Beyond Parental Leave: Family Policies and the Motherhood Employment Gap in Europe

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ABSTRACT

Despite substantial progress in women's labour-market participation, motherhood remains associated with persistent employment inequalities. This study examines how different dimensions of the care-policy environment relate to mothers' relative employment position across the 27 European Union member states between 2010 and 2025. Using a balanced panel of 432 country-year observations and two-way fixed-effects models, the analysis distinguishes paid maternity leave, paid parental leave available to mothers, father-specific paid leave, and formal childcare participation, while additionally examining differences by family size. Longer maternity leave and parental leave available to mothers are associated with a larger employment gap, whereas father-specific leave and childcare show no significant overall negative relationships. The associations for parental leave and childcare also differ significantly across family-size groups, particularly among mothers with three or more children. The findings show, therefore, that family support cannot be evaluated through its extent alone, emphasizing the relevance of its duration, gendered allocation, practical use, and responsiveness to different care and employment needs.

KEYWORDS: *Child penalty; Employment interruption; Maternal employment; Work-family reconciliation.*

JEL CLASSIFICATION: *J13, J16, J18, J21.*

1. INTRODUCTION

Parenthood remains one of the points at which otherwise narrowing gender inequalities become particularly visible in the labour market. While women's educational attainment and labour-market participation have increased substantially, the transition to motherhood continues to be associated with lower employment, reduced working hours and persistent differences in earnings relative to both men and women without children (Cukrowska-Torzewska & Matysiak, 2020; Kleven et al., 2019). Given these differences, the motherhood employment gap raises an institutional question: the extent to which mothers remain attached to employment after childbirth depends on the policy environment within which care and work are organized.

Family policies in general are intended to support this reconciliation, yet their labour-market implications are not necessarily uniform. Paid maternity and parental leave can protect mothers' employment relationships and provide time for care, while longer periods outside employment may also delay their return to work. Father-specific leave can reshape the care duties within households, whereas formal childcare can facilitate mothers' re-entry; with both mechanisms redistributing part of the care responsibility within or beyond the household. Consequently, the same broad objective of supporting families is pursued through policy instruments that operate through substantially different mechanisms. Existing evidence

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reflects this complexity: detailed national reform studies provide important insights into particular policy changes, while comparative research has frequently examined broader family-policy arrangements or a limited number of care-policy dimensions (Gornick et al., 1997; Hook & Paek, 2020; Thévenon, 2011). Nevertheless, evidence on how distinct components of the institutional environment relate simultaneously to mothers' relative employment position across countries and over time remains fragmented.

The present study addresses this gap by examining the motherhood employment gap across all 27 European Union member states between 2010-2025. Rather than treating family support as a single policy package, it distinguishes four dimensions: paid maternity leave, paid parental leave available to mothers, father-specific paid leave, and formal childcare participation. Their relationships with the motherhood employment gap are examined within a longitudinal country-level panel data framework, allowing changes within countries to be separated from persistent national differences and common developments over time. The analysis additionally considers whether these relationships differ according to family size, recognizing that the employment constraints surrounding motherhood may not be identical for mothers with one, two, or three or more children.

Accordingly, this study examines how paid maternity leave, paid parental leave available to mothers, father-specific paid leave, and formal childcare participation relate to the motherhood employment gap across EU countries over time, while investigating whether these relationships differ according to family size. Its contribution is twofold. First, it bridges the gap between detailed single-country reform evidence and broader comparative policy approaches by examining distinct family-policy instruments within a common EU-27 framework. Second, it moves beyond average relationships by considering family-size heterogeneity and the timing of policy changes. Thus, the study shifts attention from the amount of family support alone toward its duration, gendered allocation, and relationship with different care and employment needs.

2. LITERATURE REVIEW

2.1 Motherhood and labour-market inequalities

Although gender differences in education and labour-market participation have diminished considerably over recent decades, parenthood still remains an important source of gender inequality in labour-market conditions, affecting differently women's and men's professional trajectories. While earlier research conceptualized this disadvantage primarily as a motherhood wage penalty, more recent work introduces and adopts the broader concept of a child penalty, capturing changes in earnings, employment participation, working hours and other career outcomes following parenthood. According to Danish literature, male and female earnings trajectories evolve almost in parallel before the birth of the first child, yet diverge sharply afterwards. Thus, ten years after childbirth, women's earnings remain approximately 20% below their pre-childbirth trajectory relative to men, with participation, working hours and wage rates contributing in roughly similar proportions to this long-term penalty (Kleven et al., 2019). This indicates that the consequences of motherhood extend beyond wage losses, affecting women's employment participation, working intensity and broader labour-market integration.

One of the most established explanations for these inequalities is human-capital theory, as such child-related career interruptions reduce the accumulation of employment experience and seniority, which potentially lower subsequent labour-market returns. Budig and England (2001) provide empirical support for this mechanism: in their fixed-effects analysis, approximately one-third of the previously mentioned motherhood wage penalty was explained

by differences in previous job experience and seniority (including aspects like employment breaks and part-time work as well). Importantly, however, around two-thirds of the estimated penalty still remained after detailed controls for work experience. This suggests howemployment interruption represents an important, yet incomplete explanation of mothers' labour-market disadvantage (Budig & England, 2001).

Nonetheless, the significance of this mechanism is reinforced by broader evidence. Based on estimates collected from 39 journal articles, Cukrowska-Torzewska and Matysiak (2020) used meta-analysis to organize the body of empirical research on mothers' wage penalty in order to evaluate the applicability of theories explaining the disparity and the significance of the institutional and cultural context distinct to each country. They concluded that wage penalties associated with the total number of children are predominantly explained by lost experience and tenure, therefore by general child-related employment interruptions. At the same time, their results reveal another relevant pattern: for the penalty associated with having one child, factors consistent with compensating wage differential theory become more important, particularly mothers' selection into different sectors and occupations. Accordingly, motherhood-related inequality can develop both through time spent outside employment and through the types of employment women enter, respectively retain after childbirth (Cukrowska-Torzewska & Matysiak, 2020). However, beyond these individual-level mechanisms, the scale of motherhood-related disadvantages varies considerably across institutional contexts, suggesting that the policies governing employment interruptions and the return to work play an important role in shaping mothers' labour-market conditions and outcomes.

2.2 Maternity and parental leave: protection versus labour-market detachment

Given the importance of employment interruptions in explaining motherhood-related inequalities, maternity and parental leave policies represent institutional forces shaping women's paths post-childbirth on the labour-market. Their effects, however, are theoretically ambiguous. On the one hand, leave provisions can protect mothers' existing employment relationships, enabling them to temporarily withdraw from work without permanently leaving their jobs. On the other hand, longer periods outside employment could postpone labour-market re-entry and potentially contribute to human-capital depreciation. Ruhm (1998) describes precisely this trade-off, arguing that job-protected leave may preserve firm-specific human capital by allowing women to return to their previous employment, whereas lengthy absences can instead depreciate accumulated human capital and negatively affect subsequent employment and earnings outcomes.

