World Development 202 (2026) 107349

Contents lists available at ScienceDirect

World Development

journal homepage: www.elsevier.com/locate/worlddev

Development Review

Hidden work-family challenges in the low- and middle-income countries: a systematic review of causes, consequences, and policy responses

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ARTICLE INFO

JEL codes:
D13
I3
J1
J22
J38

Keywords:
Gender gap
Motherhood penalty
Time poverty
Child development
Family policies

ABSTRACT

Work–family challenges are a major barrier to gender equality and contribute to the intergenerational reproduction of inequalities by undermining child development from the earliest stages of life. In low- and middle-income countries (LMICs), however, these tensions remain poorly captured by prevailing metrics, data, and frameworks. Drawing on a systematic review of qualitative and quantitative studies published between 2000 and 2024, this article shows that motherhood penalties in LMICs are expressed through poverty-driven sectoral shifts into lower-quality jobs, heightened time poverty and what we term a work-family trade-off, where maternal employment in precarious conditions is associated with worse child health and developmental outcomes. We synthesize evidence on how micro-, meso- and macro-level factors jointly shape these patterns and highlight a "flexibility trap": informal and agricultural jobs that appear compatible with caregiving in theory often deepen work-family tensions in practice. We then review empirical evidence on three family policy domains (i.e., paid leave, cash transfers, and early childhood education and care (ECEC)) showing that ECEC most consistently improves both women's employment quality and child outcomes, while cash transfers primarily ease poverty-driven labor responses and paid leave yield mixed effects in high-informality settings. Building on these findings, we develop a conceptual framework that locates "poverty-driven work-family challenges" at the center of LMIC experiences. The review concludes with design principles for family policies and a research agenda that better captures hidden work-family tensions in LMICs.

1. Introduction

A growing body of work recognizes that addressing work–family challenges is key to advancing global social and gender equality (e.g., Berniell et al. 2023). The incompatibility of paid employment with childcare responsibilities creates substantial barriers to women's participation in paid employment that could increase their bargaining power within households and expand their networks outside the home, while compromises in childcare associated with maternal employment may have long-term effects on children's life trajectories. This agenda is reflected in the Sustainable Development Goals: Target 5.4 calls for family policies that could promote women's economic empowerment, while Target 4.2 advocates expanding early childhood education and care (ECEC) to reduce social disparities and enhance human capabilities from early childhood. Yet cross-country evidence shows that the fraction of gender inequality attributable to parenthood rises systematically with countries' level of economic development (Kleven et al. 2024). Historically, conventional theories of the long-term development of women's labor-force participation have emphasized that tensions between childcare responsibilities and paid work are most visible in advanced economies where formal employment is common (Boserup 1970; Goldin 1995). By contrast, extensive informal employment in low- and middle-income countries (LMICs) is often assumed to enable women to balance paid work and childcare because of its spatial and temporal flexibility.

However, work–family challenges in LMICs may not be rare, but rather "hidden," under-recognized by prevailing metrics, data, and frameworks. Much employment in LMICs is off the books, eluding administrative records and many surveys. As a result, studies that systematically trace earnings trajectories after childbirth in LMICs are practically nonexistent, and the impact of children's presence is captured only indirectly, often through labor force participation. This data gap understates penalties that operate through earnings and earning capacity, including shifts into lower-paid or informal jobs, loss of formal attachment, and sectoral or occupational downgrades. Moreover, standard narratives about work–family challenges understate LMIC-specific mechanisms such as widespread poverty, extensive informal

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https://doi.org/10.1016/j.worlddev.2026.107349
Accepted 11 February 2026
Available online 18 February 2026

employment, and costly or scarcely available childcare. Consequently, empirical studies often rely on hypotheses and mechanisms developed for high-income countries. This limited understanding of work–family challenges in LMICs context also hinders the interpretation of the contrasting evidence on the impact of family policies in LMICs, which has begun to receive increasing scholarly attention (e.g., Uribe et al. 2019; Vu and Glewwe 2022).

This literature review attempts to bring work–family challenges in LMICs to the surface by posing the overarching questions: *How are work–family challenges in LMICs shaped by distinct labor market institutions and socio-economic contexts? What consequences do they have, and under what conditions can family policies alleviate them?* We aim to (a) provide an overview of the extent to which work–family challenges affect mothers and children, (b) identify the mechanisms through which mothers deal with work–family challenges, and (c) explain the contrasting evidence on family policy outcomes in this literature review. To achieve this, we adopt a dual approach that combines a systematic review with a structured narrative synthesis. The structured narrative synthesis is particularly useful for organizing the fragmented literature in development economics on work–family challenges, grouping findings by thematic focus, thereby enabling us to tease out mechanisms. The systematic review component complements this by offering an overview of how widespread work–family challenges are, both in general and within specific local contexts, and assessing the effectiveness of family policies in mitigating these challenges.

We use Becker's theory of the family and human capital as a conceptual starting point for organizing these mechanisms and interpreting the LMIC evidence about how work-family challenges emerge and how family policies shape both women's labor market outcomes and child outcomes (Becker 1993; 1981). In this framework, even small initial gender differences in wages, caregiving costs, biological roles (e.g., childbearing), or discrimination can generate a self-reinforcing sexual division of labor, with men specializing in paid work and women in unpaid care. Anticipated career interruptions due to motherhood lower women's expected returns to market-oriented human capital, pushing investments toward roles compatible with caregiving. Because children's human capital is produced using both parental time and material resources, work-family challenges affect not only women's labor supply but also the quantity and quality of early-life investments in children.

Within this framework, family policies shift the relative returns to market work versus home production. Higher net returns to market work encourage substitution of time away from home production, whereas higher household income can generate income effects that reduce total labor supply by allowing families to purchase more leisure or caregiving time. These forces help to rationalize heterogeneous responses to childbirth and policy: among better-off households, income effects may support withdrawal from paid work, while in poorer households binding income constraints limit this option, a pattern that may fit less well in LMICs where poverty is widespread. At the same time, Becker's unitary model abstracts from explicit bargaining and from employers' anticipatory behavior, limiting its ability to fully capture how policies that change entitlements, earnings, or job security shift women's bargaining power and shape the magnitude and distribution of motherhood penalties and child investments. Furthermore, it also treats caregiving primarily as a private, preference-driven household input, thereby downplaying its public-good character and the wider social costs of care deficits that systematic review highlights.

The LMIC literature we review both resonates with and departs from these Beckerian predictions. A central contribution of the review is to show that impacts are highly heterogeneous across contexts, policy designs, and subgroups, and to clarify the scope conditions under which family policies are most likely to improve women's labor market outcomes and child outcomes. In some settings, childbirth is associated with reduced paid work and greater home specialization, broadly consistent with efficient specialization in households. In many others, particularly among poorer households and in informal labor markets, maternal labor supply increases after childbirth, reflecting poverty-driven necessity rather than comparative advantage, and often coinciding with heightened time poverty and low-quality employment. Family policies similarly display heterogeneous effects, facilitating entry or retention in protected formal jobs for some mothers while coinciding with shifts into informal or precarious work for others, and interacting with strong normative and legal constraints around gender roles, mobility, childcare and formal employment. We therefore treat Becker's model as a useful analytical baseline but argue that explaining the observed diversity of work-family trade-offs, motherhood penalties and child outcomes in LMICs requires a more contextually grounded conceptual framework, which we develop after presenting the systematic evidence. Our framework not only clarifies why work-family tensions in LMICs are often hidden by standard indicators but also provides a lens for interpreting heterogeneous policy findings and for designing family policies that can simultaneously advance gender equality and child well-being.

This article makes four key contributions. First, it provides, to our knowledge, the most comprehensive synthesis to date of empirical evidence on work-family challenges in LMICs. We document how motherhood penalties in these contexts are frequently hidden in sectoral downgrades, informality, and time poverty rather than in outright labor-force exit, and how these dynamics feed into child health and development. Second, we introduce the concept of "poverty-driven work-family challenges" and identify a "flexibility trap": informal and agricultural jobs that appear compatible with caregiving in theory often deepen work-family tensions in practice because of long hours, low pay, precarious work conditions and the lack of basic infrastructure. Third, we synthesize evidence on three core family policy domains and show that their effects on women's labor market outcomes and child well-being are highly heterogeneous across contexts, with ECEC most consistently improving both sets of outcomes, cash transfers primarily easing poverty-driven employment responses, and paid leave producing mixed effects under high informality and limited enforcement. This synthesis provides a guide to understanding contrasting findings of the impact of family policies in LMICs. Fourth, building on these findings and on Becker's theory of family, we develop a conceptual framework tailored to LMICs that specifies the micro-, meso-, and macro-level moderators which jointly shape work-family challenges and condition the impact of family policies.

The remainder of the article is organized as follows: Section 2 details the systematic review methodology. Section 3 examines how distinctive labor institutions and socioeconomic contexts in LMICs generate work-family challenges. Section 4 analyzes the consequences of these challenges, documenting both hidden motherhood penalties in women's employment trajectories and the work-family trade-off in child health and development. Section 5 assesses whether and under which conditions three main family policies, namely family leave, cash transfer, and ECEC, can alleviate work-family tensions and thus improve maternal and child outcomes. Section 6 introduces our conceptual framework for understanding work-family challenges in LMICs. Section 7 presents the knowledge gaps and suggests directions for future research, and Section 8 provides policy implications and concluding remarks.

2. Methodology

Our systematic review follows the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines and is prospectively registered with the Open Science Framework (OSF) to ensure transparency and replicability (Kayaoglu and Son 2025). In line with the aims of our review, we developed three sets of query strings aimed at identifying studies on (1) motherhood/child penalty, (2) the nexus between maternal employment and child outcomes as well as (3) policy-related research situated in LMIC contexts. We synthesize the results of the first two streams to characterize work–family challenges in LMICs, followed by a systematic review of studies on family policies to assess whether these policies mitigate the identified challenges or

generate unintended consequences. Literature research was conducted based on a pre-defined PICOS framework, limiting our scope to studies published between January 2000 and December 2024. We used this time window because it captures a phase of rapid expansion in microdata availability and in the introduction or reform of family policies in LMICs, and it is also the period in which work-family research in these contexts began to use broadly comparable and policy-relevant analytical approaches. Searches were conducted across five major databases: Scopus, Web of Science, PubMed, JSTOR, and EconLit.

Because the strongest LMIC evidence concerns the postpartum/early-childhood period, our systematic review focuses on mothers of infants and preschoolers. This does not imply that work-family conflicts are limited to childcare. We restrict the sample this way because work-family challenges are most intense in the early-childhood window, when child outcomes are highly time-sensitive and LMIC family policies primarily target mothers of infants and preschoolers. Holding constant the caregiving stage and the principal policy target reduces structural confounding from age-grade transitions, compulsory schooling, and adolescent labor norms, clarifying identification of policy effects on the care-work margin and ensuring the comparability of the literature in our review. However, while some design principles of family policies may be relevant to other forms of family care, analysis of elder/disability care is beyond the scope of this review. Moreover, although we center our review on mothers and children, the mechanisms we analyze are inherently household-based: mother's labor supply, caregiving, and health respond jointly with partners' labor supply, financial contributions, and caregiving efforts. Importantly, we used the World Bank classification of income levels in determining the list of LMICs. Only peer-reviewed publications written in English were included; grey literature was excluded. We focused on peer-reviewed sources to ensure methodological rigor and reproducibility; grey literature was excluded to avoid heterogeneity in quality and versioning. While review papers were not included in the final sample, we used them to validate our search strategy and ensure key studies were not inadvertently excluded. Additionally, qualitative studies were included to enhance understanding of working women's life in LMICs and to shed light on the plausible drivers behind heterogeneous findings across studies. Notably, as stated in our review protocol, we did not apply methodological quality thresholds when selecting studies. Rather than filtering based on analytical rigor, we aim to synthesize the full range of available evidence while noting gaps related to study design or robustness where relevant.

