Can Family Policies Influence the Transition to Parenthood in Turbulent Times? A Post-Communist Case Study

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Extended abstract for EPC2024

Topic

Our analysis aims to examine the impact of family policies on becoming a parent in Hungary in 1985–2016. Our central question is whether we could expect family policy measures to promote childbearing at a time when profound changes were taking place in almost all areas of life.

Theoretical focus

The impact of family policy measures is debatable, even amid the normal pace of social change and predictability. Literature on the efficiency of population policies does not offer convincing arguments (Demény 1987; Gauthier 2007). Although some family policy measures are influential (Hoem 1993, Hoem, Prskawetz and Neyer 2001, Milligan 2005, Lalive and Zweimuller 2009, Cohen et al. 2013, Slominczik and Yurko 2014), others found limited effects and the results of international comparative studies are mixed or inconsistent (Demény 1997, Gauthier 2007, Stropnik and Sircelj 2008, Freyka and Zacharov 2013, Stastna and Sobotka 2009). As a comprehensive study by Gauthier (2007, p. 339) put it, "[...] policies may indeed have an effect on families, but that effect tends to be [of] a small magnitude and [...] possibly have an effect on the timing of fertility, rather than completed family size."

Searching for policy effects is especially challenging if we study "turbulent times" that involve deep political, economic and social transformations. In Hungary, for instance, the political system has changed from a one-party to a competing multi-party system. Economically, the market economy has been rebuilt, resulting in labour market fluctuations and an economic crisis but also providing opportunities for upward mobility. The profound social change involved increased inequalities and disillusionment for those who could not achieve the well-being they had dreamt of. Moreover, the demographic landscape has also shifted from early to late childbearing (e.g. the mean age at first birth increased from 22.6 to 28.4 years during the examined period) and a "postponement transition" has taken place.

Hungary is an interesting case study because it has gone through all aspects of turbulence mentioned above. In addition, several profound changes in family and population policy happened after the political transition. These policies have been constantly present in electoral debates, and the governments in power have also embodied their ideas on population and social policy in institutional changes.

Our central question is whether we can expect family policies to have an impact during such turbulent times. To put it differently: isn't the role of government interventions precisely to provide a sense of security during times of unpredictability, to serve as a safety net? In other words, is it not precisely at this time that we can expect welfare state benefits to achieve the desired goals?

Data, methods and analytical framework

We use data on both women and men from all five waves (2001-2016/17) of the Hungarian Generations and Gender Survey for the analysis (n=8759). The data set includes detailed monthly fertility, partnership, employment and education histories, as well as basic socio-demographic information on all respondents. Our working sample includes respondents from both the original panel sample who joined in wave 1 (in 2001) and the refreshment sample who joined in wave 4 (in 2012).

Using event-history analysis (piecewise constant proportional hazard models), we explored how individual and macro-level factors influenced the first child's birth. The event of interest is the (supposed) conception, 9 months before the first live birth. The risk period starts at the respondent's 16th birthday or in January 1985. Altogether we have 5416 events (first births). Observations are censored at the 40th birthday for women and the 45th birthday for men or the last interview (minus 9 months).

We consider childbearing as a "sequential decision" (Udry 1983). The transition to parenthood is a key milestone in one's life course and a precondition for having higher-order births.

Individual-level covariates include age, cohort, ethnicity, number of siblings, parental education, religiosity, partnership status, and a combined variable on activity status, educational attainment and sex. The last two variables are time-varying, while the others are time-constant.

We take interconnected macro-level processes into account in an attempt to isolate specific effects on first birth propensity, while also controlling for micro-level factors.

Family policy regimes are operationalised as policy periods. The Hungarian family support system is complex (Makay 2015, 2018) – we only look at measures relevant to the transition to parenthood. We identified junctures or milestones (Andersson and Neyer 2007) that involved a change in basic principles, eligibility criteria or financing and only if these changes were apparent for those affected. The definitions and features of these periods and the corresponding hypotheses are summarised in *Table 1* below.

Periods		Main changes and features	Our hypotheses for first birth propensity	
1	Jan 1985 –	Pre-transition, pre-crisis:	_	
	Dec 1991	extensive, universal and wage-related family support	(baseline)	
	Jan 1992 –	Post-transition crisis:		
	May 1995	mass unemployment, economic insecurity, relative		
		weakening of family policy (inflation, devaluation), but		
		basically unchanged family policy system		
2	Jun 1995 –	Austerity measures ("Bokros Package"):	Decrease for the secondary and	
	Dec 1998	only income tested allowances remained	tertiary educated, the employed	
3	Jan 1999 –	1st Orbán government:	Increase for the secondary and	
	Apr 2002	universality, wage-related child-rearing support reintroduced, tax relief for families with children	tertiary educated, the employed	
4	May 2002 –	Socialist governments:	Increase for the low (and lower	
	Apr 2010	tax relief abolished, flat-rate family allowance doubled,	secondary) educated	
		dominance of universality		
5	May 2010 –	Orbán governments:	Increase for the secondary and	
	Jul 2016	towards the dominance of a tax relief system for families	tertiary educated, the employed	
		with children		

Table 1: Family policy periods relevant for first birth, Hungary 1985–2016

We also addressed that family policy measures may operate differently across social groups. Consequently, an interaction term between social status and policy periods is also included to see how different social groups reacted to macro-level changes.

