Parenting Leave Policies and Fertility in Europe

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Introduction and Motivation

Over the past five decades in Europe, parenting leave schemes – an umbrella term that includes maternity leave, parental leave, and leave reserved for co-parents (Dobrotić et al., 2022) – have shifted focus from protecting maternal and child health to promoting gender equality and work-life balance. In line with these goals, many governments have introduced policy instruments promoting a more equal division of leave between parents, such as father-specific quotas and incentives to share parental leave.

Family policies have also long been intertwined with demographic concerns. As fertility decline persists across Europe (Sobotka et al., 2019), policymakers increasingly consider family policies as potential levers to boost fertility (Gauthier and Gietel-Basten, 2025). Across Europe, evidence shows that longer and better paid leave is indeed associated with higher fertility rates (Luci-Greulich and Thévenon, 2013).

However, this relationship varies across countries and by the type of policy instrument considered. Maternity leave duration expansions have either provided positive effects (Lalive and Zweimüller, 2009) or unchanged fertility behaviors (Dahl et al., 2016; Duvander et al., 2020), while the introduction of paternity leave rights has shown negative effects on subsequent births (Farré and Gonzalez, 2019).

By contrast, studies exploring how leave sharing instruments are related to fertility are scarcer. Duvander et al. (2019) have examined the relationship between father-specific quotas and fertility in the Nordic context and show that their use is positively correlated with fertility outcomes in Sweden, Norway and Denmark. However, the literature lacks comparative evidence from countries with different institutional backgrounds and social norms, leaving open the question of whether similar patterns emerge in other countries, and if the relationship differs across education levels.

Aims of this study

We fill this research gap by (i) describing five decades of changes in parenting leave systems in Europe and identifying eras in the policy landscape, from 1970 to 2024, (ii) exploring patterns in

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policy changes across countries and over time, and (iii) investigating which parenting leave policy instruments matter the most to Total Fertility Rates (TFR) by education group in the European context.

Data and Methods

We use a novel set of data, the European Parenting Leave Policies (EPLP) dataset, that collects information on parenting leave scheme characteristics, including policy tools encouraging parents to share parental leave such as parent-specific quotas and incentives to share. The EPLP covers data across 21 European countries over five decades, spanning years from 1970 to 2024. With 33 variables characterizing parenting leave systems, the dataset provides information on an extensive range of leave instruments, including statutory duration for maternity, co-parent (the parent who does not give birth), parental and job-protected leave, detailed information on parental leave benefits, and flexibility in use. For each country-year case, we link policy instruments to education-specific period fertility levels estimated by Greulich and Toulemon (2023).

Our analysis proceeds in three steps:

Policy eras: We identify key changes in parenting leave systems over the last five decades across Europe. Specifically, we explore how statutory durations for maternity leave, co-parent leave, paid parental leave and parent-specific leave quotas have evolved over the years. We then dig into time trends country by country to target the drivers of change in the parenting leave landscape.

Country clusters: Then, we run a cluster analysis to group countries with similar policy profiles in each key period (Hennig et al., 2015). This enables us to assess whether the composition of parenting leave scheme clusters remains similar or changes over time.

Fertility outcomes: Finally, we examine which policy instruments matter the most to overall and education-specific period fertility levels using fixed-effects regressions, general dominance analysis as well as counterfactual analysis, by covering 21 European countries and years from 2005 to 2020.

Preliminary Results

We present three sets of results in this study:

Policy eras: Average maternity leave duration remained stable over the observed decades. However, there were clear changes regarding parental leave. The maximum duration that a parent can be on parental leave while receiving benefits was slowly growing from the 1970s before increasing sharply in the 1990s. Co-parent leave and parent-specific parental leave quotas emerged

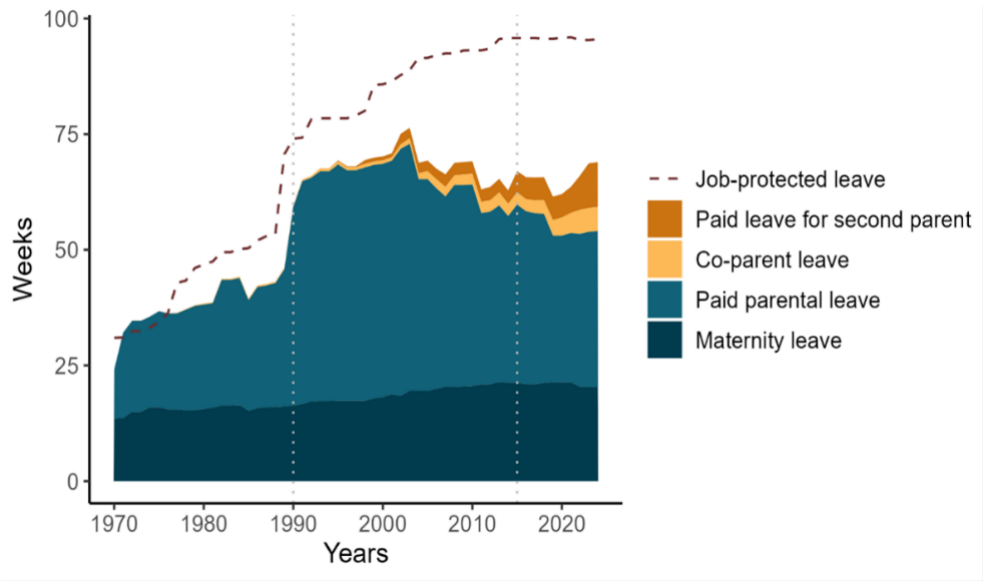
in the mid-1990s, first in the Nordic countries, and expanded elsewhere, especially after 2015. All in all, we identify three eras of policy change (see Figures 1 and 2):