Fig. 1 in Appendix illustrates our screening process following the PRISMA guidelines. Details of our study selection process are also provided in the Appendix. Our review yielded a total of 140 publications. A full list of papers employing quantitative data analysis is provided in the Appendix (Tables A1-A4). These tables present metadata detailing publication year, country and temporal coverage of empirical analysis, dependent and key independent variable(s), population coverage in their sample, main findings, and, where available, findings of subgroup analyses by gender, socioeconomic status, or urban/rural status to provide an overview of empirical findings by topics.

Furthermore, the figures below illustrate the spatial distribution of included studies across various thematic focuses: work-family challenges (Fig. 1), impacts of family leave (Fig. 2), impacts of cash transfer programs (Fig. 3) and impacts of ECEC (Fig. 4). Countries represented by included studies are indicated in navy, while countries without included studies are shaded in light gray. To accurately reflect country-specific research coverage, studies employing panel data analyses across multiple countries (e.g., 121 developing countries) were excluded from the figures, as these studies only provide average information across these large macro-level samples. These maps highlight distinct yet partially overlapping country coverage across the four thematic focuses. It reveals that research on work-family challenges offers the broadest geographical coverage, underscoring extensive scholarly interest in examining how work-family dynamics vary across diverse cultural, economic, and policy contexts. Conversely, the evaluation of family policy impacts remains limited within LMICs. The geographical distribution of ECEC research displays notable diversity, extending to additional countries in Africa (e.g., Ghana, South Africa), Latin America, and Asia. Research into cash transfer policies significantly overlaps with ECEC studies, encompassing similar countries in Latin America (Brazil, Mexico), Asia (India, Indonesia), and Africa (South Africa, Kenya), reflecting shared developmental economics and poverty alleviation agendas. In contrast, family leave policy research exhibits comparatively narrower coverage, predominantly concentrated within major economies such as Brazil, China, and South Korea.

In addition to variations in geographical coverage across research domains, notable differences emerge in the temporal distribution of studies, reflecting evolving research interests over time. Figs. 5-8 present histograms showing the frequency of included studies by year of publication, spanning January 2000 to December 2024. Studies on work-family challenges demonstrate the broadest temporal coverage, maintaining a sustained scholarly presence since the early 2000 s, with marked intensification from 2017 onward. It may reflect the SDG's post-2015 focus on gender equality, particularly on decent work and care constraints which might have increased demand, support and incentives for evidence from LMICs as well as the emerging crisis of low fertility in Latin America (e.g., Colombia, Costa Rica, and Brazil). In contrast, research on family leave policies is the most recent and sparse, emerging only in 2016 and increasing substantially by 2024, indicating a nascent

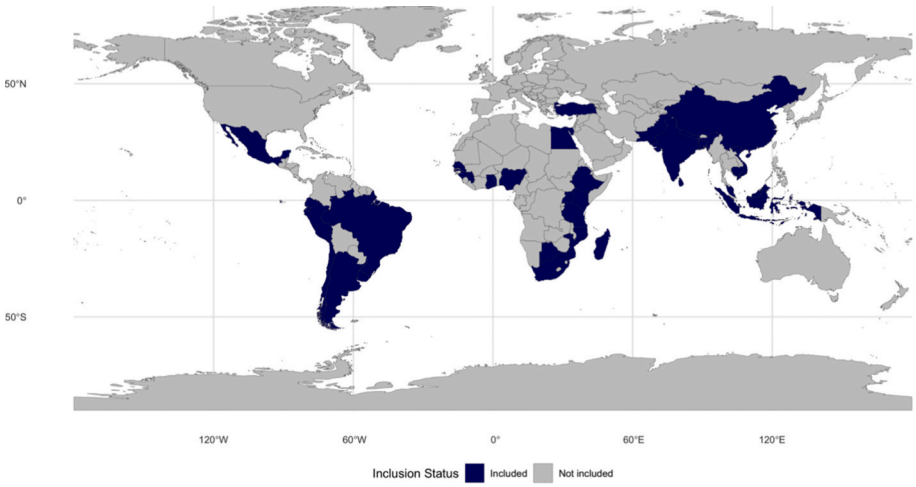

Fig. 1. Causes and consequences of work-family challenges.

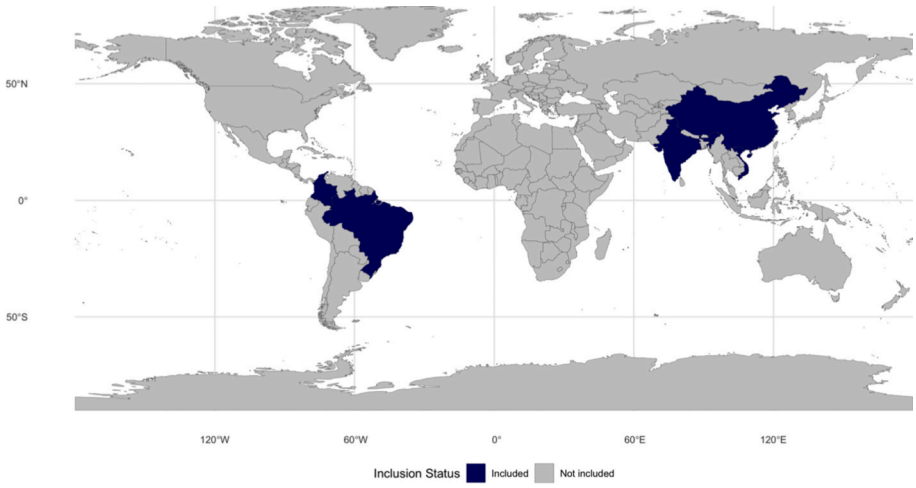

Fig. 2. Impact of leave policies.

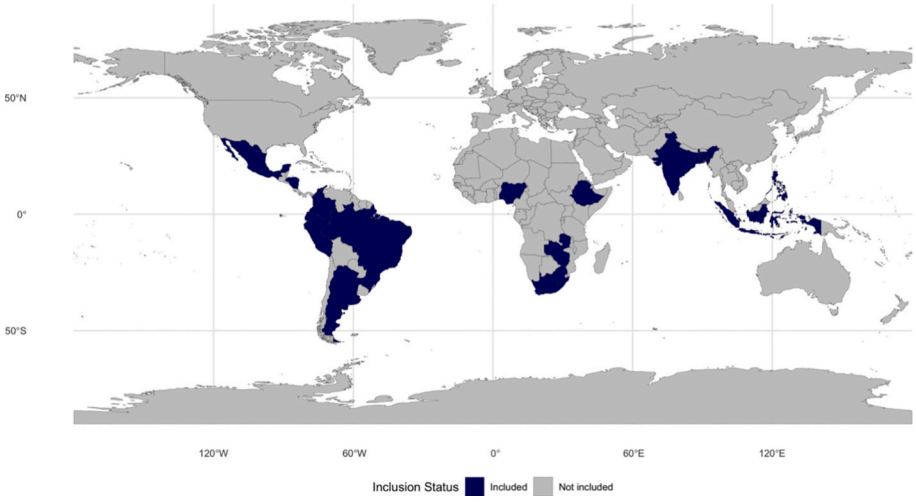

Fig. 3. Impact of cash transfer policy.

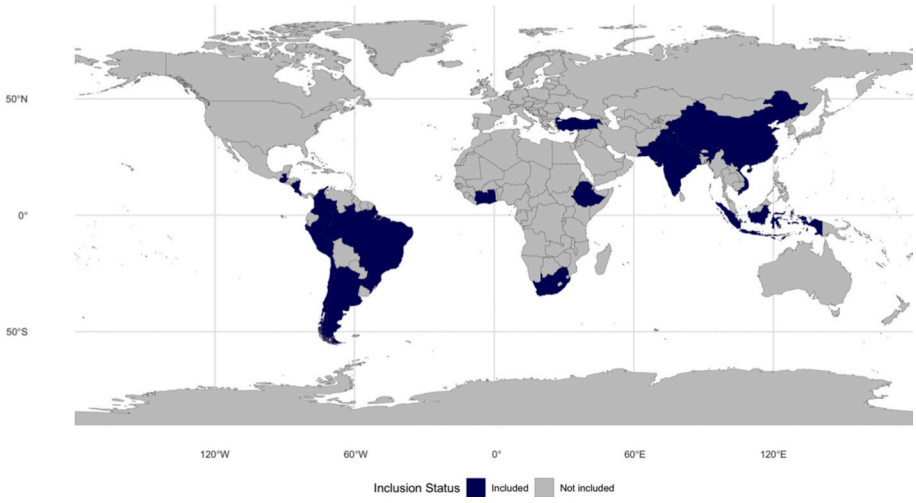

Fig. 4. Impact of Early Childhood Education and Care.

but rapidly growing field of inquiry. This post-2016 emergence of impact evaluations on family leave in LMICs might be largely reflecting the timing of reforms: many countries only expanded family leave duration in the 2000 s-2010 s, creating quasi-experimental variation only recently, alongside broader regional expansions in Latin America. In parallel, the maturation of administrative and survey data systems

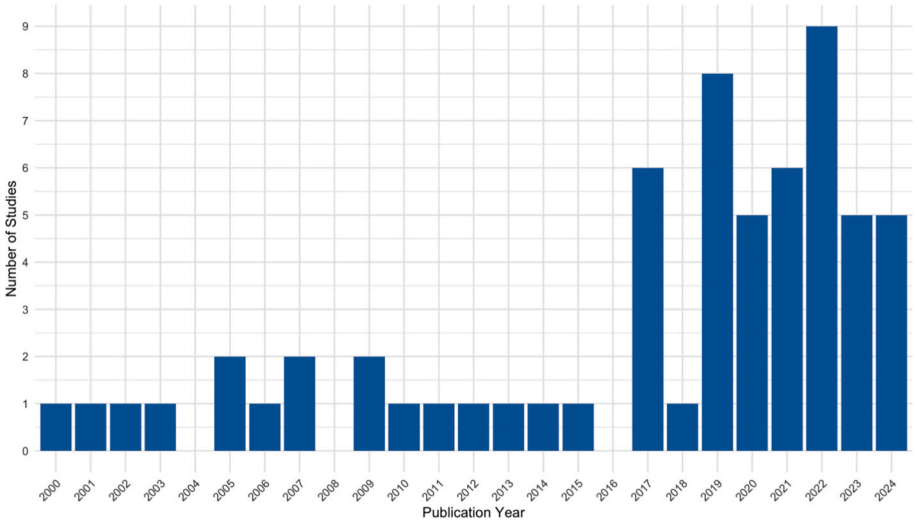

Fig. 5. Publications about the Work-Family Challenges.