This dual role becomes clearer when distinguishing between job protection and financial benefits. Lalive et al. (2014) emphasize that parental leave systems generally combine these two instruments: job protection encourages continuity with the pre-birth employer, while cash benefits financially support the postpartum period. Nevertheless, benefit receipt can also reduce the immediate incentive to resume work. Using three Austrian parental-leave reforms, authors found that, indeed, by extending the duration of benefits and job protection, mothers' return to employment is delayed. The 1990 Austrian reform, which extended both parental-leave benefits and job protection from 12 to 24 months, increased mothers' time at home after childbirth by approximately 7.8 months (Lalive et al., 2014).

Evidence from German reforms similarly demonstrates that leave duration strongly influences the timing of mothers' return to employment, while having more limited longer-term effects. After examining several expansions of maternity-leave coverage, Schönberg and Ludsteck (2014) found that each reform reduced maternal employment in the period immediately following childbirth, while changes in both job protection and financial benefits affected

mothers' return-to-work behaviour. Nevertheless, most reforms produced only relatively small effects on employment over the longer term. In addition, more recent evidence from Bergemann and Riphahn (2023) points in the same direction. Studying a reform that shortened the period of paid benefits from up to 24 months to 12 months, they find that mothers returned to the labour market substantially earlier once benefits expired while longer-term labour-force participation did not increase significantly. Together, these findings suggest that leave duration primarily affects the timing and length of mothers' employment interruptions, whereas shorter leave does not necessarily translate into persistently higher employment participation.

Nevertheless, leave design can also influence mothers' career outcomes later on. Mari and Cutuli (2021) demonstrate how the consequences of parental leave cannot be understood solely through its existence, generosity, or length. In Germany, an expansion combining longer leave with extended job protection substantially increased the time mothers spent on leave but simultaneously improved their tenure with their current employers. Thus, the authors argue that these opposing mechanisms can counterbalance each other: on the one hand, longer work interruptions may negatively affect human-capital accumulation, but on the other hand, employment protection can preserve job continuity and mitigate risks and losses. Additionally, their analysis of the later German reform similarly associates shorter leave periods and slightly longer working hours with improved wage outcomes, leading them to highlight relatively short, job-protected leave as a potentially more favourable policy configuration (Mari & Cutuli, 2021).

Therefore, the literature does not support a simple assumption that more leave necessarily leads to better labour-market outcomes for mothers. Leave can protect the pre-birth employment relationship and also maintain employment continuity, but increasing its duration can simultaneously prolong mothers' absence from work. Consequently, the effect of maternity and parental leave on motherhood-related employment inequalities is likely to depend on both the duration and design of the entitlement, providing a theoretical basis for examining the different leave components separately rather than treating family leave as a single policy measure.

2.3 Fathers' leave, childcare and the broader care environment

When focusing on mothers and their post-childbirth labour-market outcomes, they are not influenced and shaped exclusively by the amount of leave available to them, but also by the distribution of care responsibilities within the household and the availability of external childcare. Father-specific leave represents one institutional mechanism through which care can be redistributed between parents. Examining Swedish reforms, Duvander and Johansson (2012) found that reserving one month of parental leave specifically for each parent considerably increased fathers' actual leave uptake, while the introduction of a second reserved month generated a smaller but still clear increase. By contrast, a later financial bonus designed to encourage a more equal division of leave produced no observable effect during the period studied. Their findings therefore suggest that non-transferable leave entitlements can be more effective in changing fathers' leave-taking behaviour than general financial incentives (Duvander & Johansson, 2012). Nevertheless, their study evaluates fathers' leave uptake rather than mothers' subsequent employment, meaning that any effect on maternal labour-market outcomes should be considered a potential mechanism rather than a directly established consequence.

Beyond the household division, external childcare constitutes another essential element shaping mothers' labour-market participation. Comparing 11 EU countries, Cebrián et al. (2019) identify a clear interdependence between mothers' paid employment and the use of

external childcare. Complementarities have been shown between employment and childcare use, while formal and informal care operated as substitutes. Notably, these relationships vary across welfare and care regimes, indicating that mothers' employment decisions are strongly shaped by broader institutional contexts. Causal evidence from a Luxembourg reform that substantially expanded subsidized childcare capacity further indicates that greater access to childcare can facilitate mothers' labour-market participation. Bousselin (2022) found increases in both maternal employment and working hours, with mothers of younger children responding more strongly compared to those with children already in primary education. The author concludes that expanding affordable childcare can support maternal employment, while also acknowledging that the overall magnitude of the effect remains relatively modest. Still, it has been argued that expanding formal childcare provision alone is not necessarily sufficient to ensure higher maternal labour-market participation: gender-role attitudes and working-time arrangements, including flexibility and access to part-time work, also influence whether mothers are able to combine employment and childcare responsibilities (Cebrián et al., 2019). As a consequence, effective support for maternal employment requires childcare provision to be accompanied by labour-market and family policies that facilitate a more balanced division of paid and unpaid work between parents.

Most importantly, childcare and leave policies may operate jointly rather than independently. Using country-level data from OECD countries, Lee and Jung (2024) found that childcare enrolment among children aged 0-2 is positively associated with maternal employment, while the interaction between childcare enrolment and maternity-leave duration is positive. They interpret this positive interaction as evidence of complementarity between the two policies: leave can support the period immediately following childbirth, while formal childcare participation can facilitate mothers' subsequent return to employment. Accordingly, the labour-market consequences of leave duration may depend partly on whether adequate childcare is available once mothers are expected to re-enter employment.

Taken together, these findings suggest that maternal employment should be understood within a broader care-policy environment. Leave reserved for fathers can shape the distribution of parental leave, while childcare can reduce the practical constraints associated with returning to work.

2.4 Institutional heterogeneity, research gap, and hypotheses

While several different mechanisms were discussed above, they do not operate within identical institutional environments, as European countries differ considerably in the duration and design of maternity and parental leave, the extent to which leave is specifically reserved for fathers, and the availability of formal childcare. Consequently, similar family dynamics and patterns may lead to different labour-market outcomes depending on the broader policy context in which they take place.

Comparative research has long recognized this institutional heterogeneity, yet such family policies have frequently been approached as broader policy configurations or through a limited number of policy dimensions. For instance, Gornick et al. (1997) combined several indicators of parental leave and childcare into measures of public support for maternal employment, while Thévenon (2011) identified different family-policy models based on the combination of leave conditions, childcare provision and financial support. More recently, Hook and Paek (2020) analysed longitudinal evidence from 23 countries, and focused on two of the most commonly examined family-policy instruments: paid parental leave and early childhood education and care. They showed that their relationship with mothers' employment can also depend on the broader national context, and highlighted how broad measures of

parental leave may hide relevant differences in policy design, such as eligibility, benefit duration, and other characteristics of the entitlement.