- **The Era of Maternal Leave (1970–1989)**: Policies were focusing mostly on mothers, with fathers virtually omitted in the leave landscape. Only a few countries grant legal entitlements to paid parental leave for fathers.

- **The Era of change (1990–2014)**: A turning point in Europe, with the extension of legal rights to fathers with the introduction of co-parent leave, the entitlement to parental leave of fathers, the introduction of quotas (pioneered by Nordic countries), and the introduction of incentives to share parental leave.

- **The Era of Equality (2015–2024)**: Expansion of parent-specific quotas that reduce parental leave duration available to one parent at the benefit of the other parent.

Figure 1. Parenting Leave Durations in Europe (1970-2024)



Source: The European Parenting Leave Policies Dataset (1970-2024)

Country Clusters: The cluster analysis shows that European countries follow increasingly divergent trajectories in how they implement gender-equality oriented leave designs (Table 1). While the pro-equality cluster is dominated by Nordic countries across all periods, the composition of other groups – particularly the conservative and liberal clusters – shifts over time, blurring the well-established boundaries of the classic welfare typology (Esping-Andersen, 1990). Countries appear to be converging regarding the allocation of parental leave duration between across parents, but at different speeds and through diverse policy pathways.

Fertility Outcomes: Parenting leave instruments explain a lower share of fertility variations over time within European countries compared to other aggregate factors like childcare coverage for children aged 0 to 2 years old, public spending on cash benefits for families with children, and female employment (general decomposition analysis). Still, specific patterns emerge, as shown by regressions with country- and time-fixed effects. Everything else kept constant, we find that:

- **Flat-rate benefits** received during parental leave are positively correlated with period fertility levels of low-educated women, suggesting financial resources as a potential mechanism underlying fertility responses to parenting leave policies.
- **Duration of paid parental leave** is positively correlated with period fertility levels for middle educated women. Figure 2 presents a counterfactual analysis and shows how different period fertility levels would have been for middle educated women if parental leave duration was equal to zero for each country and year. Other education groups are not affected.
- **Co-parent leave duration (or often, "paternity leave")** is negatively correlated with fertility among the low- and medium-educated but not for highly educated women.
- **Parent-specific parental leave duration (non-transferrable leave, or quota)** is not significantly correlated with fertility of low educated women, positively correlated with fertility of medium educated women and negatively with fertility of highly educated women.

Takeaways and contributions

The main message that stands out in our results is that **the fertility-parenting leave nexus varies across education groups –** suggesting that parenting leave reforms may unintentionally reinforce educational disparities in family formation – **and across policy tools.** Overall, fertility tends to be weakly or negatively related to the increased involvement of fathers in leave schemes.

Our first contribution lies in complementing existing research by **enriching existing datasets**, like the OECD Family Database, the Comparative Family Policy Database and the PROSPERED dataset, with detailed information on parenting leave schemes on a very large time span. Second, we contribute to the literature that builds a typology of countries based on family policies (Gauthier, 2002; Thévenon, 2011) by **including the most recent policy tools aiming at encouraging leave sharing in the analysis**. Third, our paper adds to existing literature that compares estimates across studies using different sets of data, measures, and methods (Bergsvik et al., 2021) by **evaluating the relative importance of several policy instruments with harmonized data**. In additional to leave duration and benefits, we focus on policy tools that promote leave sharing, such as quotas and incentives, which have been given less consideration in the fertility literature than other policy instruments.

