower-educated women remained with their previous methods longer. As a result, the social gradient reversed: the pill shifted from being a method of the educated to one increasingly used by less privileged groups. Earlier research from the 2000s had demonstrated strong class-based access to medical contraception (Bajos et al., 2004), but newer studies show that when health concerns arise, better-educated women are the first to abandon hormonal methods consistent with the concept of *health lifestyles*, in which individuals with more resources adopt both medical and "natural" solutions earlier.

Similar tendencies have been observed in Belgium (Eekert et al., 2024), where "health-conscious" and higher-educated women increasingly shift from hormonal contraception toward long-acting reversible contraception (LARC) or fertility awareness-based methods. These shifts reflect both a diffusion of "healthy lifestyle" norms and social contagion effects. Although not identical to the French case, they represent an erosion of the classical positive educational gradient in pill use. Bajos et al. (2014) describe this as a "reconfiguration of social inequalities", a process in which elites first adopt a new technology (the pill in the 1970s–1990s), and later abandon it more rapidly when perceived costs or risks emerge.

Comparable analyses are scarce in Central and Eastern Europe, yet the first Czech evidence indicates a similar decline in pill use among young women (Kocourková et al., 2023). Figure 1 confirms that compared with 2008, pill use halved across all age groups by 2022. Although condom use increased, among the youngest women (18–27 years) the pill remained the most frequently used method (37%), followed by the condom (35%). Notably, the prevalence of withdrawal doubled in this age group between 2008 and 2022. Among men reporting withdrawal, 43% also reported simultaneous condom use. The use of less reliable methods, such as the rhythm method, has also increased, and among women using rhythm method, 72% reported combining them with withdrawal.

Cross-national comparison using GGS II Wave 1 data from countries with completed fieldwork (Figure 2) shows that Czechia ranks second after Estonia in condom use (25%) and first in withdrawal use (19%). In contrast, the prevalence of pill use (18%) is far below that in Northern European countries such as Denmark (48%), and IUD use (11%) also lags behind.

Table 1 presents logistic regression results identifying factors associated with the use of particular contraceptive methods. Women with two children were eight times more likely to use an IUD than childless women, confirming that IUDs are typically used once women reach their desired family size marking a shift in fertility control strategies in Czechia. Compared to

highly educated women, those with lower education were about twice as likely to use hormonal contraception and less likely to rely on withdrawal.

Overall, Czech women are abandoning the pill across age groups, but predominantly among the higher-educated mirroring the Western European pattern. This can be interpreted, following Bajos et al. (2014), as a "reconfiguration of social inequalities" in contraceptive behaviour. Further analyses will include additional explanatory variables such as short-term fertility intentions and gender inequality indicators (relative education, income, and employment status of partners), as contraceptive decision-making increasingly reflects shared couple responsibility rather than individual choice (Dereuddre et al., 2017).

Finally, changes in attitudes toward the pill must be considered in the context of social media influence, which increasingly shapes contraceptive decision-making (Foran, 2019; Wang et al., 2019). Social media have amplified narratives about the adverse effects of hormonal contraception, leading to its declining use and a shift toward alternative methods in several Western European countries (Schneider-Kamp and Takhar, 2023). Similar dynamics have been observed in Czechia, where women frequently share personal experiences of side effects from oral contraceptives (Kikalová et al., 2014; Nováková, 2017). Such first-hand narratives provide authentic, emotionally resonant knowledge that contrasts with abstract statistical risk information (Vondráčková, 2020).

Figure 1. Share of Women Using Selected Contraceptive Methods by Age Group in 2008 and 2022