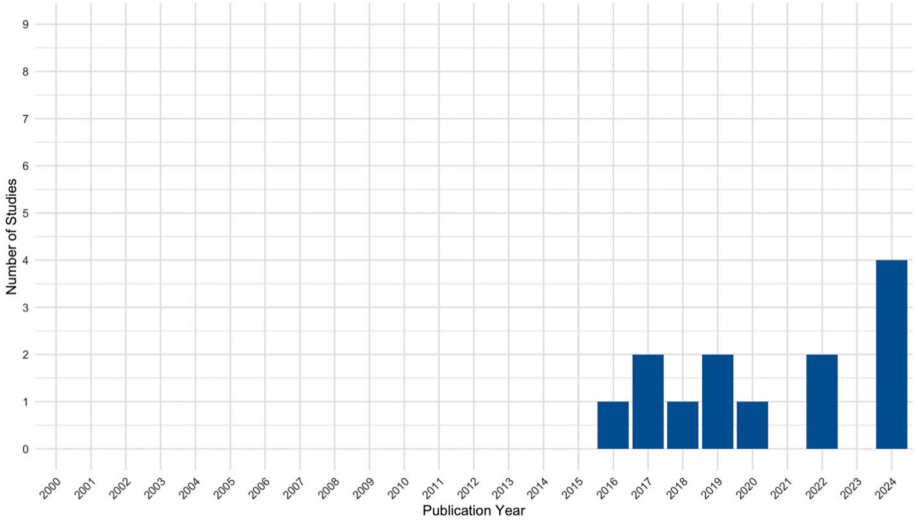

Fig. 6. Publications about the Impact of Leave Policies.

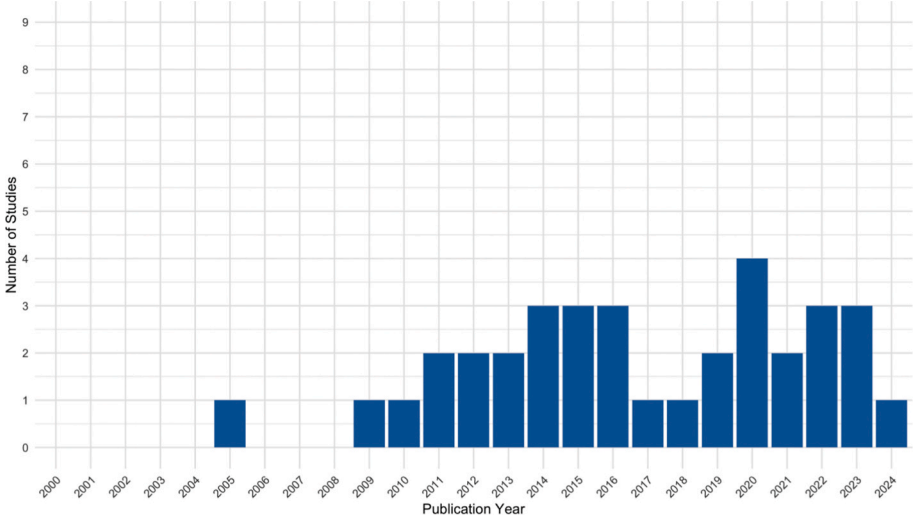

Fig. 7. Publications about the Impact of Cash Transfer Policy.

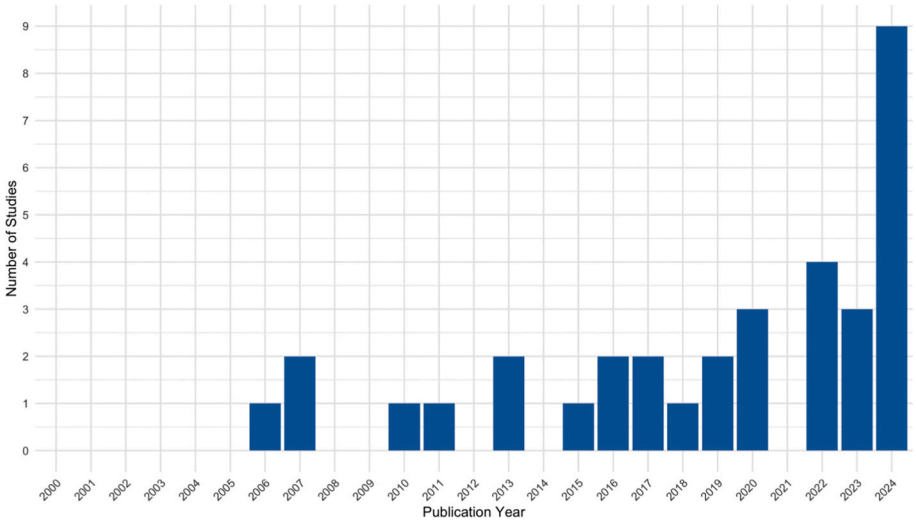

Fig. 8. Publications about the Impact of Early Childhood Education and Care.

and the diffusion of causal inference methods from high-income contexts can also be partly related to this change in the interest of researchers to analyze the LMIC settings. ECEC-related studies reveal a longer historical presence, alongside a dramatic surge in publications peaking in 2024, suggesting intensified contemporary attention. Cash transfer policy research, by comparison, has maintained a stable and sustained scholarly presence since the mid-2000 s, likely reflecting its ongoing global policy relevance. Collectively, these temporal patterns suggest that while cash transfers and work-family challenges have attracted consistent scholarly attention since the early 2000 s, work-family challenges and family policy research more broadly represent rapidly expanding areas of interest, particularly since the late 2010 s.

3. Causes of Work-Family challenges

In the following section, we identify three causes of work-family challenges: (1) the demanding, insecure, and often incompatible nature of the jobs most accessible to women; (2) shifting household configurations; and (3) the enduring influence of traditional gender norms.

3.1. Labor institutions of working mothers

Agriculture emerges as a central sector in which women's paid labor is heavily concentrated, particularly in low-income countries. In sub-Saharan Africa, 66 percent of employed women engage in agricultural production, compared with 60 percent of employed men (FAO 2023). The gender gap in agricultural employment is more pronounced in southern Asia, where 71 percent of employed women participate in agriculture, compared to only 47 percent of men. Women remain disproportionately represented in agriculture as men increasingly migrate toward better-paying opportunities within service and manufacturing sectors (Behrman and Gonalons-Pons 2020; Rao and Raju 2020). The structural transformation from subsistence farming, centered around low-value crops, toward high-value horticultural production has strengthened the feminization of agricultural sectors, as women are often perceived by employers as particularly well-suited to horticultural tasks (Melaku et al. 2024).

Agricultural employment, whether subsistence-based or wage-based, typically offers low remuneration, compelling women to work prolonged hours in precarious conditions to earn a substantive income. Brauner-Otto et al. (2019) illustrate this starkly, noting that even the highest earnings from wage labor in Nepal's agricultural sector fall far below the estimated earnings needed to maintain adequate child growth. The resulting extended workdays create acute time poverty, directly undermining women's caregiving capabilities. Compared with wage employment, own-account farming offers greater flexibility but typically involves longer total working hours rather than genuine relief from care constraints. In India, women in subsistence economies allocate roughly 75–80 percent of the hours that men devote to productive labor, yet men contribute minimally to unpaid domestic and caregiving activities (Rao and Raju 2020). These pressures intensify significantly during peak agricultural seasons. During planting periods, women's daily workloads can extend up to thirteen hours, narrowing the gender gap in productive labor but at substantial cost: their time dedicated to caregiving declines nearly 30 percent, without corresponding increases in men's domestic contributions.

Additional pressures arise from other dimensions of women's agricultural employment. Many women, especially those from poorer households, must travel long distances to reach agricultural fields, intensifying both physical exhaustion and time poverty (Komatsu et al. 2018). Women employed in agriculture are also rarely allowed to bring their children to work, as evidenced in Nigeria (Ukwuani and Suchindran 2003). More importantly, the commodification of the agricultural sector has brought significant changes to the nature and intensity of agricultural employment (Gunewardena 2010). As the modal jobs created in high-value chains are wage-based, tightly scheduled, and monitored, incompatibility between care work and agricultural work has intensified.

Informal employment represents another prevalent form of female labor participation in LMICs. It is commonly assumed that informal employment mitigates the motherhood penalty because its temporal and spatial flexibility theoretically enables women to combine caregiving with income-generation activities (e.g., Berniell et al. 2023; de Jong et al. 2017; Heath 2017). Yet, the category is too broad for that assumption to hold, encompassing occupations with distinct impacts on mothers' caregiving abilities. For instance, domestic workers frequently work during after-school hours and across multiple households, severely restricting their time with their own children (Rastogi and Dwivedi 2014). Only some informal-sector workers, such as street vendors, could bring their children to workplaces, which is also not guaranteed. Practical barriers like geographic distance, often limit the feasibility of such arrangements (Chowdhury et al. 2021).

Moreover, scholarship increasingly warns not to confuse *flexibility* with *compatibility*. Like agricultural paid labor, informal-sector work often entails lengthy working hours to earn sufficient income, despite theoretical flexibility. Mehrotra and Biggeri (2005) demonstrate that homeworkers in India—typically paid on a piece-rate basis—often work full-time, averaging nine hours per day during peak seasons, to earn a

substantive income. These time demands significantly undermine their capacity to fulfill caregiving duties, particularly active care (e.g., feeding and bathing), and frequently shift the burden of childcare onto older children, although the spatial flexibility allows supervisory care. Workplace conditions, including safety concerns, inadequate facilities for breastfeeding, and poor sanitation, also interfere with active care when mothers bring children to workplaces or undertake home-based work, potentially endangering child health (Mehrotra and Biggeri 2005; Vo et al. 2007; Manzione et al. 2019). In addition, the competing demands of employment and caregiving reduce mothers' productivity, thus depressing earnings (Horwood et al. 2021).

Lastly, agricultural and informal employment typically fall outside the scope of labor and social protections, including maternity leave entitlements and childcare provision. Even where such protections exist on paper, weak enforcement mechanisms in LMICs often hinder their practical implementation, preventing mothers from accessing their legal rights (Son 2025). As a result, unlike in high-income countries, working mothers in LMICs are often left to manage work-family tensions on their own or rely on informal support from kinship networks (Son et al. 2025).

3.2. Household configurations

Beyond labor institutions, shifting household configurations further exacerbate work-family tensions. Basic family models—typically composed of married couples and children—have transformed considerably in LMICs due to epidemics such as HIV/AIDS, and demographic transitions (Son et al. 2025). In many African countries, the HIV/AIDS epidemic has notably increased orphanhood, leaving children with single parents or grandparents. Furthermore, colonial legacies of male labor migration have frequently left women solely responsible for both productive and reproductive roles (Farista and Jaga 2024). Single motherhood, particularly among lower-income and less-educated women, has risen markedly in Latin America and the Caribbean (Cakouros and Reynolds 2022). Cakouros and Reynolds (2022) report that nearly one-quarter of children in Ethiopia and one-fifth in Peru have lived in lone-mother households at some point, while the proportion in India and Vietnam is closer to one-tenth.

Despite demographic change, extended-family co-residence continues to mitigate work-family conflicts (Heath 2017; Nakahara et al. 2006; Schmieder 2021; Starkweather et al. 2024; Win et al. 2022). However, this support structure also weakens when families migrate to urban areas (Vo et al. 2007). This shift coincides with more rigid, time-bound wage employment, which increases the difficulty of combining paid work and childcare and heightens the salience of childcare availability, quality, and cost for migrant households. At the same time, we do not suggest that childcare is unproblematic in rural areas. Rather, the mechanisms differ: rural households have to rely more on proximate kin and flexible time allocation, while recent migrants to urban areas often lose kin support while wage employment raises the need for dependable, time-consistent childcare. This helps explain why, as women enter urban wage jobs, the absence or unaffordability of formal care and family-leave support can make childcare more acutely constraining for migrants. Economic hardship can further strain kinship support. In urban Kenya and South Africa, for example, while single mothers often rely on extended family, this support diminishes when kin are unemployed or lack the financial resources to assist with childrearing (Clark et al. 2017).

