



# Internal and international parental migration and the living conditions of children in Ghana

Victor Cebotari<sup>a,b,\*</sup>, Bilisuma B. Dito<sup>c</sup>

<sup>a</sup> University of Luxembourg, 2 Avenue de l'Université, L-4365 Esch-sur-Alzette, Luxembourg

<sup>b</sup> Maastricht University, Boschstraat 24, 6211 AX Maastricht, the Netherlands

<sup>c</sup> Department of Technology and Society Studies, Maastricht University, Grote Gracht 82, 6211SZ, the Netherlands

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## ABSTRACT

Relatively little is known about the effects of parental migration on the living conditions of children who stay behind. Using survey data collected in 2010 from Ghanaian school children (11–18 years; N = 2100), this study investigates variations in children's durable goods and private utilities when parents migrate internally or internationally compared to a control group of children who live with their parents. The study also investigates whether the effects are contingent upon the marital situation of the parents. The findings show that parental migration is not associated with poorer living conditions for Ghanaian children. Rather, specific factors, such as parental divorce, internal migration and the gender of the child, influence whether children experience a decline in their living conditions when parents migrate.

## 1. Introduction

Ghanaian migration is a major source of labour supply to the Global North. The Ghanaian international migrant stock is estimated to range from 0.8 million (European Commission, 2016) to 1.5 million (Government of Ghana, 2016). Since the 1990s, an estimated eight million Ghanaians have also migrated internally from rural to urban areas, chiefly to the metropolitan areas of Accra and Kumasi (Molini & Paci, 2015). Many of these migrants seek better standards of living for themselves and for their family members who often stay behind. There are no accurate estimates on the proportion of children who live separated from their parents due to migration. The available data on children's living arrangements show that up to 37% of all Ghanaian children, excluding orphans, lived without at least one biological parent in 2014 (Ghana Statistical Service, Ghana Health Service, and ICF International, 2014). Whether this is entirely due to internal and international parental migration is unknown due to data constraints.

Clearly a large proportion of Ghanaian children live separated from their parents due to migration, with their care managed by family members who live in different locations, within and outside the country. Studies have argued that migration leads to the commodification of love, in which parents replace physical absence with material goods and improved living conditions for children who stay behind (Coe, 2011a;

Parreñas, 2005). Indeed, evidence shows that families employ formal and informal strategies to address the material needs of children in transnational care, with various effects (Levitt, Viterna, Mueller, & Lloyd, 2017). Specifically, studies show that parental migration leads to improved living conditions for children, measured with outcomes such as food and non-food consumption (Beegle, Weerdt, & Dercon, 2011); gifts and commodities (Parreñas, 2005); and housing, services and assets (Mberu, 2006; Richter, Norris, Swart, & Ginsburg, 2006). Studies also note that improved living conditions are not necessarily a replacement of parental care for children who stay behind. While children attach themselves to more financially secure caregivers (Coe, 2011a), they also long to be reunited with their parents in the country or abroad (Cebotari, Mazzucato, & Siegel, 2017; Poeze, Dankyi, & Mazzucato, 2017). In a study on Honduran transnational families, Schmalzbauer (2004) describes how children have difficulties understanding where and who the father is, despite regularly receiving material goods and remittances from fathers abroad. Insights from Filipino migrant mothers show that children enjoy improved living conditions at home, but they also miss maternal affection (Parreñas, 2005). When one or both parents migrate, the risk of divorce increases (Caarls, 2015), in which case there is a risk of a diminished material support to children who stay behind (Dreby, 2010; Nobles, 2011).

The analyses performed in these studies show there are benefits and

\* Corresponding author.

E-mail addresses: [victor.cebotari@uni.lu](mailto:victor.cebotari@uni.lu), [victor.cebotari@maastrichtuniversity.nl](mailto:victor.cebotari@maastrichtuniversity.nl) (V. Cebotari), [bilisuma.dito@maastrichtuniversity.nl](mailto:bilisuma.dito@maastrichtuniversity.nl) (B.B. Dito).