We control for two indicators of economic turbulence: inflation rate (yearly percentage change, lagged by 1 year) and female labour market participation rate (aged 15–60, %).

Postponement can be conceptualized as a diffusion process (Rogers 2003), a "postponement transition" (Kohler, Billari and Ortega 2002). We also captured the effect of this fertility postponement, the general diffusion of late childbearing with a macro indicator: mean age of women at first birth. More specifically, we use the predicted mean age of women at first birth (computed from a logistic growth curve with four parameters) to control for the general diffusion of late childbearing. This predicted mean is often close to the actual mean age values (see *Table 2*).

Year	Inflation rate, lagged by	Female employment	Mean age at first birth	Predicted mean age at
rear	1 year	rate	(women)	first birth (women)
1985	8.3	77.4	22.9	22.9
1986	7.0	78.2	23.0	23.0
1987	5.3	78.4	23.1	23.1
1988	8.6	77.0	23.3	23.2
1989	15.5	77.1	23.4	23.3
1990	17.0	75.1	23.4	23.5
1991	28.9	73.2	23.5	23.7
1992	35.0	67.5	23.9	23.9
1993	23.0	62.6	24.2	24.2
1994	22.5	59.3	24.5	24.5
1995	18.8	57.1	24.9	24.8
1996	28.2	55.6	25.3	25.2
1997	23.6	54.5	25.6	25.6
1998	18.3	54.9	26.0	25.9
1999	14.3	56.7	26.4	26.3
2000	10.0	56.9	26.6	26.6
2001	9.8	57.0	26.8	27.0
2002	9.2	55.6	27.1	27.2
2003	5.3	56.5	27.4	27.5
2004	4.7	55.9	27.6	27.7
2005	6.8	55.6	27.9	27.9
2006	3.6	55.1	28.1	28.0
2007	3.9	54.9	28.3	28.2
2008	8.0	54.6	28.3	28.3
2009	6.1	54.0	28.4	28.3
2010	4.2	54.9	28.7	28.4
2011	4.9	55.1	28.8	28.4
2012	3.9	57.1	28.6	28.5
2013	5.7	57.9	28.5	28.5
2014	1.7	60.9	28.4	28.5
2015	-0.2	63.0	28.4	28.6
2016	-0.1	65.4	28.2	28.6

Table 2: Values of the macro-level covariates by calendar year

Findings

We built a set of models to see how the inclusion of different sets of variable change the risk of first birth in subsequent policy periods (*Figure 1*). The general trend in the probability of having the first child is U-shaped if only policy period is included (Model 1) and net of individual-level effects (Model 2). The trend becomes J-shaped when postponement is taken into account (Model 3), showing that the adoption of a late childbearing model made it difficult to see that childbearing propensity actually increased after 1999, net of the general postponement.





Notes: hazard ratios and 95% confidence intervals.

The impact of individual-level covariates is consistent with previous studies and with what we would expect (*Figure 2*). Being single, a student and aged 35 or older has the strongest negative impact on first birth. Younger age, Roma ethnicity, low parental education and having at least two siblings increases the risk. Regarding the combined variable of activity status, education and sex, we could see that education has a positive effect among the employed. Being out of the labour market increases the risk of first birth for women but decreases it for men, which is consistent with gender role differences. (Non-working respondents usually have low education, but it was not possible to differentiate this group by education due to a low number of cases.)

Family policies showed a status-dependent effect (*Figure 3*). In 1995, the shift from universality to means-testing and the abolition of the earnings-related childcare allowance increased the direct and indirect costs of having children for many and led to a direct and differentiated reduction in childbearing propensity. This effect varied by social status and was strongest among employed persons with vocational or secondary education. Later, the probability of a first birth increased among employed people with secondary or tertiary education after 2002 and for non-employed women after 2010. The primary educated shows different patterns depending on employment status and gender.

Moreover, results showed that postponement mattered, reducing the probability of becoming a parent. In addition, first children were more likely to be born in times of lower inflation, and higher employment rates. Hence, the declining risk of becoming a parent is partly an autonomous process, independent of economic changes, but is also influenced by the macroeconomic environment and the role of family policies.

Figure 2: The effect of individual-level covariates



Notes: hazard ratios and 95% confidence intervals.

Figure 3: The status-dependent effect of policy periods



Notes: hazard ratios and 95% confidence intervals; individual-level covariates, employment rate and predicted mean age at 1st birth are controlled