At the same time, much of the more detailed evidence on how changes in leave design and duration influence mothers' employment comes from evaluations of specific national reforms, leaving a gap between highly detailed single-country studies and broader comparative approaches. The present study addresses this by examining developments across 27 EU countries over a 16-year period. At the same time, it considers distinct components of the care-policy environment rather than representing family support through a single overall measure. Specifically, it distinguishes maternity leave, paid parental leave available to mothers, leave reserved for fathers, and formal childcare participation, and examines their relationship with the motherhood employment gap, while also accounting for persistent differences between countries over time. Accordingly, the study is guided by the following research question: *how are paid maternity leave, paid parental leave available to mothers, father-specific paid leave, and formal childcare participation associated with the motherhood employment gap across EU countries over time?*

With regard to leave available to mothers, previous research points to a trade-off between employment protection and the consequences of prolonged labour-market absence. Comparative European evidence additionally indicates that the labour-market benefits associated with leave tend to weaken as its duration and generosity increase (Akgunduz & Plantenga, 2013; Lalive et al., 2014; Ruhm, 1998; Schönberg & Ludsteck, 2014). On this basis, the following hypotheses were formulated:

H1: Longer paid maternity leave is associated with a larger motherhood employment gap.

H2: Longer paid parental leave available to mothers is associated with a larger motherhood employment gap.

For fathers' leave, the preceding literature established how reserved entitlements can increase fathers' actual leave-taking. What's more, further causal evidence from Quebec shows that father-specific leave can also reduce the specialization of paid and unpaid work between parents beyond the leave period itself (Patnaik, 2019). Thus, if greater father involvement contributes to a more balanced allocation of care responsibilities, this should reduce the relative employment disadvantage experienced by mothers. Therefore:

H3: Greater paid leave reserved specifically for fathers is associated with a smaller motherhood employment gap.

Finally, the positive relationship between childcare access and maternal employment discussed beforehand is supported by additional quasi-experimental evidence. Bauernschuster and Schlotter (2015), using two policy changes in Germany, found that increased access to public childcare raises maternal employment, while comparative evidence similarly identifies childcare provision for young children as one of the most beneficial policies for mothers while remaining in paid work (Keck & Saraceno, 2013). Accordingly:

H4: Greater formal childcare participation is associated with a smaller motherhood employment gap.

3. METHODOLOGY

3.1 Research design and sample

The study adopts a quantitative longitudinal panel design to examine and analyse the relationship between family-policy arrangements and the motherhood employment gap across European Union countries. The dataset covers all 27 EU member states over the period 2010-

2025, resulting in a balanced panel of 432 country-year observations. In accordance, the country-year represents the main unit of analysis.

The longitudinal structure enables the analysis to move beyond static cross-country comparisons, as well as to examine how changes in family-policy conditions within countries are associated with changes in the motherhood employment gap over time. This becomes particularly relevant given the substantial institutional heterogeneity across EU countries and the scale at which maternity leave, parental leave, father-specific entitlements and childcare provision have evolved not only at different points, but to different extents as well during the period studied. At the same time, the multi-country design allows these developments to be examined within a common comparative framework. The 2010-2025 period was selected based on the availability of consistently comparable policy, employment and childcare indicators across the full set of EU countries (OECD, 2026).

3.2 Data sources and variables

The dataset combines policy and labour-market indicators from several harmonized European and international sources. Information on paid leave entitlements was primarily obtained from the OECD Family Database, particularly the PF2.5 indicator on trends in leave entitlements around childbirth and PF2.1 on the key characteristics of parental leave systems (OECD, 2026). Where historical observations were unavailable, the leave series were reconstructed using the MISSOC Comparative Tables (2026) and the annual reviews of the International Network on Leave Policies and Research (2026). National legislation and official government sources were also consulted where necessary to verify the classification, effective date, and design of individual policy reforms. To ensure temporal consistency, annual leave observations reflect the policy provisions in force in April of each year. The principal policy variables are paid maternity leave, paid parental leave available to mothers, and father-specific paid leave, all three expressed in weeks and the last one combining paid paternity leave and paid parental leave reserved exclusively for fathers. In addition, formal childcare participation, measured as the percentage of children under three participating in formal childcare, was introduced based on Eurostat EU-SILC data (Eurostat, 2026a), and captures participation in formal care rather than childcare capacity itself.

The dependent variable, the motherhood employment gap, was constructed from the Eurostat EU Labour Force Survey (EU-LFS) dataset (Eurostat, 2026b). It is calculated as the employment rate of women aged 25-49 without children minus the employment rate of women aged 25-49 whose youngest child is under six. Higher values consequently represent a larger employment disadvantage among mothers. Yet, in order to examine heterogeneity by family size, additional motherhood-gap measures were calculated separately for mothers with one child, two children, and three or more children, using the same Eurostat employment source and construction as the overall dependent variable.

Nevertheless, the models additionally account for changing macroeconomic conditions through the national unemployment rate (Eurostat, 2026d) and real GDP growth (Eurostat, 2026c).

3.3 Empirical strategy

The empirical analysis relies primarily on two-way fixed-effects (TWFE) panel regressions, which exploit within-country variation over time while accounting for time-invariant observed and unobserved country characteristics and for common developments affecting all countries in a given year (Duxbury, 2021). The baseline specification can be expressed as:

$$MEG_{it} = \beta_1 MAT_{it} + \beta_2 PAR_{it} + \beta_3 FAT_{it} + \beta_4 CHILD_{it} + \beta_5 UNEMP_{it} + \alpha_i + \lambda_t + \varepsilon_{it} \quad (1)$$

where:

- MEG_{it} is the motherhood employment gap in country (i) and year (t);
- MAT_{it} is paid maternity leave, in weeks;
- PAR_{it} is paid parental leave available to mothers, in weeks;
- FAT_{it} is father-specific paid leave, in weeks;
- $CHILD_{it}$ is formal childcare participation;
- $UNEMP_{it}$ is national unemployment rate;
- α_i is country fixed effects;
- λ_t is year fixed effects;
- ε_{it} is error term.

The estimated coefficients therefore indicate whether within-country changes in the respective policy dimensions are associated with changes in the motherhood employment gap, conditional on the other included independent variables. The main specification controls for the national unemployment rate, while real GDP growth is added in an extended specification to assess sensitivity to broader macroeconomic conditions. As TWFE models do not by themselves establish causal identification, the estimated coefficients are interpreted as conditional within-country associations rather than causal effects (Imai & Kim, 2021).

Standard errors are clustered at the country level using the cluster-robust variance estimator (CRV1). This allows the regression errors to exhibit heteroskedasticity and within-country correlation over time, rather than treating all country-year observations as independent (Arellano, 1987; Cameron & Miller, 2015). These estimates constitute the basis for evaluating the four hypotheses guiding the paper. Given the relatively limited number of country clusters (27), inference is additionally assessed using CRV3, a jackknife-based cluster-robust variance estimator designed to provide a more cautious assessment when conventional cluster-robust inference may be sensitive to a limited number of clusters (MacKinnon et al., 2023). Therefore, CRV3 is treated as a statistical sensitivity check.