3.3. Gender norms

Lastly, prevailing gender norms exert a profound influence on work-family dynamics experienced by mothers in LMICs. Conservative beliefs commonly frame women's participation in the labor market as a threat to family cohesion, marital stability, and child development. Berniell et al. (2023) provide suggestive evidence of how these norms significantly shape maternal labor market behaviors across Latin America. Specifically, in contexts where societal consensus supports the notion that "a woman should work only if her partner does not earn enough," women with children are disproportionately likely, compared to their childless counterparts, to either withdraw entirely from the labor force or transition into part-time employment. These deeply entrenched gender norms impose a particularly heavy burden on women, especially when societal expectations stand in stark contrast to economic realities. Such norms actively discourage male partners from contributing to domestic chores and childcare, even as financial imperatives increasingly compel women into paid employment. In Tanzania, Bhojani et al. (2024) illustrate this tension vividly: despite chronic financial insecurity resulting from irregular male earnings, fathers persistently asserted patriarchal authority over household decisions, opposing women's employment. Consequently, employed mothers are routinely left to manage both income-generating activities and extensive domestic responsibilities, receiving minimal or no support from their male partners.

4. Consequences of Work-Family challenges

4.1. Motherhood penalty

Although the motherhood penalty is typically defined as the adverse causal impact of childbirth on mothers' earnings and earnings capacity (e.g., wages, cumulative earnings, sector/occupation quality, and formal attachment), only a few studies directly measure it through sectoral transitions because earnings data are limited in LMICs. Accordingly, we identified quantitative studies examining the motherhood penalty through analyses of fertility's impact on women's labor market outcomes, including labor force participation and working hours, which help illuminate mechanisms or responses. In addition, qualitative studies offer richer, context-specific insights into the experiences of mothers navigating income generation and childcare duties simultaneously (Bhojani et al. 2024; Cakouros and Reynolds 2022; Clark et al. 2017; Gunewardena 2010; Horwood et al. 2021; Mehrotra and Biggeri 2005; Rao and Raju 2020; Vo et al. 2007).

Of the eighteen studies, twelve identify a negative relationship between fertility and maternal labor force participation among at least one subgroup of employed women (Agüero and Marks 2011; Behrman and Gonalons-Pons 2020; Berniell et al. 2023; Bongaarts et al. 2019; Caceres-Delpiano 2012; Cruces and Galiani 2007; de Jong et al. 2017; Entwisle and Chen 2002; Heath 2017; Querejeta and Bucheli 2023; Sunday et al. 2024; Tumen and Turan 2023). In contrast, eight studies document cases where mothers increase their labor force participation or working hours following childbirth within specific subpopulations (Behrman and Gonalons-Pons 2020; Berniell et al. 2023; Desta 2013; Glick and Sahn 2005; Heath 2017; Herrera et al. 2019; Schmieder 2021; Villanueva and Lin 2020). Large-scale, cross-national analyses further suggest that the motherhood penalty becomes increasingly pronounced with advanced stages of economic development (Aaronson et al. 2020). Even among studies affirming the existence of a penalty, several contend that its magnitude is comparatively smaller in LMICs relative to high-income contexts (Berniell et al. 2023; Villanueva and Lin 2020). .

This divergence partly reflects sector transitions, which cautions against understating the systematic motherhood penalty in LMICs. In low-income settings, fertility is significantly negatively associated with cash-earning work, but no comparable effect appears when broader employment definitions include unpaid labor, such as family work, which suggests that sectoral transitions mitigate fertility's impact on mothers' labor force participation (Agüero and Marks 2011).[1] In particular, studies emphasize transitions from higher- to lower-quality employment: mothers withdraw from formal employment in Latin

[1] Because definitions of employment vary across countries and studies (Benería 2001; 1999) and shape estimated effects, we document this heterogeneity in the summary of findings in the Appendix (Table A1).

America (Querejeta and Bucheli 2023) and from non-agricultural sectors in Sub-Saharan Africa that are typically linked to greater economic empowerment (de Jong et al. 2017) and move into informal employment, part-time roles, or self-employment (Berniell et al. 2023). A cross-regional study using data from 58 LMICs finds that increasing numbers of children at home correlate negatively with maternal labor participation in transitional sectors (e.g., domestic or service jobs) and modern sectors (e.g., clerical, technical, or professional occupations), though no significant effect emerges in agriculture (Bongaarts et al. 2019). These transitions are potentially accompanied by wage penalties after childbirth with lasting implications (Querejeta and Bucheli 2023; Villanueva and Lin 2020). Qualitative evidence highlights women's decisions to forego the stability and long-term economic advantages of formal, high-quality employment in favor of lower paying but more flexible informal arrangements, even though it remains unclear whether this flexibility can resolve the tension between paid labor and childcare given the long working hours (Horwood et al. 2021; Vo et al. 2007).

The divergence also reflects *poverty-driven* responses in LMICs. Mothers often increase their labor force participation or extend working hours following childbirth—a phenomenon rarely observed in high-income countries. Economically disadvantaged mothers respond to escalating household expenditures associated with additional children by intensifying labor market participation (Schmieder 2021). These increases concentrate in low-quality, poorly remunerated sectors, including self-employment (Berniell et al. 2023; Glick and Sahn 2005; Heath 2017), informal work (Herrera et al. 2019; Schmieder 2021; Villanueva and Lin 2020), and agricultural employment (Behrman and Gonalons-Pons 2020). Several studies further document increases in working hours among these mothers after childbirth, as observed in Ethiopia (Desta 2013), Ghana (Heath 2017), and Mexico (Schmieder 2021).

Nonetheless, several studies challenge this narrative. In Turkey, mothers in informal employment are more likely to exit the labor force after the birth of their first child than those in formal employment (Tumen and Turan 2023). Comparable findings are reported by Caceres-Delpiano (Caceres-Delpiano 2012), who highlights that unpaid labor and self-employment in rural areas are particularly sensitive to fertility-related shifts. Rather than cushioning mothers from labor market disadvantages, vulnerable employment conditions may in fact exacerbate them. Alternatively, mothers may initially relinquish informal or unpaid roles that they can more easily resume later due to intense time constraints, while postponing exit from formal employment until higher-parity births due to the high opportunity cost of giving up formal employment.

4.2. Work-Family Trade-Off

So far, work-family challenges have typically been empirically defined by fertility's negative impact on maternal employment—commonly termed the motherhood or child penalty. However, conceptualizing them solely in terms of reduced maternal labor market participation obscures a central feature of work-family challenges in LMICs: *poverty-driven responses*. Economic urgency constitutes the primary motivation compelling low-income mothers to resume or maintain employment shortly after childbirth, regardless of the severity of work-family tensions (Chowdhury et al. 2021; Farista and Jaga 2024; Luthuli et al. 2020; Ruiz-Casares and Heymann 2009). In such contexts, the consequences of work-family challenges may manifest more acutely in other outcomes, namely, child health and development, which we term the *work-family trade-off*.

We identified 27 quantitative studies that examine the effects of maternal employment on child outcomes, including health, mortality, and development, as well as intermediate outcomes such as breastfeeding practices and dietary diversity—key pathways that link mothers' labor market participation to child well-being. An additional four qualitative studies provide nuanced insights into mothers' motivations underlying their decisions between paid employment and caregiving (Chowdhury et al. 2021; Farista and Jaga 2024; Rao and Raju 2020; Ruiz-Casares and Heymann 2009). While findings of these studies vary across settings and subpopulations, synthesis of empirical evidence drawn from nationally representative data reveals that twelve studies report adverse effects of maternal labor participation on child outcomes within at least one subgroup. Specifically, two studies address child mortality (Amir-ud-Din et al. 2022; Saabneh 2017), two on exclusive breastfeeding practice (Ahmmed et al. 2022; Campos and Hawkins 2022), and nine explore child health indicators, such as most commonly measured by stunting risk, as well as height-for-age (HAZ), weight-for-height (WHZ), and weight-for-age (WAZ) score (Burroway 2017; Hosen 2023; Jakaria et al. 2022; Nankinga et al. 2019; Rashad and Sharaf 2019; Rastogi and Dwivedi 2014; Saabneh 2017; Shajan and Sumalatha 2022; Ukwuani and Suchindran 2003). Four studies report positive associations (Azizah et al. 2022; Burroway 2017; Saabneh 2017; Shajan and Sumalatha 2022).

Adverse effects are most pronounced where maternal employment is *poverty-driven*. Working mothers in low-income contexts and urban slums frequently face the negative consequences for child health (Win et al. 2022). Across regions, precarious, low-wage employment in agriculture, or blue-collar, or informal sector jobs is associated with poor child health or higher mortality, whereas professional, clerical, sales, and other formal sector jobs are associated positively with child well-being (Burroway 2017; Amir-ud-Din et al. 2022; Saabneh 2017; Shajan and Sumalatha 2022; Brauner-Otto et al. 2019; Nankinga et al. 2019; Manzione et al. 2019; Nakahara et al. 2006; Toyama et al. 2001). These studies often highlight that these relationships are intricately intertwined with poverty: once household income is controlled, the negative impact of maternal employment on child health frequently diminishes (Burroway 2017; Nakahara et al. 2006; Saabneh 2017; Ukwuani and Suchindran 2003). Impoverished mothers encounter *work–family trade-off* most, while relatively affluent mothers may opt out of employment when childcare arrangements are not available or when their paid work is incompatible with their maternal role. Structural disadvantages associated with poverty, including substandard housing, inadequate healthcare access, and deficient infrastructure, further exacerbate these risks. Severe time pressure is common in such settings, in part because limited infrastructural resources like water and fuel require intensive domestic unpaid work, largely supplied by mothers (Bamji and Thimayamma 2000; Nakahara et al. 2006).

Time poverty may even eclipse income poverty as a determinant of child health outcomes, despite mothers' intention to work in order to invest in children. In a low-income community in Indonesia, maternal employment increases household income but paradoxically worsens food insecurity, likely because employed mothers have substantially less time available for meal preparation, thereby compromising child nutrition (Toyama et al. 2001). Complementing this perspective, Komatsu et al. (2018), utilizing time-use data from Bangladesh, Nepal, Cambodia, Ghana, and Mozambique, demonstrate that women in agricultural households facing the greatest time constraints are not necessarily the poorest but rather those employed outside the home, especially in seasonal agricultural employment. Their study highlights that the amount of maternal time dedicated to domestic activities and food preparation is critical for dietary diversity for both mothers and their children. Rao and Raju (2020) further advance this argument by suggesting that the extreme time constraints confronting women employed in agriculture, particularly during peak employment periods, might partially explain the "South Asian enigma," in which rapid economic growth and significant poverty alleviation have not translated into proportionate improvements in child nutritional status.

Yet, exceptions indicate that other mechanisms should also be

considered. Some studies find pronounced negative impacts of maternal employment among highly educated or relatively affluent or formally employed mothers (Hosen 2023; Jakaria et al. 2022; Andrade and Gil 2023).[2] These studies suggest that privileged women often undertake inflexible full-time employment, thereby exacerbating caregiving challenges. Other work shows that the marginal utility of maternal income for child well-being may be greater in poorer households, so additional income from maternal employment may offset adverse nutritional effects primarily among poorer households (Diiro et al. 2017; Melaku et al. 2024).