Appendix

Figure 2. Share of parent-specific quotas in total parental leave duration (1970-2024)

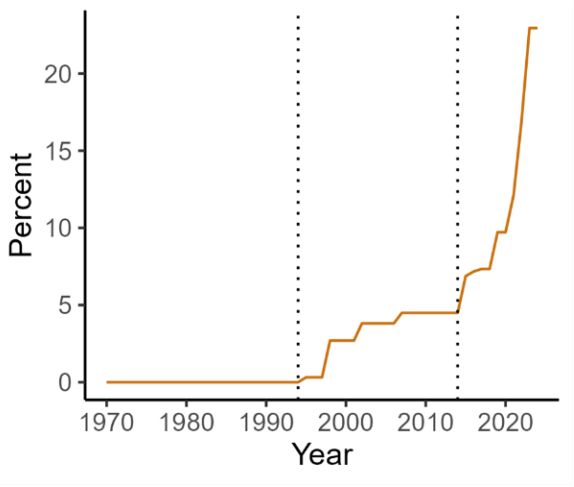
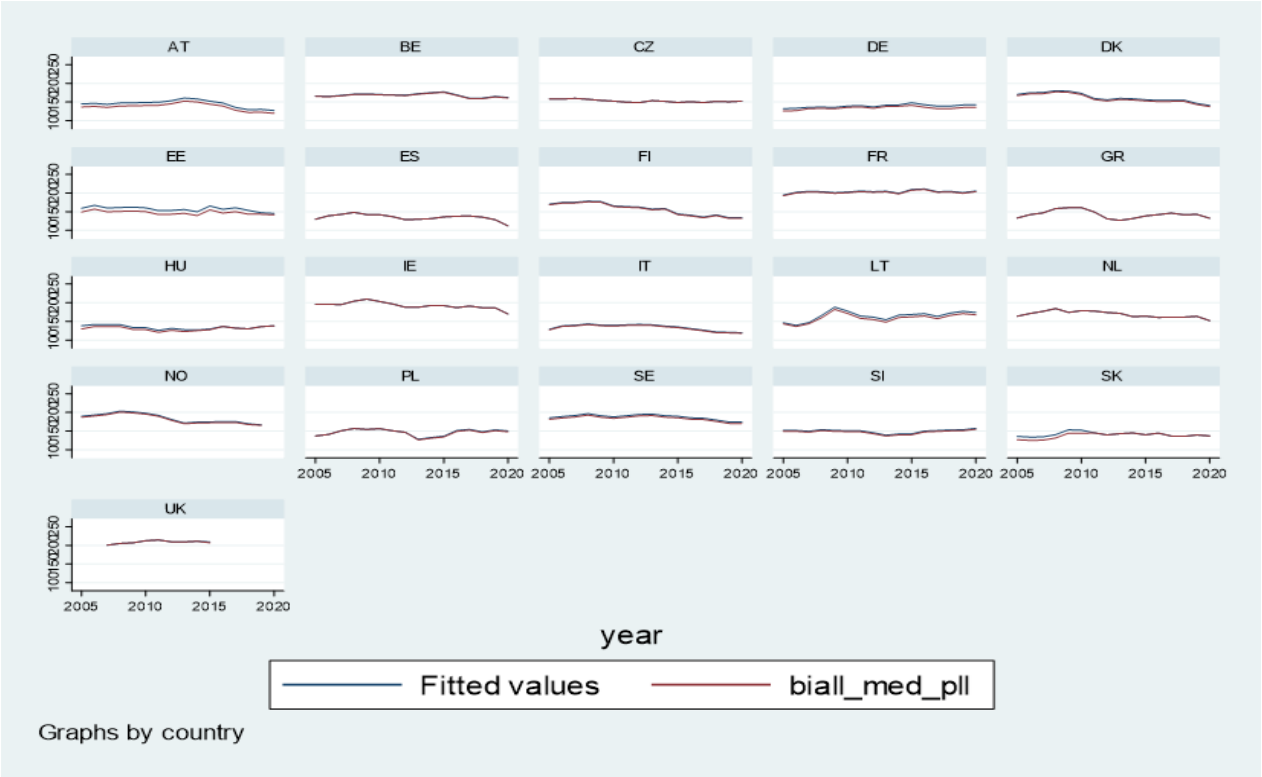


Figure 3. Fertility trends for middle educated women by country with counterfactual period fertility levels of middle educated women absent of parental leave (2005-2020)



Note: The blue line represents estimated period fertility level for middle educated women with positive parental leave duration. The red line: estimated period fertility level for middle educated women with zero parental leave duration

Table 1. Evolution of clusters over the three eras

	CONSERVATIVE CLUSTER	EQUALITY CLUSTER	LIBERAL CLUSTER	FRANCOPHONE CLUSTER
ERA OF MATERNAL LEAVE	CZ, SK, HU, IT, SK	SE, NO	UK, IE, NL, GR, ES, PL, AT, DE, LT, EE, DK, FR, BE	-
ERA OF CHANGE	AT, DE, LT, EE, CZ, SK, HU	SE, NO, DK, FI, SI	UK, IE, NL, GR, ES, PL, IT, FR	BE
ERA OF EQUALITY	AT, DE, LT	SE, NO, DK, FI, SI, EE, PO	UK, IE, NL, GR, ES, IT, CZ, SK, HU	BE, FR

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