Moreover, to observe and analyse whether the policy relationships vary with family size, separate TWFE regressions are estimated for 3 separate categories: mothers with one child, two children, and three or more children. These are complemented by a stacked specification containing interactions between the policy variables and family-size categories. Interaction models allow the relationship between an explanatory variable and the outcome to differ across groups (Brambor et al., 2006), while joint Wald tests are used to assess whether the policy coefficients differ significantly across family-size categories.

A series of additional specifications is used to assess the robustness and temporal pattern of the main estimates. One-year lagged models examine whether policy associations emerge with delay, while first-difference models relate year-to-year changes in the policy variables to year-to-year changes in the motherhood employment gap. Country-specific linear trends allow countries to follow distinct underlying trajectories, while leave-one-country-out estimations assess whether the results are disproportionately influenced by individual member states. Models excluding 2020-2021 examine sensitivity to the exceptional conditions associated with the COVID-19 period. Alternative specifications separating the components and relative share of father-specific leave are additionally used to evaluate the stability of the findings concerning fathers' entitlements.

Finally, supplementary policy-change and distributed-lag specifications distinguish policy expansions from reductions and examine associations in the reform year and subsequent years. Such specifications provide information on temporal adjustment surrounding policy changes (Schmidheiny & Siegloch, 2023). These analyses are treated as supporting evidence

on timing and adjustment rather than as a basis for causality. Dynamic specifications are similarly applied to father-specific leave and childcare. All primary and supplementary panel estimations were conducted in Python using the pyfixest package.

4. RESULTS

4.1 Descriptive patterns and policy variation

The descriptive statistics, summarized by Table 1, reveal substantial variation in both the family-policy indicators and the motherhood employment gap across the 432 country-year observations. Across the full sample, the motherhood employment gap averaged 12.71 percentage points with a standard deviation of 12.44, while its values ranged from -7.5 to 48.9 percentage points. The negative observations indicate country-years in which the employment rate of mothers with young children exceeded that of women without children. On average, the employment rate was 67.05% among mothers with a youngest child under six, compared with 79.76% among women without children.

Considerable heterogeneity was also observed in paid leave entitlements. Paid maternity leave averaged 21.22 weeks with a standard deviation of 10.65, ranging from 6 to 58.6 weeks, whereas paid parental leave available to mothers displayed considerably greater dispersion, with an average of 42.51 weeks and standard deviation of 39.96, its values ranging from 0 to 188 weeks. Father-specific paid leave remained substantially shorter on average, at 8.81 weeks with a standard deviation of 8.99, with country-year values ranging from 0 to 30.17 weeks. Formal childcare participation among children under three averaged 30.70% with a standard deviation of 18.72, ranging from 0.5% to 78.9%. Regarding the macroeconomic controls, the national unemployment rate averaged 8.19% with a standard deviation of 4.42, while real GDP growth averaged 2.17%, standard deviation of 3.52, across the observation period, with values ranging from 2.0% to 27.8% and from -10.9% to 24.6%, respectively.

Table 1. Descriptive statistics of the main study variables

Variable	N	Mean	SD	Min	25th percentile	Median	75th percentile	Max
Paid maternity leave (weeks)	432	21.22	10.65	6.00	16.00	18.00	24.00	58.60
Paid parental leave available to mothers (weeks)	432	42.51	39.96	0.00	17.33	32.00	51.90	188.00
Father-specific paid leave (weeks)	432	8.81	8.99	0.00	2.00	5.30	13.00	30.17
Employment rate of mothers (%)	432	67.05	11.77	33.90	60.05	69.50	75.93	85.80
Employment rate of women without children (%)	432	79.76	6.62	53.70	77.50	80.75	84.60	91.20
Motherhood employment gap (percentage points)	432	12.71	12.44	-7.50	5.05	10.20	17.05	48.90
Formal childcare participation (%)	432	30.70	18.72	0.50	15.98	27.05	45.72	78.90
Unemployment rate (%)	432	8.19	4.42	2.00	5.38	7.00	9.70	27.80
Real GDP growth (%)	432	2.17	3.52	-10.90	0.70	2.10	3.80	24.60

Source: Authors' own calculations.

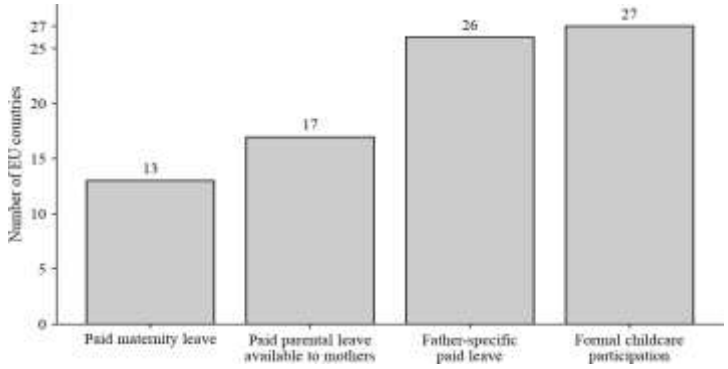


Figure 1. Number of EU countries exhibiting within-country variation in the principal policy indicators, 2010–2025

Source: Authors' own calculations.

Figure 1 illustrates the extent of within-country variation in the principal policy indicators over the period studied, which constitutes the variation exploited by the fixed-effects estimations. Maternity-leave duration changed in 13 of the 27 countries, while parental leave available to mothers changed in 17 countries. Father-specific leave varied over time in 26 countries, and formal childcare participation changed in all 27 countries. Thus, although the extent of longitudinal variation differs across policy dimensions, each of the principal explanatory variables exhibits within-country variation between 2010 and 2025.

4.2 Main fixed-effects results

Table 2 presents the two-way fixed-effects estimates for the overall motherhood employment gap across the three principal specifications. In the baseline model, presented by Model (1) and containing the four main policy dimensions, paid maternity leave is positively and statistically significantly associated with the motherhood employment gap (β=0.564, p=0.019), as is paid parental leave available to mothers (β=0.042, p=0.023). By contrast, neither father-specific paid leave (β=0.013, p=0.823) nor formal childcare participation (β=0.078, p=0.500) exhibits a statistically significant association. The same general pattern is maintained after accounting for national unemployment, which constitutes the preferred specification in Model (2). Paid maternity leave remains positively and statistically significantly associated with the motherhood employment gap (β=0.522, p=0.011). Holding the other included variables constant, an additional week of paid maternity leave is therefore associated with an approximately 0.52 percentage-point larger motherhood employment gap. Paid parental leave available to mothers is similarly positive and statistically significant (β=0.041, p=0.014), corresponding to an approximately 0.04 percentage-point increase in the gap per additional week of entitlement. In contrast, father-specific paid leave (β=0.001, p=0.982) and formal childcare participation (β=0.069, p=0.557) remain statistically insignificant. The unemployment rate itself is also not statistically significant (β=-0.246, p=0.137).