Much literature supports that the effects of maternal employment are highly contextual, particularly with respect to job type and working conditions. Paid work that allows mothers to bring their children along mitigates the negative effects of maternal employment, (Ukwuani and Suchindran 2003; Starkweather et al. 2024), whereas some studies caution that even when mothers bring their children to work, active care may still go unmet, with potential health consequences (Manzione et al. 2019). Spatial proximity between home and workplace also shapes how maternal employment affects child health: while on-farm maternal employment exhibits no significant negative association with HAZ scores, off-farm employment does (Debela et al. 2021). During peak employment periods, children's health outcomes tend to worsen, although long-term effects remain uncertain (Starkweather et al. 2024). Work scheduling structure matters as well: domestic paid labor that overlaps with times when young children require care is linked to poorer child health outcomes (Rastogi and Dwivedi 2014). Lastly, it is important to consider whether maternal employment strengthens women's agency and influence over household decisions, since greater bargaining power tends to channel more resources to children and broaden child-rearing knowledge outside the home. These non-financial benefits are often larger when mothers contribute a greater share of household income (Debela et al. 2021).

Before concluding this section of the review, a few clarifying points are necessary regarding the concept of *work–family trade-offs* and women's employment in LMICs. Importantly, the notion of a *work–family trade-off* should not be interpreted as a critique of maternal employment itself. As with ongoing debates about whether low-paid, precarious work can nonetheless foster women's empowerment and bargaining power (Kabeer 2016), it remains inconclusive whether the potential benefits of such employment, particularly increased bargaining power within households, are sufficient to offset its adverse effects on child outcomes. More importantly, our central argument is that economically vulnerable mothers are often constrained to low-quality jobs not by choice, but by the pressing need to balance paid work and childcare or, at a minimum, to navigate difficult decisions between economic survival and caregiving. This dual burden generates intense strain and should be recognized as a distinct and pervasive dimension of the work–family challenge in LMIC contexts.

5. Role of family policies in Alleviating Work-Family challenges

Family policies address work-family trade-offs through three core channels: *income, substitution*, and *intra-household bargaining*. By reducing the financial burdens of childrearing and supporting early childhood development, family policies can generate *income* effects that mitigate poverty-related risks and ease the financial pressures associated with having children. By relieving time constraints and offering institutional substitutes for maternal care, they shift *time allocation* toward paid work (Becker 1965). Furthermore, directing financial resources to mothers or enabling their access to higher-quality employment can also enhance women's *bargaining power* within households, affecting both labor supply and investments in child well-being. Beyond immediate impacts, these policies are increasingly viewed as instruments for advancing gender equality and intergenerational mobility, because early investments can yield lasting gains in human capital at relatively low cost (Cunha et al. 2006). Moreover, improvements in child health and development may influence maternal labor market participation in the medium and long term, as caregiving demands associated with poor child health remain a significant barrier to women's sustained engagement in paid employment. In this section, we review empirical evidence on three family policy areas, namely family leave, child benefits, and early childhood education and care (ECEC), focusing on outcomes for women's labor market outcomes and for children's health and development. We emphasize design features, context and the mechanisms linking policies to outcomes in synthesizing findings.

5.1. Family leave policies

Paid leave was initially introduced to protect maternal and infant health around childbirth. It provides a critical period of rest and support that enables recovery and early caregiving, including breastfeeding, while maintaining income. Over time, however, paid leave policies have evolved to place greater emphasis on promoting gender equality in the labor market. Maternity leave provisions increasingly include protections against dismissal during pregnancy to sustain women's employment and reduce the *motherhood penalty*. Paternity and parental leave, in turn, are designed to reshape the gendered division of caregiving responsibilities and paid employment between parents. While all LMICs have introduced paid maternity leave, only a minority offer short paid paternity leave and even fewer provide paid parental leave.

The next subsection synthesizes the findings of 13 studies on paid leave, focusing on women's economic outcomes and child health and development. The full list of studies appears in Appendix Table A3.

5.1.1. Impact on Women's labor market outcomes

Evidence is mixed on whether paid leave mitigates *motherhood penalties* in LMICs. Only two of seven studies identify gains in women's employment. Firm-level evidence from 53 developing countries links paternity leave mandates to higher female employment share, consistent with shared leave redistributing caregiving responsibilities and reducing employer bias (Amin et al. 2016). Cross-country panel estimates for Latin America show that increases in total family leave duration, covering maternity, paternity and parental leave, are associated with higher female employment, with larger effects where baseline coverage was low (Galván et al. 2024). However, in contexts where coverage expanded to medium or high levels (over 60 percent), the gains were accompanied by an unintended consequence: a rise in informal employment among women.

Other studies report that paid leave can worsen job quality, increasing transitions from "good" to "bad" jobs. Bose and Chatterjee (2024) find that the 2017 extension of paid maternity leave in India from 12 to 26 weeks reduced the likelihood of women working in regular salaried employment, particularly for married and younger women, and, in turn, increased their participation in informal and unpaid labor. These patterns are consistent with employer-liability financing that raises the perceived cost of employing women of childbearing age. Extensions of paid maternity leave have been associated with increases in informality, self-employment, and inactivity among women of childbearing age relative to men or older women, especially for younger and less-educated workers in precarious jobs, and with declines in formal-sector employment, as observed in China (Liu et al. 2024), Colombia (Uribe et al. 2019), and several African and Asian countries (Ahmed and Fielding 2019). Vietnam is an exception: longer duration of paid maternity leave increased formal employment of women and reduced unpaid agricultural household work, with unchanged overall labor force participation (Vu and Glewwe 2022). Vietnam's social-insurance financing and stronger enforcement likely mediated these effects.

Moreover, long-run effects on labor force participation, employment

[2] It requires caution to interpret the findings of these studies, as they don't control household income or expenditure as others.

and wages are often null. At the macro level, maternity leave generosity shows no association with female labor force participation across 121 countries (Fallon et al. 2017). In a separate macro panel from 1995 to 2016, higher compensation levels have no significant effect, while longer durations are associated with lower formal employment (Ahmed and Fielding 2019). In Brazil, a voluntary extension from four to six months had selective take-up among larger, more productive firms and no significant long-term effects on women's employment or wages; strategic timing of separations and weak compliance monitoring may have diluted impacts (Machado et al. 2024). These findings underscore the need for more research on the long-term effects of paid maternity leave in LMICs, particularly studies employing causal inference methods.

Overall, we interpret the mixed findings as evidence of the complex dynamics of paid leave and its limited implementation in LMICs, rather than inherently adverse. The impact of paid maternity leave on female labor force participation remains theoretically ambiguous: taking leave can interrupt women's career trajectories, resulting in lost work experience and long-term earnings penalties. From the labor demand perspective, employers may also respond to such policies with increased reluctance to hire women of childbearing age, anticipating potential costs—thereby exacerbating gender gaps in employment and wages. Importantly, these adverse outcomes are not unique to LMICs; similar patterns have been observed in high-income countries as well (Olivetti and Petrongolo 2017). Ultimately, the net effect of paid leave policies depends on whether their positive labor supply effects outweigh the negative consequences of wage penalties and statistical discrimination. Since both labor demand and labor supply elasticities vary based on women's skills, age, family structure, and the broader socio-economic context, the effects of family leave policies are likely to be heterogeneous across these dimensions.

Entrenched labor market segmentation contributes to its unintended negative consequences for maternal labor market outcomes in LMICs (Ahmed and Fielding 2019; Fallon et al. 2017; Liu et al. 2024). Studies emphasize that women's access to paid maternity leave in these contexts is highly limited, with coverage and take-up rates generally much lower than in high-income countries. Globally, only 40.6 percent of employed mothers are entitled to statutory maternity leave, largely due to the widespread prevalence of informal employment and weak enforcement mechanisms (Son 2025). In most African countries, fewer than 10 percent of employed mothers are registered for maternity leave schemes, while coverage in Latin America ranges from less than 10 percent to more than 66 percent (Addati et al. 2014). Actual use is likely below legal entitlement, so reforms that raise generosity without improving access may have limited effect. Nevertheless, most empirical studies tend to overlook the issue of access and focus instead on the generosity or duration of benefits as is typical in research conducted in high-income countries where informality is low and maternity leave policies are broadly accessible. A partial exception is Galván et al. (2024), although policy expansion is still captured largely as increased generosity. These findings imply that any increase in duration or generosity should be paired with measures that expand coverage and enforcement in high-informality settings to avoid substitution into informal work.

5.1.2. Impact on child health and development

Compared to labor market outcomes, the literature exhibits broader consensus regarding the beneficial effects of paid maternity leave on child health.[3] Across four studies examining infant and under-five mortality in LMICs, longer paid maternity leave is associated with lower mortality rates (Ahmed and Fielding 2019; Fallon et al. 2017; Puliyel et al. 2020; Shahraki 2022). Fallon et al. (2017), using data from 121 countries, find significant declines in infant and child mortality, particularly in low-income contexts and where secondary school enrollment is moderate. They emphasize that insufficient compensation may exacerbate financial stress, potentially undermining child nutrition, which could explain why higher wage replacement rates are associated with lower infant and child mortality. Puliyel et al. (2020) similarly report that extended leave reduces mortality in 34 countries across Asia and the Pacific. Shahraki (2022), focusing on 12 MENA countries, corroborates these findings and notes that the benefits are amplified in settings with higher female labor force participation and public health expenditure. Longer paid leave enables mothers to access postnatal healthcare services, such as vaccinations and regular medical check-ups, contributing to reductions in infant mortality. Additionally, extended leave supports breastfeeding, a key determinant of child nutrition and immunity. Chai et al. (2018), using data from 38 LMICs, find that longer paid leave is positively associated with early initiation, exclusive breastfeeding, and breastfeeding duration—behaviors that are often difficult for working mothers to sustain. However, not all child outcomes improve. Jahagirdar et al. (2017), analyzing data from 37 LMICs, find no significant relationship between maternity leave duration and child HAZ scores. They attribute this null result to short leave durations, limited coverage, and weak health infrastructure, although these mechanisms are not empirically validated in their study.

5.2. Cash transfers

Cash transfer programs place strong emphasis on child development and poverty reduction, serving primarily as tools of social protection. To break the intergenerational transmission of poverty and promote greater investment in children, governments in many LMICs target low-income households with non-contributory cash transfers. These programs often require mothers to fulfill specific conditions, such as attending pre- and antenatal care visits and ensuring their children's school attendance, vaccinations, and routine medical check-ups to enhance their developmental impact, namely conditional cash transfer (CCT). Cash transfer programs are often explicitly directed to mothers, reflecting the widespread recognition that women are more likely to allocate household resources toward the well-being of their children. Although not designed to change women's employment directly, cash transfers can do so indirectly: improved child health and development may raise women's labor force participation over time, and easing liquidity constraints can facilitate movement into better-quality jobs. Over the past two decades, child benefits have become a central pillar of social protection systems in many LMICs. Unlike family leave and ECEC policies, which often reach formal sector workers or urban populations, cash transfer programs typically achieve broader coverage due to scalability and political appeal. Program designs vary along key dimensions, including the use of conditionalities, integration with complementary services, and transfer size. This section synthesizes evidence from 35 studies on women's economic outcomes and children's health and development. A complete list of the reviewed studies is available in Appendix Table A4. Of the 35, twenty-seven focus exclusively on child outcomes, four on women's outcomes, and the remaining 4 on both.