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costs for children when parents migrate. These studies also point to a more complex range of characteristics that define parental migration and the living conditions of children who stay behind. Because existing studies are generally small in scale and context-specific, they may not provide a common sense understanding of Ghanaian migrant families and their investments in children. There is a need for a more contextualised understanding of what characteristics are more likely to determine the living conditions of Ghanaian children when parents migrate.

The aim of this study is to examine associations between different characteristics of parental migration and the living conditions of children in Ghana. We do this by comparing the outcomes of children of migrants in relation to children of non-migrant parents. With few exceptions, the lack of adequate migration data has hampered the understanding of children's living conditions in Africa, in contrast with Asian and Latin American countries, where migration data is more widely available.

The current study adds novelty to literature on the role of migration on children's lives in several ways. First, it explores different migration characteristics that depict the lives of Ghanaian children who stay behind. It does so by operationalizing migration characteristics, not only by looking at who the migrant parent is, a conventional measure of parental migration, but also by distinguishing between internal and international migration, and identifying the marital status of migrant parents. Migrant families are diverse, and these characteristics have the potential to unveil specifics in associations that may affect children negatively or positively, thus adding precision to the analysis of migrant families. Second, this study employs unique data in that it is obtained from children themselves. Having children's reports is important because existing literature relies almost exclusively on adult reports to advance theoretical arguments about children whose parents migrated internally or internationally. Existing studies also show that compared with children, adults tend to over-report on children's outcomes (Cebotari, Siegel, & Mazzucato, 2016; Jordan & Graham, 2012). Furthermore, migrant parents may not always know of children's living conditions, especially if they have a tense relationship with the child's caregiver (Poeze et al., 2017). Third, this study adds a gender perspective to the analysis of children's living conditions. We know from qualitative studies that gender differences exist in the quality of care and the living conditions of Ghanaian children who stay behind (Poeze et al., 2017; Whitehead, Hashim & Iversen, 2007). However, this study is the first to test these gender effects in Ghana through quantitative modelling.

Using survey data collected in four urban areas of Ghana, this study measures children's living conditions through an indexed value of seven asset indicators: type of house, ownership of the house, cooking space, both bathroom facilities and toilet facilities, availability of a computer and finally availability of a refrigerator, both for the child's use. Understanding how migration affects children's material welfare is critical to supporting policies and strategies that will effectively improve the well-being of children who stay behind.

## 2. Background

### 2.1. Parental migration and child welfare

At the turn of the century, transnational family studies emerged to focus specifically on families that live in the realm of migration. Transnational families refer to when families span two or more country contexts and therefore do not account, in a strict sense, for children who live separated from family members due to internal migration only. More recently, it is increasingly argued to study different forms of migration and their outcomes holistically, as a family process and an interplay between different factors and contexts (Hugo, 2016; Song & Glick, 2020).

Within transnational family literature, the well-being of children

who stay behind is one major area of research. Despite interest in these children, the theoretical input remains underdeveloped. Generally, money and time are seen as pivotal resources that parents can invest in their children (Wen & Lin, 2012). Along these lines there are benefits and costs associated with parental migration for children in transnational care. Indeed, research indicates that parental migration may improve the socioeconomic status of children (Askarov & Doucouliagos, 2020; Parreñas, 2005; Richter et al., 2006; Wen & Lin, 2012), but there are also concerns of the emotional costs incurred by children of migrants (Coe, 2011a; Jordan & Graham, 2012; Mazzucato & Cebotari, 2017). It implies that the effects of migration on children are not unidimensional and must be understood in the context surrounding the care of children (Cebotari, Mazzucato, & Appiah, 2018). Several mechanisms that define parental migration and the care arrangements for children are detailed next.