Table 2. Two-way fixed-effects estimates of the motherhood employment gap

Variable / model characteristic	(1) Baseline TWFE	(2) TWFE + unemployment	(3) TWFE + unemployment + GDP growth
Paid maternity leave	0.564 (0.226), p=.019	0.522 (0.192), p=.011	0.495 (0.180), p=.011
Paid parental leave available to mothers	0.042 (0.017), p=.023	0.041 (0.016), p=.014	0.040 (0.014), p=.009
Father-specific paid leave	0.013 (0.056), p=.823	0.001 (0.059), p=.982	0.011 (0.064), p=.869
Formal childcare participation	0.078 (0.115), p=.500	0.069 (0.117), p=.557	0.061 (0.111), p=.590
Unemployment rate	Not included	-0.246 (0.160), p=.137	-0.195 (0.171), p=.265
Real GDP growth	Not included	Not included	0.252 (0.165), p=.139
Country fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Standard-error estimator	CRV1, country-clustered	CRV1, country-clustered	CRV1, country-clustered
Observations	432	432	432
R^2	0.868	0.870	0.872
Within R^2	0.059	0.070	0.083

Notes: The dependent variable is the motherhood employment gap, expressed in percentage points. Coefficient estimates are reported first, followed by country-clustered CRV1 standard errors in parentheses and exact p-values. All specifications include country and year fixed effects.

Figure 2 provides a visual representation of the four policy coefficients from the previously discussed preferred specification. The confidence intervals for maternity leave and parental leave available to mothers remain entirely above zero, whereas those for father-specific leave and formal childcare participation cross zero. The figure therefore visually reflects and demonstrates the distinction between the statistically significant positive associations identified for the two mother-specific leave measures and the absence of statistically significant overall associations for father-specific leave and childcare.

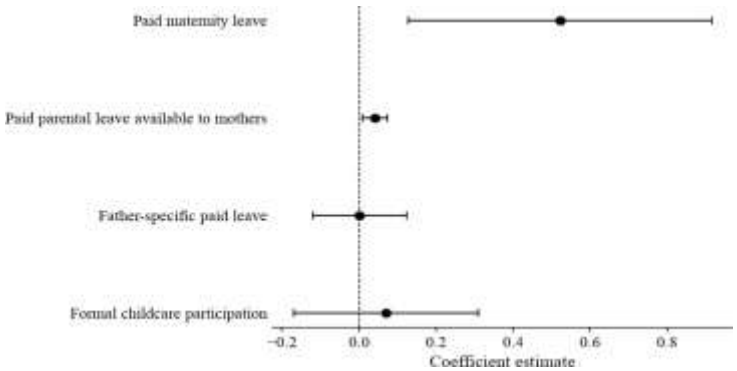


Figure 2. Coefficient estimates from the preferred two-way fixed-effects specification

Notes: Points represent coefficient estimates and horizontal lines represent 95% confidence intervals. The model includes country and year fixed effects and controls for the national unemployment rate. Standard errors are clustered at the country level using CRV1. Leave entitlements are measured in weeks, while formal childcare participation is measured in percentage points; coefficient magnitudes should therefore not be directly compared across differently scaled policy variables.

Source: Authors' own calculations.

Nevertheless, Model (3) from Table 2 shows real GDP growth as an additional macroeconomic control, leaving the central pattern largely unchanged. Paid maternity leave (β=0.495, p=0.011) and paid parental leave available to mothers (β=0.040, p=0.009) remain positively and statistically significantly associated with the motherhood employment gap, whereas father-specific paid leave (β=0.011, p=0.869) and formal childcare participation (β=0.061, p=0.590) remain statistically insignificant. Neither the unemployment rate (β=-0.195, p=0.265) nor real GDP growth (β=0.252, p=0.139) is statistically significant in this specification.

Taken together, the primary TWFE estimates provide support for H1 and H2, as longer paid maternity leave and longer paid parental leave available to mothers are associated with a larger motherhood employment gap. H3 is not supported, since father-specific paid leave does not exhibit the hypothesized statistically significant negative association. Likewise, H4 is not supported in the overall sample, as formal childcare participation shows no statistically significant negative association with the motherhood employment gap.

4.3 Differences by family size

To examine whether the estimated policy relationships vary according to family size, the preferred TWFE specification was re-estimated separately for mothers with one child, two children, and three or more children. Each specification includes the four principal policy variables, national unemployment, country fixed effects, year fixed effects, and CRV1 standard errors clustered by country. Table 3 summarizes the resulting estimates.

The results show that paid maternity leave remains positively associated with the motherhood employment gap among mothers with one child (β=0.499, p=0.008) and two children (β=0.625, p=0.001). The coefficient is also positive among mothers with three or more children (β=0.517), although it does not reach the conventional 5% significance threshold (p=0.098). Paid parental leave available to mothers follows a more differentiated pattern. Its association with the motherhood employment gap is positive and statistically significant among mothers with one child (β=0.048, p=0.002) and two children (β=0.052, p=0.010), whereas the coefficient becomes considerably smaller and statistically insignificant among mothers with three or more children (β=0.012, p=0.584). Father-specific paid leave does not exhibit a statistically significant association in any family-size category, with coefficients of β=0.011 (p=0.865), β=-0.048 (p=0.395), and β=0.021 (p=0.801) for mothers with one, two, and three or more children, respectively. Formal childcare participation is likewise statistically insignificant within each group. Its coefficient is positive for mothers with one child (β=0.110, p=0.299) and two children (β=0.123, p=0.303), but negative for mothers with three or more children (β=-0.056, p=0.690).

Although the separate family-size regressions indicate different coefficient patterns across the three groups, statistical significance in one group and non-significance in another does not by itself establish that the coefficients differ significantly. A stacked interaction specification was therefore estimated to directly test whether the policy associations vary across family-size categories. Additionally, Joint Wald tests indicated statistically significant heterogeneity for paid parental leave available to mothers (p<0.001) and formal childcare participation (p=0.013). By contrast, the corresponding differences are not statistically significant for maternity leave (p=0.171) or father-specific paid leave (p=0.161). According to these results, the strongest difference concerns paid parental leave available to mothers. Using mothers with two children as the reference category, the parental-leave association is significantly weaker among mothers with three or more children ($\beta_{interaction}$=-0.039, p<0.001), whereas the

difference between mothers with one and two children is not statistically significant ($\beta_{interaction}$=-0.005, p=0.582).