5.2.1. Impact on Women's labor market outcomes

Although empirical evidence on the effects of child benefit policies on women's labor outcomes remains limited (i.e., eight of 35 studies), an emerging pattern suggests that these policies mitigate *poverty-driven* labor responses by cushioning the expenditure shock of childbirth and reducing the need for precarious employment. Aggregate estimates show no detectable labor-market effects for mothers in Honduras (Boo and Creamer 2019), India (Chakrabarti et al. 2021), and Colombia (Lopez-Arana et al. 2016). In South Africa, cash transfers did not affect women's employment status or income but increased job-seeking among

[3] To understand this divergence, it is also important to note that studies examining labor market outcomes tend to employ causal inference methods, whereas this latter group of studies mostly relies on macro-level or cross-country micro-level data.

unmarried mothers and shifted work from agriculture to non-agriculture without wage gains or formalization(Tondini 2022). In Peru, the *Juntos* program temporarily reduced working hours, particularly among married women and those with young children, without changing overall labor force participation, consistent with a short-run *income effect* (Fernandez and Saldarriaga 2014). The findings underscore the importance of short-run income effects in contexts where women face liquidity constraints and work predominantly in flexible, informal jobs.

However, once beneficiary groups are disaggregated, impacts tend to be more pronounced among disadvantaged mothers. These findings highlight the heterogeneous ways in which income support shapes labor decisions, particularly by influencing *income* and *time allocation* across households with differing socio-economic profiles. Garganta et al. (2017), for instance, show that Argentina's *Asignación Universal por Hijo* program discouraged labor market participation primarily among mothers with lower education, while having no effect on more advantaged groups. Consistent with an *income effect*, the program alleviated the painful *work-family trade-off* faced by economically vulnerable mothers to reconcile caregiving responsibilities with the necessity of contributing to household income through precarious jobs. The extent to which transfers can substitute maternal income depends on their generosity. For example, Ecuador's *Bono de Desarrollo Humano*, which provides relatively modest benefits, does not reduce labor supply, whereas Nicaragua's *Red de Protección Social*, offering more generous transfers, is associated with a decline in labor force participation (Fiszbein and Schady 2009, 118–19).

Time requirements also shape outcomes. Feminist critiques argue that conditionalities reinforce traditional gender roles by imposing time burdens on mothers, especially economically disadvantaged ones (e.g., Molyneux 2006). Requirements such as attending health check-ups or school appointments divert time from income-generating or job-seeking activities. Consistent with this critique, Brazil's *Bolsa Família* program reduced rural women's working hours and lowered the probability that rural women are employed by 13.1 percentage points, partly offset by increased male labor; comparable effects are not found for rural men or urban women (de Brauw et al. 2015). The authors attribute these heterogeneous impacts to logistical barriers in rural areas, where households face significantly longer travel times to access schools and health services and are more likely to rely on female recipients to collect benefits, whisch raise the time costs of compliance.

5.2.2. Impact on child health and development

Echoing the evidence for women's labor outcomes, aggregate estimates are mixed, while disaggregated analyses show that gains in child health and development are concentrated among impoverished households, indicating that cash transfers mitigate *work–family trade-offs*. On cognitive outcomes, CCTs in Honduras, Mexico, and Nicaragua report positive effects, including more on-time school enrollment and less absenteeism (Boo and Creamer, 2019; Todd and Winters 2011; Macours et al. 2012). In contrast, the evidence on unconditional cash transfers (UCTs) in Bangladesh and Zambia show no significant cognitive gains, underscoring the roles of context, transfer size, and complementary services (Hossain et al. 2022; Handa 2016). In Ecuador, however, UCTs improved language acquisition and cognitive functioning, with effects concentrated among rural and economically disadvantaged households, suggesting that baseline deprivation may moderate the effectiveness of transfers (Paxson and Schady 2010; Fernald and Hidrobo, 2011).

The evidence on the impact of cash transfers on child health outcomes is even more heterogeneous. In Brazil, expanded coverage of *Bolsa Família* is associated with lower child mortality, diarrhea incidence, and malnutrition (Rasella et al. 2013). Across Latin America, expansions in social transfer programs have contributed to declines in child mortality from poverty-related illnesses (Aransiola et al. 2023; 2024; Cavalcanti et al. 2023), and globally, greater coverage correlates with reductions in under-five mortality, particularly where generosity is higher (Li et al. 2021; Richterman et al. 2023). Yet, several studies report no measurable improvements in physical growth or other health outcomes (Labrecque et al. 2018; Attanasio et al. 2014; Kandpal et al. 2016; Aizawa 2020b). For UCTs, null effects on anthropometrics are documented in South Africa (Zembe-Mkabile et al. 2016), Zambia (Handa 2016), and Ecuador (Fernald and Hidrobo, 2011).

Impact evaluations show that cash transfers disproportionately change behavior in impoverished households. In Brazil and Colombia, CCTs significantly increased the uptake of preventive care services (Lopez-Arana et al. 2016; Shei et al. 2014). These effects are particularly pronounced among rural and economically disadvantaged households, thereby contributing to the broader objective of promoting social equity from the earliest stages of life. Taking another example, Nicaragua's *Red de Protección Social* substantially boosted childhood vaccination rates in communities with limited access to health infrastructure, from 38 percent before the program to nearly 85 percent after expansion (Barham and Maluccio 2009). Nonetheless, effects depend on service access and program design (Aizawa 2022; Chakrabarti et al. 2021). In India, expanding eligibility increased healthcare-seeking among rural and low-income mothers (Aizawa 2020a).

In addition to program design (e.g., CCT vs. UCT) and household socio-economic status, program impacts also operate through women's time and intra-household bargaining power. In Ethiopia's *Productive Safety Net Program* (PSNP), which integrates cash transfers with a public works component, short-term improvements in child nutrition are closely linked to mothers' engagement in income-generating activities (Debela et al. 2015). Presence of adult female laborers in the household amplifies gains in children's WHZ scores among beneficiaries, while this association is not statistically significant among non-beneficiaries. These findings underscore that the effectiveness of cash transfer programs can be enhanced when mothers' *bargaining power* is strengthened through engagement in paid labor—particularly in forms of employment, such as public works, that do not involve physically demanding tasks for extended hours under harsh conditions. This highlights the importance of addressing the *work–family trade-off* not solely through income support, which can sometimes produce adverse outcomes for women's labor market participation, especially among economically vulnerable mothers, but through integrated approaches that also expand access to viable and sustainable employment opportunities for women.

5.3. Early childhood education and care (ECEC) policies

ECEC policies emphasize both promoting gender equity in the labor market and supporting early childhood development. By providing alternatives to maternal caregiving, ECEC programs reduce the care burden on mothers and free up their time for engagement in paid work. Many programs prioritize children of caregivers who are employed, in education, or actively seeking work, but large national programs in LMICs are not typically restricted to these groups. Concurrently, ECEC programs often bundle services that affect child health and development, including supplementary nutrition, immunization, health check-ups, and parent support through home visits, clinic consultations, or group sessions. Childcare initiatives in LMICs frequently target low-income populations who lack access to contributory childcare services or reside in areas with low pre-primary enrollment rates. Governments may subsidize home- or community-based childcare provision (e.g., *Hogares Comunitarios* in Colombia and Guatemala, *Proyecto Integral de Desarrollo Infantil* in Bolivia), establish formal childcare centers (e.g., India's *Integrated Child Development Scheme*, Rio de Janeiro's *Early Childhood Development Program*, or Colombia's *De Cero a Siempre*), or incorporate pre-primary education into public schooling systems. Although less widespread than cash transfer programs, ECEC has expanded in recent years, especially in Latin America.

The following subsection synthesizes findings from 34 studies that examine the role of ECEC in LMICs on women's economic outcomes and children's health and development. The full set of reviewed studies is listed in Appendix Table A3.

5.3.1. Impact on Women's labor market outcomes

Our review of the literature indicates that expanding ECEC services can mitigate the *motherhood penalty*, as evidenced by improvements in maternal labor market outcomes across LMICs. Notably, large-scale preschool expansions in Latin America have yielded notable improvements in maternal paid employment. In Argentina and Brazil, enhanced access to preschool programs led to higher rates of mothers' labor force participation and working hours (Berlinski et al. 2008; Berlinski and Galiani 2007; Ryu 2020). In Nicaragua, community-based childcare turns out to be also effective in stimulating female labor force participation in poor urban areas (Hojman and Boo, 2022). Positive effects extend beyond Latin America. In India, Jain (2016) documents that public pre-school education supported rural women's labor supply. Comparable effects are reported in Costa Rica (Mata 2024) where formal childcare increased working hours while in China, combined with support from grandparents it increased maternal employment (Du et al. 2019; Du and Dong 2013).

Beyond raising employment rates, ECEC programs have also been shown to improve job quality by shifting women from informal or unpaid work into more structured, wage employment. In Vietnam (Dang et al. 2022), Brazil (Ryu 2020), Ghana, and Guatemala (Quisumbing et al. 2007), access to childcare increased women's engagement in higher-quality jobs, such as wage labor and formal sector employment, and reduced informal employment, subsistence agriculture, and unpaid domestic labor, while labor force participation is not changed. The effects on the sectoral transition were heterogeneous: lower-educated mothers decreased their engagement with informal work, while higher-educated mothers increased formal employment and hours in Brazil (Ryu 2020). In contrast, the expansion of kindergarten services in China increased maternal labor force participation in non-agricultural sectors, particularly among low-income and rural women (Fang and Miao 2024). Clark et al. (2017) showed that subsidized childcare, paired with targeted employment support, can improve job quality for economically vulnerable mothers by providing care during regular working hours and reducing the need to seek highly flexible, low-paid jobs. In Nairobi, married mothers experienced larger employment gains, while single mothers, already more likely to be working, used vouchers to move from flexible, low-paid jobs into more regular, better-paying jobs, including a government-run slum improvement program and service sector jobs. These shifts allowed single mothers to reduce weekly hours without loss of earnings, consistent with higher hourly wages and job quality. Taken together, these findings suggest that when structured to complement women's employment needs, ECEC programs can help alleviate both *motherhood penalties* and *work–family trade-offs*.

Our review further highlights that the design and implementation of ECEC programs are critical to their effectiveness. Null or limited effects are frequently associated with restricted opening hours, low program quality, high costs, or the widespread availability of informal care alternatives. For instance, Halim et al. (2022) find that in Indonesia, preschool availability led women to shift into unpaid family labor without gains in wage employment or income, as facilities operated only a few hours per day—insufficient to support full-time paid work. In Turkey, lowering the school starting age did not affect mothers' employment or job-seeking behavior, a pattern consistent with the prevalence of half-day schooling and demand-side constraints (Zayim and Kayaoglu 2024). In China, childcare availability increased women's labor force participation and weekly hours, while higher childcare costs reduced working hours, underscoring the role of affordability alongside availability (Du and Dong 2013). By contrast, in Armenia, eliminating daycare fees produced only minor, short-term improvements in labor force participation and childcare utilization, highlighting the importance of service quality (Baghdasaryan and Barseghyan 2024).

5.3.2. Impact on child health and development

Empirical evidence on the effects of ECEC on child health and development in LMICs presents a complex and heterogeneous picture, shaped substantially by program quality, intensity, and contextual factors. Underlying mechanisms extend beyond educational stimulation to encompass pathways through health and nutrition interventions. Programs integrating nutritional support, health monitoring, and parental engagement, such as those studied in Nepal (Nakahara et al. 2010), Pakistan (Ali et al. 2024), Chile (Allel et al. 2020) and Vietnam (Nguyen 2022), consistently demonstrate significant health and developmental benefits, notably improved anthropometric measures (e.g., heights and weights) and reductions in infectious diseases. However, not all findings are positive. In India, preschool attendance is linked to adverse short-term health impacts, showing that poorly resourced ECEC centers with overcrowding increased children's exposure to infections, consequently lowering their HAZ scores (Sarkar and Sarkar 2017). In Colombia, no significant nutritional improvements are observed due to implementation issues within the nutritional components of the program (Bernal and Fernández 2013).