Starting with early theoretical insights into the costs and returns of human migration (Sjaastad, 1962), it is generally acknowledged that migration is key to the economic development and to improving the living standards of those who stay behind. According to the new economics of the labour migration paradigm (Stark & Bloom, 1985), migration is primarily a family strategy to diversify the income portfolio and build resilience against various risks and liquidity constraints. In sub-Saharan Africa, improvement in the living conditions of family members has been identified as one of the main drivers of migration (Adepoju, 2004). The additional resources from migration aim at enhancing the quality of life of family members and at maximising their economic welfare. In the case of Ghana, research shows the importance of internal and overseas transfers of money and goods for improved consumption and access to healthcare and socially significant expenses on funeral services of family members who stay behind (Arhinful, 2001). A study using panel evidence shows that rural-to-urban migration has contributed to improved household consumption growth in Tanzania (Beegle et al., 2011). Similarly, in Ethiopia, Mberu (2006) found significant advantages from both long-term and temporary internal migration for the living conditions of household members, measured by 19 household items and assets. Further in Ghana, Ackah and Medvedev (2010) found positive effects of internal migration on household consumption provided that migrants send remittances and in sufficient amounts. In Nepal, Lokshin, Bontch-Osmolovski, and Glinskaya (2010) similarly concluded with regard to international labour migration.

When studies look specifically at associations between migration and children's living conditions, they indicate that under certain circumstances, migration may enhance children's well-being and their upward economic progression. In China, wealth generated by migration improves children's school enrolment and reduces the gender gap in education (Meng & Yamauchi, 2017). In the context of South Asia, Jordan and Graham (2012) revealed that children of migrants have higher material wealth, which in turn positively mediates their happiness and school performance. However, a study conducted in South Africa shows that rural children who had recently migrated to the city are more disadvantaged than long-term resident children in terms of housing and access to electricity, water, sanitation, and amenities such as a refrigerator, a television, a washing machine, a telephone and a motor vehicle (Richter et al., 2006). Furthermore, in Mexico, McKenzie (2005) used asset indicators to measure the degree of inequality among children in migrant households and found that greater wealth inequality is associated with lower school attendance rates for boys but not girls.

Parental migration also leads to the absence of parental input, which often causes considerable disruptions in children's lives. On the one hand, the human ecology model emphasises the importance of family environment and the negative consequences that children may incur when the significant adults in children's lives are absent (Bronfenbrenner, 1979). On the other hand, recent studies show the effects of new co-presence routines that rely on multiple media tools to recreate a space for family practices that shape different ways of 'doing family' from afar (Baldassar, Nedelcu, Merla, & Wilding, 2016). Such new ways

of co-presence facilitate the involvement of migrant parents in the daily activities of children who stay behind (Jordan, Dito, Nobles, & Graham, 2018; Meyers & Rugunan, 2020).

While some children experience parental separation due to migration only, other children experience parental absence due to migration and divorce. Notably, the evidence shows that migration increases the risk of divorce, such as when women migrate alone or when both partners migrate at the same time (Caarls, 2015). For children, parental migration and the added effect of divorce may represent a distinct experience. Parental migration is primarily motivated by a desire to improve the lives of children, whereas in cases of divorce, parents often move to different locations, build new families, and may have financial constraints to continue supporting their children (Dreby, 2010; Nobles, 2011).

Studies that address the effects of divorce on child welfare emphasise the adverse effect of marital dissolution on children's well-being (Amato, 2010). Within transnational family studies, the remitting behaviour of Salvadorian migrant parents indicates that children's economic well-being declined following parental divorce (Abrego, 2009). Parental investments in children slows down even further when divorced parents remarry and have children in the new unions (Dreby, 2010). A recent study in Ghana shows that children whose parents migrate and are divorced have greater emotional difficulties compared to children living with both parents (Mazzucato & Cebotari, 2017). Several factors appear to influence the extent of these effects on children. Girls, older children and children living in poorer families are more likely to be disadvantaged when parenting in the context of migration is affected by divorce (Landale & Oropesa, 2001; Nobles, 2011). However, evidence from Ghana shows that having a stable care arrangement, that is when children do not change their caregiver, is beneficial for children whose parents migrate and divorce (Cebotari et al., 2018).