Table 3. Family-size-specific two-way fixed-effects estimates of the motherhood employment gap

Variable / model characteristic	(1) Mothers with one child	(2) Mothers with two children	(3) Mothers with three or more children
Paid maternity leave	0.499 (0.173), p=.008	0.625 (0.163), p=.001	0.517 (0.302), p=.098
Paid parental leave available to mothers	0.048 (0.014), p=.002	0.052 (0.019), p=.010	0.012 (0.022), p=.584
Father-specific paid leave	0.011 (0.065), p=.865	-0.048 (0.056), p=.395	0.021 (0.084), p=.801
Formal childcare participation	0.110 (0.104), p=.299	0.124 (0.118), p=.303	-0.056 (0.138), p=.690
Unemployment rate	-0.230 (0.150), p=.137	-0.169 (0.144), p=.252	-0.256 (0.222), p=.260
Country fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Standard-error estimator	CRV1, country-clustered	CRV1, country-clustered	CRV1, country-clustered
Observations	432	432	427
R^2	0.858	0.868	0.859
Within R^2	0.068	0.087	0.041

Notes: The dependent variable in each model is the motherhood employment gap calculated for the corresponding family-size category relative to women without children. Coefficient estimates are reported first, followed by country-clustered CRV1 standard errors in parentheses and exact p-values. The model for mothers with three or more children contains 427 observations because the corresponding employment outcome is unavailable for five country-year observations.

Source: Authors' own calculations

A similar pattern emerges for formal childcare participation. The childcare association for mothers with three or more children is significantly more negative than that observed for mothers with two children ($\beta_{interaction}$=-0.172, p=0.013), while the difference between mothers with one and two children is not statistically significant ($\beta_{interaction}$=-0.021, p=0.677).

Figure 3 visually summarizes the family-size interaction results by presenting the estimated differences in policy coefficients relative to mothers with two children, constituting the reference category. The figure confirms that the most impactful differences concern paid parental leave available to mothers and formal childcare participation, particularly for mothers with three or more children, whereas the corresponding contrasts for maternity leave and father-specific paid leave remain statistically indistinguishable across family-size categories.

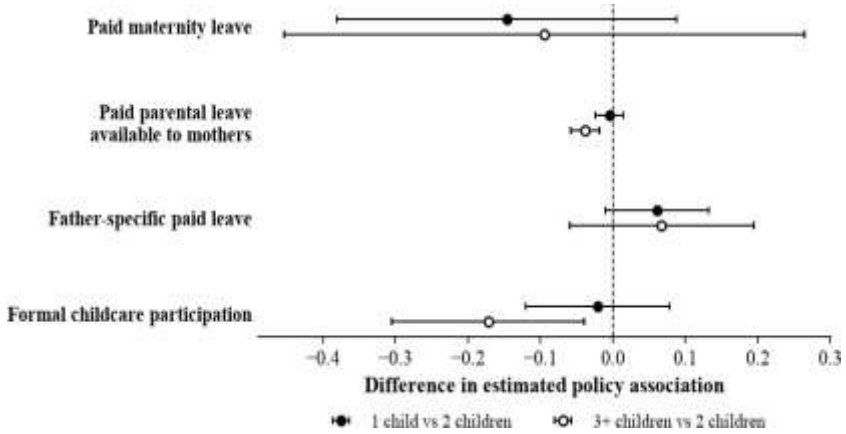


Figure 3. Family-size interaction effects relative to mothers with two children

Notes: Points represent interaction coefficients from the stacked family-size specification, with mothers with two children serving as the reference category. Horizontal lines indicate 95% confidence intervals. Negative values indicate a smaller estimated policy association relative to mothers with two children, whereas positive values indicate a larger association. Confidence intervals crossing zero indicate that the corresponding difference is not statistically significant. Since the policy variables are measured in different units, coefficient magnitudes should not be compared directly across policy dimensions.

Source: Authors' own calculations

Overall, the family-size analysis indicates that the relationship between family-policy conditions and the motherhood employment gap is not uniform across family structures, with statistically significant heterogeneity identified specifically for parental leave available to mothers and formal childcare participation. These findings provide the principal evidence addressing the family-size dimension of the research question.

4.4 Robustness and sensitivity analyses

Table 4 summarizes the principal robustness checks assessing the sensitivity of the main TWFE results to different modelling assumptions. The one-year lagged specification preserves the positive and statistically significant associations for both paid maternity leave (β=0.379, p=0.015) and paid parental leave available to mothers (β=0.061, p=0.019), while father-specific leave and childcare remain statistically insignificant.

The results become less precise under more demanding specifications. When country-specific linear trends are included to account for the possibility that countries follow different underlying long-term trajectories in maternal employment, the maternity-leave coefficient remains positive but falls below conventional 5% statistical significance (β=0.405, p=0.073), whereas the parental-leave coefficient remains positive and significant (β=0.030, p=0.002). In the first-difference specification, which relates year-to-year policy changes directly to year-to-year changes in the motherhood employment gap, maternity leave remains positive but is significant only at the 10% level (β=0.443, p=0.096), while parental leave is no longer statistically significant (β=-0.013, p=0.417).

Excluding the COVID-19 years (2020 and 2021) similarly leaves the maternity-leave association positive and significant (β=0.531, p=0.005), whereas the parental-leave coefficient remains positive but becomes less statistically significant (β=0.050, p=0.095). Father-specific leave and childcare remain similarly statistically insignificant.

The leave-one-country-out analysis further indicates that the positive maternity- and parental-leave coefficients are not generally driven by a single country, although their statistical significance becomes weaker when selected countries are excluded. In particular, maternity-leave significance weakens when Estonia, Finland, or Greece are omitted, while parental-

leave significance becomes less precise when Czechia, Estonia, Hungary, or Slovakia are excluded.

Table 4. Selected robustness and sensitivity analyses

Specification	Paid maternity leave	Paid parental leave available to mothers	Father-specific paid leave	Formal childcare participation	N
Preferred TWFE,	0.522 (0.192),	0.041 (0.016),	0.001 (0.059),	0.069 (0.117),	432
CRV1	p=.011	p=.014	p=.982	p=.557	
One-year lag,	0.379 (0.146),	0.061 (0.024),	0.039 (0.058),	0.069 (0.115),	405
CRV1	p=.015	p=.019	p=.506	p=.553	
Country-specific	0.405 (0.217),	0.030 (0.008),	0.011 (0.067),	-0.035 (0.040),	432
trends	p=.073	p=.002	p=.868	p=.392	
First differences	0.443 (0.257),	-0.013 (0.016),	-0.014 (0.053),	0.045 (0.031),	405
	p=.096	p=.417	p=.793	p=.157	
Excluding 2020–	0.531 (0.172),	0.050 (0.029),	0.007 (0.073),	0.083 (0.123),	378
2021	p=.005	p=.095	p=.921	p=.507	
Preferred TWFE,	0.522 (0.268),	0.041 (0.026),	0.001 (0.073),	0.069 (0.132),	432
CRV3	p=.062	p=.126	p=.986	p=.603	

Notes: Coefficient estimates are reported first, followed by standard errors in parentheses and exact p-values. The lagged specification uses one-year-lagged policy variables. The first-difference specification relates year-to-year changes in policy variables to year-to-year changes in the motherhood employment gap. All specifications use country-clustered standard errors; the final row applies CRV3 rather than CRV1.