Cognitive and educational outcomes, including school readiness, early literacy, and numeracy, also reflect this heterogeneity. Formal and higher-quality preschool is associated with significant cognitive or educational gains in Peru (Cueto et al. 2016), in Vietnam (Robinson and Dinh 2023), China (Tang et al. 2023), and other LMICs (Shafiq et al. 2018). The size and persistence of these gains vary systematically by gender and socio-economic conditions, including early-life nutrition, maternal education, and household status. By contrast, some studies exhibit negligible cognitive improvements or mixed results, attributed to quality constraints such as inadequate teacher training and overcrowded classrooms (Ghosh 2024). A distinctive aspect of ECEC research in LMIC contexts is the joint examination of maternal labor market outcomes alongside child development, reflecting policy priorities that emphasize both gender equality and social equity from the early stages of life. For instance, preschool expansion has been shown to positively influence maternal employment rates while concurrently enhancing child outcomes, specifically, preschool attainment in Argentina (Berlinski and Galiani 2007) and cognitive, language, and motor development in South Africa (Cluver et al. 2024). In Nepal, Nakahara et al. (2010) similarly find that childcare attendance allowed employed mothers who lacked childcare support at baseline to achieve higher income levels, thereby improving family incomes and child WAZ scores. In Nicaragua, public childcare enhances children's socio-emotional skills while simultaneously increasing maternal employment, affirming the cost-effectiveness of integrated policy approaches (Hojman and Boo, 2022). However, limited increases in attendance rates resulted in modest effects on children's cognitive skills and maternal labor participation in Brazil, suggesting potential for greater impact with broader program implementation (Castro and da Cruz 2024). Collectively, these findings indicate that when ECEC services are available and of adequate quality, they can support child development while empowering women economically, although magnitudes depend on program intensity, take-up, and context.

6. Conceptual framework: Poverty-driven work-family challenges in LMICs

Building upon the literature that we reviewed, we propose a conceptual framework tailored to LMIC contexts that clarifies the dynamics of work-family challenges and how family policies mitigate them. Fig. 9 summarizes the mechanisms derived from the review. Pervasive poverty generates a distinctive form of work-family challenges in LMICs: Mothers, especially in low-income households, cannot forgo earnings despite severe work-family tensions. Some even increase hours after childbirth to absorb the expenditure shock associated with a new child. In response, mothers frequently enter or shift into lower-quality jobs that appear to offer spatial or temporal flexibility relative to formal-sector employment, especially informal and agricultural work. As a result, the motherhood penalty is less visible in the labor force participation rate and instead manifests as sectoral transitions in LMICs.

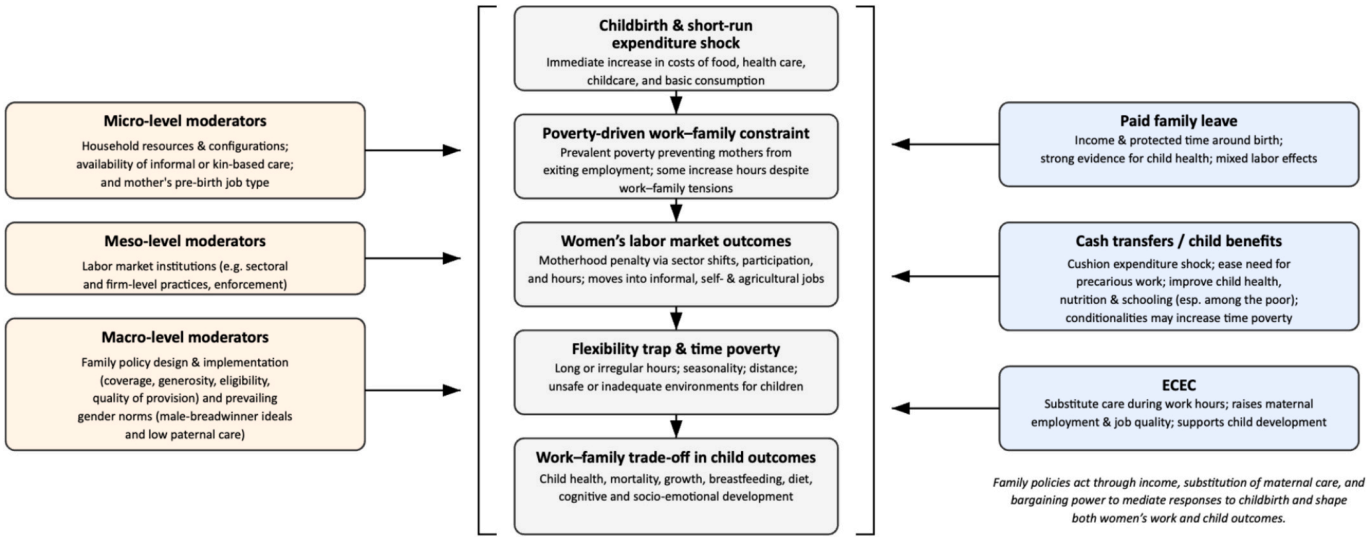

Fig. 9. Poverty-driven work-family mechanism and policy effects in LMICs.

However, this dynamic produces a *flexibility trap*: the theoretical flexibility rarely resolves incompatibility between paid work and care. Much informal work is not flexible in practice. A growing share of agricultural employment is waged, with rigid and tightly timed schedules, unlike subsistence farming. Some informal activities, such as small-scale trade, allow mothers to bring children to the workplace, yet the distance between home and work and mobility constraints often undermine this option. Even when children accompany mothers, workplaces and home-based settings typically lack safe spaces and basic facilities, so active care (e.g., feeding, bathing, clinic visits) is curtailed. Moreover, low pay requires long hours to reach a subsistence income, which intensifies *time poverty,* particularly for women in low-income households. The literature shows that these *poverty-driven work–family challenges* are expressed in poorer child health and developmental outcomes, which we term here as *work-family trade-off*, a pattern less emphasized in high-income country settings (Hegewisch and Gornick 2011).

The reviewed literature shows that family policies can relieve *poverty-driven work-family challenges*. Cash transfers ease the *expenditure shock* associated with childbirth by supplementing household income. They enable mothers to reduce hours or shift away from informal and agricultural work, lowering reliance on low-quality jobs. Where program conditionalities and administrative tasks are burdensome and service access is limited, however, compliance can raise *time poverty* because these tasks fall on mothers, particularly those with limited access to clinics and schools. Whether reductions in maternal employment reflect relief from *income pressure* or *time poverty* generated by conditionalities remains an open question. ECEC reduces the need for flexible (but low-quality) jobs by providing childcare during standard working hours, which facilitates shifts into more predictable, better-quality jobs and improves earnings. By contrast, paid family leave often shows limited aggregate effects on maternal labor outcomes where legal coverage and take-up are low, especially among economically disadvantaged mothers.

Findings that diverge from this mechanism underscore that each link in the mediating chain is conditioned by moderators at the micro-, meso-, and macro-levels. In this framework, "micro" refers to individual and household conditions, "meso" to local labor market and workplace institutions, and "macro" to national family policy designs and prevailing gender norms. Some moderators could be located at multiple levels, but we assign them to the level at which they most strongly shape mothers' responses to childbirth and family policies. At the micro-level, the size of the post-birth expenditure shock and labor responses depend on household resources (e.g., partner income, remittances, savings), the availability of alternative care (e.g., kin support, co-residence), and mothers' pre-birth job type. Earnings levels, work schedules, task demands, commuting distance, actual job flexibility, seasonality, and the feasibility of bringing children to work shape how strongly time poverty rises and whether time-allocation costs offset income gains for child health and development. For instance, disagreement over whether informal or formal sector employment is more detrimental to children's health, or over whether mothers are more likely to forgo informal or formal employment after childbirth, depends not only on whether jobs are "good" or "bad" but also on other micro-level determinants. At the *meso*-level, labor market institutions condition the impact of family policies on maternal employment; even when ECEC provides care during standard working hours and creates an opportunity to enter formal employment, maternal employment may not change where good jobs are scarce (e.g., formal sector or public employment). In addition, the jobs typically available to women in the local context fundamentally shape work-family challenges, determining both labor-market responses to childbirth and the time poverty that arises from combining paid work and care. At the macro level, family policies support children's well-being and shape mothers' decisions about labor market participation. However, their impact depends critically on policy design and implementation, including *de jure* and *de facto* coverage, generosity, eligibility, and the quality of provision. Prevailing gender norms in societies further shape how mothers and their partners behave, including how they allocate time between paid work and care.

This conceptual framework diverges from the conventional theoretical framework that explains maternal labor supply decisions as well as the relationship between child-wellbeing and maternal employment based on the experience in high-income countries. Many assumptions underpinning Becker's framework (i.e., efficient household decision-making, clear separation between market and home production, and weak institutional constraints) are less tenable in LMICs. In addition, Becker's model frames caregiving as a private input into household utility rather than a public good with positive spillovers, thereby downplaying how institutional arrangements that ration time and resources for care generate social costs beyond the family. As our review shows, there is widespread informality, low earnings, and scarce childcare push mothers into employment out of necessity rather than choice, often worsening time poverty and job quality. Normative and legal barriers further constrain women's choices, shaping who can access family leave, formal jobs, or early-childhood services.

Moreover, it advances scholarship in the feminist political economy

by specifying how factors at the micro-, meso-, and macro-level shape social reproduction. This literature emphasizes the intersection between agency and structure, when examining how transformations of capitalism structure social reproduction, for example, how international trade and welfare policies shape everyday practices and the relations between production and reproduction (Fraser 2022; Bakker 2007). Shifts in the global political economy drive the informalization and feminization of labor market institutions, with far-reaching implications for social reproduction and the reconstitution of family forms. Yet much of this work remains reflective or case-based: it often lacks an empirical foundation and rarely specifies the mechanisms through which each level affects social reproduction. Our conceptual framework, built on systematic evidence, provides empirical grounding for these claims by specifying level-linked mediators and moderators and by using *poverty-driven work–family challenges* as a concrete case that shows how macro-, meso-, and micro-factors jointly shape mothers' daily efforts to combine paid work and care.

7. Knowledge gaps

Our review reveals several important knowledge gaps that future research could address. First, a more disaggregated approach to maternal employment is needed. While studies on *work–family trade-offs* have examined the diversity of job characteristics, such as commuting time, flexibility, seasonality, and the ability to bring children to work, to understand how mothers allocate time between paid employment and caregiving in various contexts, research on the *motherhood penalty* or family policy tends to treat maternal employment in overly aggregated terms. Impact evaluations tend to focus primarily on employment quantity, often neglecting how family policies may shape the *quality* of employment. Some studies distinguish between "bad jobs" (e.g., informal or agricultural employment) and "good jobs" (e.g., formal or wage employment), but such dichotomies remain crude. As scholars such as Rastogi and Dwivedi (2014) and Villanueva and Lin (2020) argue, the informal sector comprises a wide range of working conditions with varying implications for work–family dynamics. For instance, the constraints faced by domestic workers differ significantly from those encountered in on-farm family labor, and the degree of work–family conflict in agriculture may vary depending on task type and seasonal labor demands. This raises a central question for future research: how do specific labor market institutions and employment arrangements shape work–family conflict, particularly the motherhood penalty, and mediate the impact of family policies?