There is a general tendency among scholars to articulate concerns about children when parents migrate. These concerns predominantly relate to children whose migrant parent is the mother (Parreñas, 2005; Xu, Xu, Simpkins, & Warschauer, 2019). From a theoretical perspective, the attachment theory posits that children need stability and the presence of a long-term caregiver for a meaningful development (Bowlby, 1958). It implies that children are more vulnerable to maternal migration in societies where mothers are children's primary caregivers. Studies found negative associations between maternal migration and the educational, emotional and physical development of children who stay behind in countries such as Mexico (Antman, 2012), Philippines (Parreñas, 2005) and China (Wen & Lin, 2012). In Ghana, however, norms of child fosterage and social parenthood prevail, in that children often live in the care of someone other than their biological parents, irrespective of whether or not parents have migrated (Cebotari et al., 2017). Such norms make it easier for parents, especially mothers, to migrate within Ghana and across and beyond the African continent (Goody, 1982). Indeed, the feminisation of migration is increasingly common in Ghana (Adepoju, 2004) and elsewhere (Cebotari et al., 2016; Parreñas, 2005). A recent study shows that Ghanaian migrant mothers are successful in securing proper living arrangements for their children who stay behind (Poeze et al., 2017). Similarly, in El Salvador, Abrego (2009) found that compared with children of migrant fathers, children of migrant mothers often thrive economically. This is arguably due, in part, to the remitting behaviour of mothers, in that they are more likely to send regular remittances and invest these resources in children (Pfeiffer & Taylor, 2008). Despite this evidence, more research is needed to better understand the trade-offs between improved living conditions and the costs associated with living without one or both parents due to migration.

One important but overlooked area of study is how internal and international migration differ in their effects on children's living conditions. Given that internal migration is prevalent in many developing countries, the investigation of these effects is crucial. Empirical studies

on the effects of migration on living conditions focus either on internal (Beegle et al., 2011; Mberu, 2006; Ackah & Medvedev, 2010; Molini & Paci, 2015) or international migration (Arhinful, 2001; Lokshin et al., 2010). To our knowledge, there are no studies that look at children's living conditions in the context of internal and international parental migration. Studies in the area of migration and development argue that internal and international migration share common drivers and motivations for migration, such as the kinship and friendship networks, and the desire to improve the well-being of family members who stay behind (Hickey & Yeoh, 2016; Vullnetari, 2020). Recent evidence shows that migration trajectories are often complex, with interlinked movements between internal and international migration periods, where patterns of internal migration often precede international migration (Cebotari et al., 2018; Hugo, 2016). Internal and international migration also have similar channels and preferences of sending in-kind and monetary remittances to family members who stay behind (Cebotari, 2020). However, there are reasons to believe that internal and international migration also entail various family disruption and welfare effects on children. Specifically, the two types of parental absence carry different expectations regarding the amount and the frequency of material benefits, with international migration perceived as providing greater material rewards for children and their caregivers (Poeze et al., 2017). International migration is often praised for its remitting potential, in that overseas migrants can send more remittances compared to domestic migrants (Antman, 2012). At the same time, international migration results in longer periods of separation compared to internal migration (Cebotari et al., 2018). Studies show that longer periods of parental absence may disrupt childcare practices (Dreby, 2010), may hinder child development (Lu, 2015) and may exacerbate parent-child conflicts (Coe, 2011b).

The literature also notes gender differences in the outcomes of children who stay behind. The rationale of household decision-making theory (Becker, 1965) posits that investments in children are proportionate with the perceived returns from these investments in terms of household utility. This paradigm has implications for children's living conditions, as there may be different dynamics in the lives of boys and girls following parental migration. In Ghana, evidence suggests that the living conditions of girls deteriorates when parents migrate, mainly due to increased domestic work and frequent changes in care arrangements that affect girls more often than boys (Whitehead et al., 2007). Ghanaian girls are also more likely to experience poorer health and happiness outcomes when parents migrate internally or internationally (Cebotari et al., 2018). There is similar evidence in other geographical contexts such as Romania, where Robila (2011) found higher levels of depression among girls of migrant parents compared to boys. In Vietnam, Behrman and Knowles (1999) note that fewer resources from parents abroad are invested in girls compared to boys. In Mexico, however, Antman (2012) shows that the allocation of resources in households tend to favour girls when family members migrate. Similarly, Nobles (2011) observed that Mexican migrant fathers invest differentially in children, in that girls receive considerably more economic resources than boys do. The same author, however, notes a reversal in the pattern of investment, with boys favoured over girls when families are affected by divorce. In Tajikistan, the migration of household members is more likely to lead to normal school progress among girls (Cebotari, 2018). Depending on the context, the net effects of parental migration on children's living conditions may vary by gender and the observed characteristics of family life.