Source: Authors' own calculations.

Finally, the CRV3 small-cluster correction leaves the estimated coefficients of the preferred model unchanged but increases their standard errors. Under CRV3, maternity leave remains positive (β=0.522) but has p=0.062, while parental leave remains positive (β=0.041) with p=0.126. Father-specific leave and childcare remain statistically insignificant. These results indicate that the direction and dimension of the primary associations are stable, but the statistical precision of H1 and H2 is sensitive to the more conservative small-cluster inference procedure.

4.5 Policy changes and temporal dynamics

Supplementary policy-change models were estimated to examine whether expansions in maternity and parental leave were associated with real-time or delayed changes in the motherhood employment gap. Table 5 presents the reform-year, one-year lag, two-year lag and cumulative estimates.

For maternity-leave expansions, the reform-year coefficient is positive and statistically significant (β=0.720, p=0.002), followed by a negative first-year lag (β=-0.423, p=0.001) and a statistically insignificant second-year lag (β=0.137, p=0.124). The cumulative association over the reform year and the following two years remains positive and statistically significant (β=0.434, p=0.013).

Parental-leave expansions display a different temporal pattern. The reform-year coefficient is negative and statistically significant (β=-0.026, p=0.016), followed by a positive first-year lag (β=0.038, p<0.001), while the second-year lag is statistically insignificant (β=0.006, p=0.507). The cumulative three-year association is small and statistically insignificant (β=0.017, p=0.168).

No statistically significant dynamic associations were identified for father-specific paid leave or formal childcare participation across the reform year and subsequent lags. Moreover, only 3 of the 27 parental-leave reforms identified during the study period met the strict criterion of being sufficiently isolated from other simultaneous leave-policy changes. The dynamic specifications are therefore treated as supplementary evidence on policy timing rather than as estimates of individual reform effects.

Table 5. Dynamic associations following maternity- and parental-leave expansions

Policy expansion	Reform year	One-year lag	Two-year lag	Three-year cumulative association
Paid maternity leave	0.720, p=.002	-0.423, p=.001	0.137, p=.124	0.434, p=.013
Paid parental leave available to mothers	-0.026, p=.016	0.038, p<.001	0.006, p=.507	0.017, p=.168

Notes: Coefficients refer to changes in the motherhood employment gap associated with policy expansions in the reform year and subsequent years. The cumulative estimate represents the sum of the reform-year and two lagged coefficients. These specifications use first-differenced outcomes, year fixed effects, and CRV1 standard errors clustered by country.

Source: Authors' own calculations.

5. DISCUSSION

5.1 Mother-specific leave and the motherhood employment gap

The results reveal a clear distinction between mother-specific leave and the other dimensions of the care-policy environment. Both paid maternity leave and paid parental leave available to mothers are positively associated with the motherhood employment gap, supporting H1 and H2. Rather than suggesting that paid leave or its extension is inherently detrimental to mothers' employment, this pattern points to the trade-off embedded in leave policies. Their protective function helps mothers remain attached to employment during childbirth and early care, yet longer entitlements can simultaneously extend the period spent outside active employment. In this sense, the findings suggest that once paid leave is already institutionally established, its duration becomes particularly relevant for mothers' employment position during children's early years.

This interpretation is consistent with earlier evidence showing that leave duration can influence the timing of mothers' return to work (Lalive et al., 2014; Schönberg & Ludsteck, 2014). However, the present study adds a broader and comparative perspective to these findings. Instead of focusing on one national reform, it shows that across the EU-27, within-country increases in both maternity leave and parental leave available to mothers are associated with a larger employment gap between mothers of young children and women without children. This is particularly important given the construction of the dependent variable: a larger gap does not necessarily imply that mothers permanently leave the labour market, but may reflect a later return during the period in which their youngest child is under

six. The results therefore point more strongly toward prolonged labour-market absence than toward permanent withdrawal.

A second contribution lies in separating maternity leave from parental leave available to mothers. Although these are institutionally different forms of leave, the same positive association was observed across two distinct forms of leave available specifically to mothers, both extending paid time away from employment. This adds an important dimension to the interpretation of leave policies: beyond their mere existence, their duration and gendered allocation also matter when evaluating motherhood-related employment inequalities. Nevertheless, the lower statistical precision under CRV3 suggests that the direction of these associations is more stable than their significance, supporting a cautious interpretation of the findings as comparative patterns rather than uniform causal effects.

5.2 Father-specific leave, childcare and effective policy support

When it comes to the care-policy dimensions of father-specific paid leave and formal childcare participation, different patterns emerged: neither was significantly associated with the overall motherhood employment gap, leaving H3 and H4 unsupported. These findings are relevant because both policies are generally expected to facilitate mothers' employment by redistributing care either within the household or thanks to formal services. The results, however, suggest that increasing the amount of father-specific leave or the level of formal childcare participation does not automatically translate into a smaller employment disadvantage for mothers across the 27 EU countries.

In the case of fathers' leave, the distinction between policy entitlement and actual behavioural change appears especially important. Previous evidence has shown that reserved leave can increase fathers' take-up and can contribute to a more equal division of care (Duvander & Johansson, 2012; Patnaik, 2019). Yet, further evidence suggests that such effects are not universal. The Swedish "Daddy-Month" reform, for example, substantially increased fathers' leave-taking, but without producing significant longer-term changes in household specialization or gender gaps in employment and wages (Ekberg et al., 2013). The absence of an overall association in the present study therefore adds a comparative perspective to the existing mixed evidence: across the EU-27, a greater formal entitlement reserved for fathers alone did not appear sufficient to systematically narrow the motherhood employment gap. Its impact and long-term consequences may depend more strongly on whether fathers actually use the leave and whether this involvement continues beyond the leave period.

A similar distinction emerges for childcare. While targeted reforms have demonstrated that expanded childcare can increase maternal employment, including the Luxembourg evidence (Bousselin, 2022), participation rates alone might not reflect entirely how childcare support helps working parents. Literature discusses several constraining aspects, such as opening hours, location or the organization of available services, even in relatively developed childcare systems (McLean et al., 2017). Nonetheless, recent research covering the EU demonstrates that increases in childcare provision and participation are expected to generate different employment responses across countries depending on existing childcare systems and labour-market conditions (Narazani et al., 2025). Thus, the present findings reinforce this heterogeneity: higher formal childcare participation does not correspond to a uniformly smaller motherhood employment gap across the EU. So, when considering the father-specific leave result too, this suggests that policies intended to redistribute care depend not only on their formal scale, but also on how effectively they can be used within different national and household contexts.

5.3 Family size and differentiated policy relationships

The family-size analysis adds another layer to these findings, showing that the relationship between family policies and the motherhood employment gap is not entirely uniform across different family sizes and structures. The clearest differences emerged for two care-policy dimensions: paid parental leave available to mothers and formal childcare participation. While the positive parental-leave association remained visible among mothers with one and two children, it became substantially weaker among mothers with three or more children. On the other hand, formal childcare participation followed a different pattern, with its association becoming significantly more negative for mothers with three or more children compared with those having two children. Regarding maternity leave or father-specific leave, no statistically significant differences across family-size groups were found.