A more disaggregated approach would, for instance, deepen our understanding of how the *motherhood penalty* operates across different types of informal and formal employment. Whether informal workers experience more acute penalties than their formal counterparts remain an open empirical question, due in part to the overly broad classification of informal employment in existing studies. For example, the informal sector works available to women in Turkey, where Tumen and Turan (2023) show that mothers are more likely to exit informal than formal jobs, differs markedly from that in Latin America, where Berniell et al. (2023) report the opposite.

Second, there is a need to more systematically examine maternal labor market outcomes and child outcomes together, particularly among low-income households. Yet, impact evaluations typically assess these domains in isolation. In our review, only one study evaluates the effects of paid leave on both maternal labor force participation and child outcomes, and only two do so for cash transfers. This gap reflects an analytical division rooted in policy priorities: gender equality is often framed as the central objective of paid maternity leave, while the reduction of intergenerational poverty guides evaluations of cash transfer programs. ECEC policies stand out as the domain in which both outcomes are regularly considered; four studies in our review assess both maternal employment and child development, reflecting the dual goals of gender and social equity. Nonetheless, all family policies have implications for both domains. For instance, Boo and Creamer (2019) and Lopez-Arana et al. (2016) find that cash transfers improve child health while reducing women's labor force participation, suggesting that progress in one area may come at the expense of another. This points to a key line of inquiry: under what conditions do family policies simultaneously enhance women's economic security and children's wellbeing, and when do they instead generate trade-offs between these goals?

Furthermore, it remains unclear why paid maternity leave tends to yield positive effects on child health and development despite its limited ability to reduce the *motherhood penalty* in many LMICs, due to low coverage and weak enforcement. Several qualitative studies suggest that maternity leave could theoretically improve child health—particularly in vulnerable households—by relieving work–family tensions during the critical first six months postpartum, supporting practices such as breastfeeding and intensive caregiving (Chowdhury et al. 2021; Horwood et al. 2021). Yet in practice, cash transfers often serve as the *de facto* mechanism for enabling caregiving breaks, as many economically vulnerable women lack access to statutory leave due to their exclusion from formal employment. Future research should apply the same level of methodological rigor used to evaluate the impact of paid maternity leave on maternal labor market outcomes to the assessment of its effects on child health outcomes—ideally examining both dimensions jointly. Existing studies on the impact of paid leave on child health outcomes predominantly rely on macro-level or cross-country micro-level data, often employing less robust causal inference methods than those used in studies focusing on women's labor market outcomes. Such dual-focused evaluations would offer a more comprehensive understanding of how family policies operate across diverse institutional and socioeconomic contexts.

Third, the measurement of family policies remains insufficiently nuanced, even though our review highlights an important question: how do differences in family policy features and constellations affect their impact? Many impact evaluations rely on binary indicators denoting the existence of a policy, which obscures critical differences in design, intensity, quality, and enforcement—factors essential to understanding actual effectiveness. This limitation is compounded by a dearth of comparative research; most evaluations using causal methods are confined to single-country studies. A comparative perspective would enrich our understanding of policy effectiveness, particularly by matching countries with similar labor market structures for women but differing family policy constellations. Several studies underscore that employment opportunities shape the labor outcomes of family policy interventions, reinforcing the need for context-sensitive metrics. At a minimum, we advocate for the development of more sophisticated policy indicators that reflect labor market realities in LMICs. For instance, given the prevalence of informal employment, research should explicitly incorporate this dimension when defining treatment and comparison groups. Measures of effective coverage and take-up rates are also likely to be more informative than conventional indicators such as the duration of maternity leave, which often applies only to a small, privileged subset of the workforce in LMICs. In Latin America, for example, domestic and temporary workers, historically excluded from formal protections, have increasingly gained legal entitlements to maternity leave since the early 2000 s (Blofield and Franzoni 2018), marking significant progress that should be better captured in evaluation frameworks.

Finally, future research should apply more disaggregated approaches to the analysis of policy beneficiaries to better capture how family policies interact with diverse socio-economic attributes of individuals and households. As highlighted in our review of *work–family trade-offs*, mothers experience these tensions in highly differentiated ways depending on their socio-economic status. Not surprisingly, while empirical studies report null effects of family policies when examining average outcomes, more nuanced analyses often reveal that particular subgroups, such as low-income mothers, rural residents, or informal

sector workers, exhibit significant shifts in labor supply or child well-being. Disaggregating beneficiaries not only by income and urban–rural residence but also by intra-household dynamics and prevailing gender norms would illuminate how structural and normative factors shape both policy uptake and effectiveness. For example, Debela et al. (2015) show that when mothers engage in income-generating activities, particularly in less exploitative forms of labor, the positive effects of social protection programs on child nutrition are amplified. Such evidence underscores the need to consider heterogeneity in both opportunities and constraints when evaluating family policies, in order to design interventions that are more inclusive, equitable, and responsive to the lived realities of women and children in LMICs.

8. Policy implication and Conclusion

Work–family challenges pose a significant barrier to advancing gender equality in labor markets and hinder child development, thereby reinforcing social inequalities from the earliest stages of life. In this review, we examine the specific work–family tensions faced by mothers in LMICs. Contrary to the dominant perspective in economics, which tends to associate women's labor force participation and related constraints with later stages of development, we show that such tensions are already deeply entrenched in LMICs. The nature of employment most commonly available to women in these contexts, particularly in agriculture and informal sectors, is often fundamentally incompatible with caregiving responsibilities, challenging conventional assumptions. Moreover, traditional family structures, once supported by extended kin networks, have been disrupted by demographic transitions, rapid urbanization, the HIV/AIDS epidemic, and recurrent economic shocks. Persistent gender norms further intensify the adverse effects of fertility on maternal labor outcomes, placing disproportionate pressure on low-income mothers, who are expected to contribute economically while receiving limited support from male partners in caregiving and domestic responsibilities.

To explain how mothers navigate the competing demands of paid labor and caregiving, we propose a conceptual framework that highlights a poverty-driven dimension of work–family challenge unique to LMICs: economically vulnerable mothers often increase their labor supply after childbirth, frequently by entering or intensifying their participation in precarious employment. This strategy, however, often leads to adverse outcomes for child health and development, revealing an interrelationship between maternal labor outcomes and child well-being. Development economics literature has yet to fully recognize this income–caregiving trade-off as a defining feature of work–family challenges in these settings.

Building on these findings, we call for an integrated policy approach that explicitly considers gender and social equality as interrelated goals of family policy. Resolving the dual crises of care and poverty is highly demanding within a global political economy in which neoliberal restructuring increases households' reliance on women's earnings while failing to generate sufficient high-quality jobs, with the result that women are disproportionately concentrated in precarious work (Seguino and Braunstein 2018). To date, these aims remain largely unbalanced and siloed, as reflected in the separation of SDGs. In LMICs, family policies have been designed mainly through a social investment lens that prioritizes child development and health among low-income households, while the gender equality dimension has received far less attention. The design and conditionality of poverty-targeted family policies can reduce mothers' capacity to participate in paid employment and discourage them from taking better-quality jobs, for example when eligibility rules exclude formal employment (Levy and Schady 2013). At the same time, employment-oriented family policies remain highly limited in LMICs, in sharp contrast to high-income countries that have expanded universal maternity leave and developed more gender-neutral leave schemes. As a result, a minority of middle-class women secure paid leave and meet care needs by employing low-income women, while low-income mothers, even when covered by cash transfers and targeted childcare, still rarely gain access to quality employment (Böger et al. 2025).

Increasingly, the social investment approach emphasizes the complementarity of social and gender equality goals (Hemerijck et al. 2023), a view supported by our review of LMICs: incorporating maternal employment into policies that emphasize child development may, in fact, strengthen their effectiveness. Evidence suggests that child outcomes improve when mothers' bargaining power, bolstered through paid work, is high. Coupling ECEC services or cash transfers with public employment programs for economically vulnerable women is an example of amplifying child health gains and improving women's labor market outcomes simultaneously (Clark et al. 2017; Debela et al. 2015). However, achieving both goals, and especially gender equality, in LMICs is far more complex and requires moving beyond family policy to expand the supply of quality jobs. A large body of research shows that even educated women in LMICs often confront a scarcity of such opportunities, as men occupy many of the service-sector positions that are more frequently held by women in high-income countries (Chatterjee and Vanneman, 2022; Seguino and Braunstein 2018). The Vietnamese case suggests that reducing gender segregation through family policy becomes feasible when these measures accompany structural transformation that expands formal employment (Vu and Glewwe 2022).

An additional policy implication concerns the need to understand and account for local labor market institutions. Addressing informal employment is critical, as such jobs typically offer meager wages, necessitate long hours, and provide no formal labor protections, including paid maternity leave. Although the latest International Labor Organization's Maternity Protection Convention (C183) seeks to extend leave coverage to informal workers, including domestic, self-employed, and home-based workers, most LMICs, with the exception of several Latin American countries, have yet to adopt these protections for the majority of female workers. Guaranteeing paid maternity leave during the critical postpartum period would represent a major advancement for both maternal and child well-being. Family policy design should also reflect other types of local labor market institutions. Our review emphasizes the specific working conditions associated with jobs held by mothers in LMICs, such as work hours, task types, commuting distances, job flexibility, and the feasibility of bringing children to work, which should be considered in policymaking. In agriculture-based economies, seasonality must be factored into the provision of ECEC, as time poverty intensifies during peak labor periods (Rao and Raju 2020). In urban informal sectors, mothers often avoid formal childcare because opening hours are fixed and misaligned with irregular or extended work schedules (Horwood et al. 2021).

Finally, the quality of family policies must be taken seriously. Beyond the availability of childcare service, both affordability (e.g., childcare fees) and quality (e.g., curriculum, staff qualifications, opening hours, and monitoring systems) critically influence service uptake. Qualitative research reveals that many mothers refrain from using formal childcare due to prohibitively high costs or concerns about poor service quality (Ruiz-Casares and Heymann 2009; Horwood et al. 2021). The policy model adopted plays a central role in shaping quality and thus its child outcomes (Bernal et al. 2019). Center-based childcare often delivers better outcomes for child health and development by investing in physical infrastructure (e.g., kitchens, playgrounds), employing specialized personnel (e.g., nutritionists, administrative staff), and organizing children into age-specific classrooms. By contrast, home- and community-based care typically mixes children of different ages and is operated by individual caregivers in private homes. Although public childcare centers require greater financial investment, they generally offer higher-quality services. Furthermore, the lack of service infrastructure critically undermines the quality and effectiveness of family support in LMICs. Many mothers report that excessively short maternity leave with low wage replacement rates, combined with limited access to basic healthcare, prevents them from adhering to the recommended six months of exclusive breastfeeding, even when they are formally entitled

to paid leave (Farista and Jaga 2024). Infrastructure gaps also hinder the effectiveness of cash transfer programs. In contexts where health and administrative systems are weak, both the utilization of healthcare services and access to cash benefits are often limited (Aizawa 2022; Chakrabarti et al. 2021). Strengthening service infrastructure is thus crucial for enhancing the reach and impact of family policies, ensuring that family policy benefits translate into substantive improvements in maternal labor market outcomes and child well-being.

CRediT authorship contribution statement

Keonhi Son: Writing – review & editing, Writing – original draft, Investigation, Conceptualization. **Aysegul Kayaoglu:** Writing – original draft, Methodology.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Acknowledgement

We gratefully acknowledge the Collaborative Research Center 1342, Global Dynamics of Social Policy. The center is funded by the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation) under project number 374666841—SFB 1342. Additionally, we acknowledge the generous support from the Mannheim Center for European Social Research.

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.worlddev.2026.107349.

Data availability

No data was used for the research described in the article.

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