## 2.2. Hypotheses

Because existing evidence is often context-specific, it is difficult to make a priori assumptions about the living conditions of children in Ghana based on the effects of migration measured in other settings. Nevertheless, the empirical evidence suggests that mechanisms pertaining to internal and international migration, which parent has migrated, migration and parental divorce, and the gender of the child all

may nuance the way migration associates with children's living conditions.

According to the studies referenced earlier, several hypotheses are explored:

**Hypothesis 1.** Both internal and international parental migration are expected to have a positive effect on children's living conditions compared to children living with both parents.

**Hypothesis 2.** Parental divorce, whether accompanied by internal or international migration, will affect children's living conditions more negatively in comparison with children living with both parents.

**Hypothesis 3.** Parental migration involving mothers is likely to have a positive effect on children's living conditions compared to children living with both parents.

**Hypothesis 4.** Girls are more at risk to have poorer living conditions in comparison with boys when living in different care arrangements due to migration.

### 3. Method

#### 3.1. Data and sample

The study draws upon a large-scale survey data collected in 2010–2011 from Ghanaian secondary school children in four urban areas with high migration flows: Accra, Kumasi, Sunyani and Cape Coast. To date, the survey provides a unique large scale quantitative perspective on how children perceive and measure patterns of migration, well-being, and care arrangements in an African context.

A stratified sampling procedure was used to select children from public and private, low- and high-quality schools in each urban area. The list of schools was obtained from the Ministry of Education in Ghana, which ranks public and private schools in quality hierarchies based on school enrolment, infrastructure and children's performance on final examinations. In total, 22 junior high schools (JHS) and senior high schools (SHS) were randomly selected and invited to participate in the survey. All schools agreed to participate, except for one that was subsequently replaced by another randomly selected school in the same urban location. In Ghana, JHS precedes SHS, and each has three grades. In each school, the research team randomly selected one class from each grade and invited all children in that class to participate in the survey. Subsequently, the team randomly selected six additional classrooms from the three grades in which only children with at least one internal or international migrant parent was invited to complete the questionnaire. Children of migrants were purposely oversampled to obtain a sufficient number of children to compare them with a sample of children living with both parents in the same communities. Independent sample t-tests compared the means of key characteristics of the random and purposive samples and found no significant differences. Therefore, the reliability of the data and the analysis was not affected by inclusion of two samples of children.

The survey questionnaire was designed as a self-reporting tool, where the children filled in the data themselves under the guidance and supervision of the research team. The questionnaire contained over 190 indicators pertaining to parental migration, children's family life, socioeconomic characteristics and well-being. All children were informed of the voluntary nature of their participation. The survey's response rate was 85%. The analytical sample comprised boys ( $N = 959$ ) and girls ( $N = 1141$ ) aged between 11 and 18 years. These samples did not include children who are orphans ( $N = 116$ ).

The data collection and analysis received approval from the ethics committee of the University College Cork. We acknowledge the existing debate on whether it is ethical to collect data from children in school settings with only their own consent and without the consent of their parents. An emerging discussion posits that although young people have their own power and agency (Dreby, 2010; Whitehead et al., 2007), they

are hard to access as they are highly governed and protected by parents, schools and governing bodies. As a result, they are less involved in decision-making processes such as whether to participate in research.