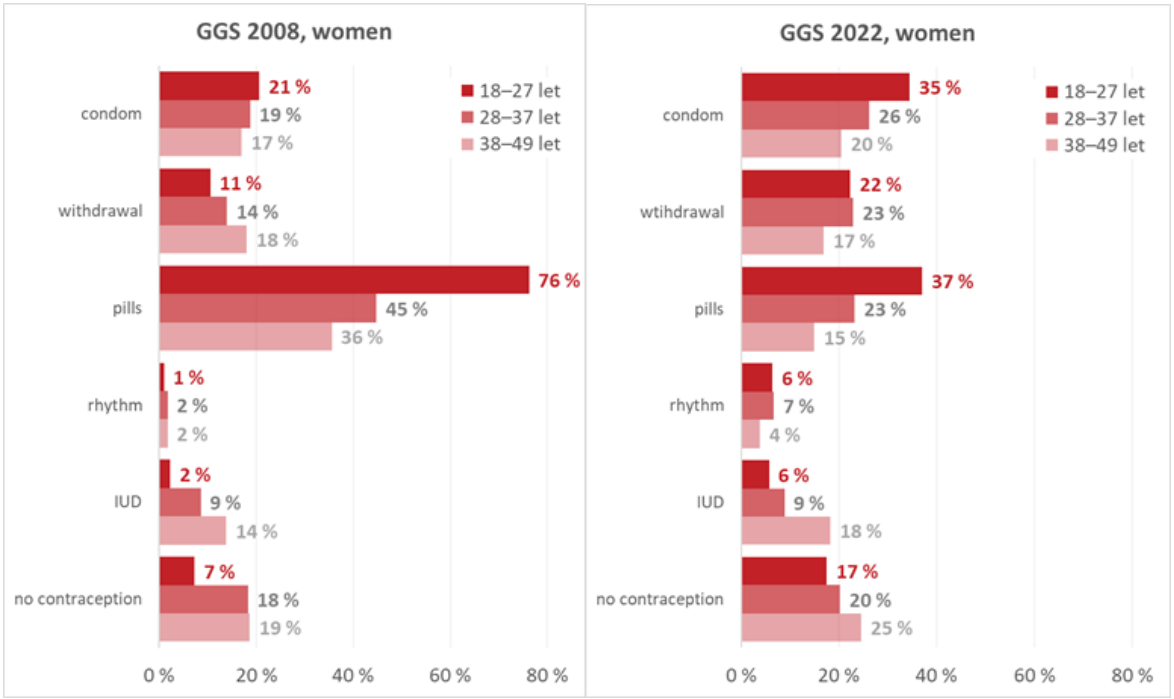

Figure 2. Prevalence of the Most Common Contraceptive Methods by Age Group in Czechia Compared to Selected European Countries, GGS 2020–2023, Women Aged 18–44

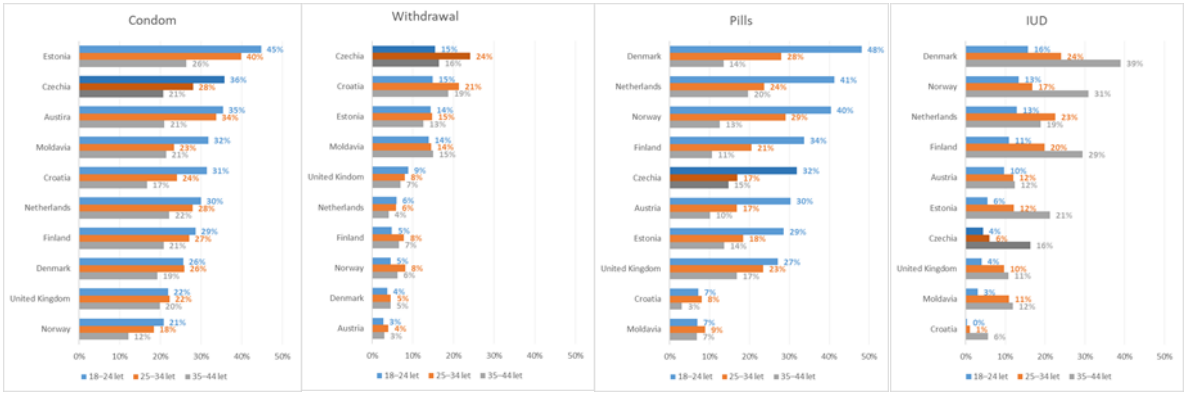

Table 1. Differences in the Use of Contraceptive Methods by Partnership Status, Education, Age, and Number of Children (Odds Ratios from Binary Logistic Regression), GGS 2022, Women Aged 18–44

Method	Condom		Pills		Withdrawal		IUD		No contraception	
	Sig.	Exp(B)	Sig.	Exp(B)	Sig.	Exp(B)	Sig.	Exp(B)	Sig.	Exp(B)
Constant	0,409	1,240	0,000	0,194	0,033	0,537	0,000	0,067	0,000	0,071
Partnership status										
Single	0,650	1,140	0,193	1,502	0,802	1,085	0,366	0,601	0,280	1,455
Partnership	0,028	0,584	0,044	1,654	0,428	0,814	0,571	1,224	0,062	1,641
Cohabitation	0,031	0,693	0,130	1,332	0,962	0,992	0,002	0,449	0,000	1,967
Married (ref.)	0,024	**1,000**	0,203	**1,000**	0,811	**1,000**	0,010	**1,000**	0,004	**1,000**
Education										
Primary	0,015	0,571	0,000	2,236	0,000	0,246	0,602	0,851	0,003	1,993
Secondary	0,017	0,710	0,000	2,078	0,001	0,588	0,830	1,041	0,176	1,261
Terciary(ref.)	0,011	**1,000**	0,000	**1,000**	0,000	**1,000**	0,815	**1,000**	0,012	**1,000**
Age										
18–24 let (ref.)	0,001	**1,000**	0,207	**1,000**	0,026	**1,000**	0,031	**1,000**	0,039	**1,000**
25–34 let	0,084	0,659	0,431	0,817	0,347	1,290	0,102	0,419	0,139	1,574
35–44 let	0,001	0,421	0,111	0,643	0,579	0,851	0,492	0,694	0,018	2,129
Number of childten										
0 (ref.)	0,047	**1,000**	0,601	**1,000**	0,083	**1,000**	0,000	**1,000**	0,000	**1,000**
1 child	0,009	0,570	0,197	0,733	0,013	0,576	0,559	1,348	0,010	1,813
2 children	0,126	0,725	0,649	0,897	0,057	0,659	0,000	8,122	0,147	0,693
3 children and more	0,573	0,865	0,750	0,908	0,076	0,606	0,000	5,686	0,322	0,731
Nagelkerke R Square	0,049		0,075		0,066		0,170		0,077	
Number of respondents	1 348		1 348		1 348		1 348		1 348	