These differences are aligned with previous scientific evidence showing that family size itself changes the constraints shaping mothers' employment. Baranowska-Rataj and Matysiak (2016) used comparative European data to demonstrate that additional children can substantially reduce mothers' employment, but highlighted also that the magnitude of this relationship varies depending on the institutional conditions supporting the combination of work and care. Similarly, Sieppi and Pehkonen (2019) showed that employment disadvantages associated with having children differ according to the number of children in a household. The current study takes this discussion further by suggesting that family size may influence not only the motherhood employment disadvantage itself, but also how specific family-policy dimensions relate to that disadvantage.

This is particularly visible for mothers with three or more children. Their weaker association with parental leave can indicate that, as care responsibilities increase, additional mother-specific leave plays a less prominent role in shaping the employment gap than it does for smaller families. At the same time, the relatively more negative childcare relationship suggests that external care becomes more relevant as care demands extend across several children. Nevertheless, this result should remain cautiously interpreted, as childcare was not individually significant within the three-or-more-child group; what the interaction analysis establishes is that its relationship differs significantly from that observed among mothers with two children. Overall, the findings show that aggregate policy relationships can hide relevant differences across family structures, reinforcing the importance of considering family size when evaluating how family policies relate to mothers' employment.

5.4 Policy timing, adjustment and interpretation

Several additional analyses helped in providing a more nuanced perspective on the stability of the main findings. The positive maternity-leave association remains visible across the different specifications, although its statistical significance weakens under country-specific trends, first differences and the more conservative CRV3 inference. The parental-leave relationship appears more sensitive, remaining positive in several robustness models but becoming statistically weaker or disappearing under others. This does not necessarily contradict the primary findings, but indicates that their direction is more stable than their statistical precision. Particularly given the limited number of country clusters, the CRV3 results reinforce the importance of avoiding overly strong conclusions based exclusively on conventional significance thresholds (MacKinnon et al., 2023). The evidence therefore supports H1 and H2 primarily through the preferred TWFE specification, while the robustness analyses define the limits within which these relationships should be interpreted.

The dynamic results further emphasize that changes in family policy do not correspond to an immediate and uniform adjustment in the dependent variable, the motherhood employment gap. Maternity-leave expansions display different associations in the reform year and

subsequent years, although their cumulative three-year relationship remains positive. For parental leave, the short-term coefficients similarly change direction, but no significant cumulative relationship remains over the three-year period. Such variation across time is supported by research showing that mothers' employment responses to parental-leave reforms can differ substantially between the short and medium term (Kluve & Schmitz, 2018). These dynamics suggest that the average relationships captured by the TWFE models may unfold differently over time, around individual policy reforms.

Finally, the frequent overlap between policy changes adds an important institutional dimension to this interpretation. Only 3 of the 27 parental-leave reforms identified could be considered sufficiently isolated from other simultaneous leave reforms. This result illustrates how family policies often evolve together rather than as independent interventions. Consequently, attributing short-term changes in mothers' employment to a single reform becomes particularly difficult in a complex comparative European setting. By combining average within-country relationships with robustness and temporal analyses, the present study therefore shows both sides of the evidence: mother-specific leave displays a broader positive relationship with the motherhood employment gap, while the strength and timing of that relationship remain dependent on specification, adjustment period and the surrounding policy environment. Once again, this reinforces the interpretation of the findings as comparative institutional patterns rather than isolated causal policy effects.

5.5 Implications, limitations and further research

The findings provide several implications for the way family policies are designed and evaluated. Most importantly, they highlight that the existence or expansion of such policies alone does not necessarily determine their relationship with mothers' employment. In the case of mother-specific leave, duration and gendered allocation appear particularly relevant, while father-specific leave and childcare seem to depend more strongly on their effective use and broader institutional context. From a policy perspective, this emphasizes the need to consider family-policy instruments as interconnected elements rather than isolated entitlements. Supporting mothers' employment may therefore require balancing adequate periods of protected leave with conditions facilitating their return to work, fathers' actual involvement in care, and childcare services that are practically accessible to all families.

Several limitations should nevertheless be acknowledged. First, the country-level design captures broad institutional relationships rather than individual mothers' post-birth experiences regarding employment decisions, preventing conclusions about how particular women respond to specific policies. Similarly, father-specific leave is measured through formal entitlement rather than actual take-up, while the childcare indicator reflects participation rather than accessibility, affordability, or quality. The observational TWFE framework further identifies within-country associations rather than causal effects, and inference remains sensitive to the relatively limited number of country clusters. Finally, given the frequent overlap between family-policy reforms, isolating the consequences of individual policy changes was constrained.

Given these limitations, future research could combine comparative policy indicators with individual-level longitudinal data on leave uptake and return-to-work timing. Greater attention could also be given to policy characteristics beyond duration, including replacement rates, leave flexibility and job protection, as well as more detailed dimensions of childcare. In addition, the family-size findings suggest that policy relationships should be examined across different household structures rather than only for mothers as one uniform group. Finally, in-depth analyses of isolated reforms and interactions between leave, fathers' involvement and

childcare could provide stronger evidence on how different policy combinations shape mothers' employment trajectories over time.

6. CONCLUSIONS

This study examined how different dimensions of family policy relate to the motherhood employment gap across the 27 EU member states between 2010 and 2025. The findings show that these policy dimensions do not operate uniformly. Longer paid maternity leave and paid parental leave available to mothers are associated with a larger motherhood employment gap, supporting H1 and H2, while father-specific paid leave and formal childcare participation do not show the expected overall negative relationships. At the same time, the family-size analysis reveals that these associations are not identical across households, particularly in the case of parental leave and childcare.

The results therefore highlight a significant distinction between the existence of family support and the way it is designed, accessed, and used. Mother-specific leave can protect mothers' employment attachment while also extending their absence from active employment, whereas father-specific entitlements and childcare appear more dependent on accessibility, actual take-up, and the broader institutional environment. By separating these policy dimensions within one comparative EU framework, the study shows that understanding the motherhood employment gap requires moving beyond broad measures of family support and considering the duration, allocation and practical functioning of individual policies.

Thus, findings suggest that more extensive family-policy provision does not automatically translate into smaller employment inequalities between mothers and women without children.

Taken together, the positive associations identified for mother-specific leave, the absence of comparable overall relationships for father-specific leave and childcare, and the heterogeneity observed across family sizes suggest that family-policy support cannot be evaluated through its extent alone. What appears equally important is how that support is distributed between parents, how it is used in practice, and how it interacts with different care and employment needs. While the results should be interpreted only as comparative within-country associations, they still have the power to reinforce the need to evaluate family policies not only by how much support they provide, but by how effectively that support contributes to combining care and employment.

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