#### 3.2. Measures

The current study used an indexed measure of *children's living conditions* that comprises seven asset indicators. Based on McKenzie (2005), the living conditions index was generated using a principal components analysis to combine seven assets that include durable goods and private utilities: (1) the child lives in a separate or semi-detached house, (2) the house is owned by the child's parent(s), (3) there is a separate room for cooking in the house, (4) a separate bathroom is used by the child's family, (5) there is a flush toilet inside the house used by the child's family, (6) there is a working computer and (7) there is a refrigerator that the child can use. The final indexed measure is a linear scale with values between 0 and 7. The Cronbach's alpha score of the indexed measure is 0.70, attesting for a good reliability of included items (Nunnally & Bernstein, 1994). The inclusion of asset items in this format is the predominant source of compatible survey information on the living conditions in developing countries. Including these assets is also compatible with the needs of children who stay behind. For instance, the availability of a computer for child use is an essential tool to regularly keep in touch and communicate with a migrant parent (Baldassar et al., 2016; Cebotari, 2018; Poeze et al., 2017). The indexed value of living conditions is widely applied in the migration and development studies, and its reliability has been validated by Mberu (2006), Filmer and Pritchett (2001) and McKenzie (2005) in the contexts of Ethiopia, India and Mexico, respectively.

The analysis includes three parental migration indicators. The first indicator classifies the children according to those who live with (1) non-migrant parents and those who have at least one parent who is an (2) internal or (3) international migrant. The second indicator further divides the children into categories that also account for parental marital status: non-migrant parents, parent(s) away internally and married, parent(s) away internationally and married, parent(s) away internally and divorced/separated and, finally, parent(s) away internationally and divorced/separated. The classifications of the third indicator are focused on which parent has migrated: non-migrant parents, father away internationally, father away internally, mother away internationally, mother away internally, both parents away internationally, and both parents away internally. This last indicator omits children whose parents are divorced. This omission is necessary to isolate the effects of migration from the effects of marital divorce when analysing this type of family separation.

One demographic indicator accounts for children's age groups (11–14, 15–16 and 17–18 years). Family characteristics include five indicators: binary measurements for both maternal as well as paternal education, where 1 indicates completed secondary education or more; a variable for the total of other children living with the child; a binary indicator that equals 1 if the child lives with younger children; and another binary indicator of whether children live with a resident parent.

Additional variables relating to the characteristics of children's care were also included. The stability of children's care arrangement is assessed according to three categories that indicate the frequency with which the primary caregiver was changed: the child never changed caregiver, the child changed caregiver once, and the child changed caregiver two or more times (Cebotari et al., 2017). A binary indicator measuring the quality of the child-caregiver relationship was also included where 1 indicates a distant relationship. A child's primary caregiver is often a parent, other family or non-family members. Recent studies emphasised the need to account for dynamics in family functioning that involve children of migrants and their primary caregiver when measuring children's well-being outcomes (Cebotari et al., 2018; Jordan & Graham, 2012; Poeze et al., 2017). Finally, a variable for the number of assets children had at the start of primary school was included

to account for the differences in the living standards of children over time (McKenzie, 2005).

### 3.3. Analytical strategy

Although recent empirical research on migration has provided many insights into how children fare when parents migrate, few of these studies have modelled associations between migration and children's living conditions. A major limitation of this type of analysis is the availability of data that would allow for a convincing assessment of the living conditions of children in migrant and non-migrant settings and the inherent difficulty in observing changes in migration status over time. Several studies use experimental data (Stillman & McKenzie, 2012) or longitudinal surveys (Cebotari, 2020; Lu, 2015; Nobles, 2011), but most studies rely on snapshot evidence to explore such lines of inquiry.

The key concerns with snapshot data are unobserved heterogeneity that may affect the outcomes and measurements of migration along with the implicit assumption that migration occurs at random. For instance, wealth differentials may drive migration in that those who migrate may have greater earning potential and skills compared with those who stay behind (Harris & Todaro, 1970). However, recent longitudinal evidence found no conclusive evidence that Ghanaian parents who transitioned from being non-migrants to being internal or international migrants had better living conditions in the year(s) prior to migration than parents who did not migrate (Cebotari et al., 2018). It implies that the mechanisms of migration may be context-specific or that there may be other conditions that influence movement and wealth in the migration-sending context.

Previous studies have used instrumental variables (Beegle et al., 2011; Stillman & McKenzie, 2012) to account for selectivity of migration. However, this approach may not be suitable for our analysis, as we account for different migration configurations and distinguish between children of internal and international migrants, with each migrant prone to different degrees of selectivity. In addition, we rely on children's self-reported data, which is not a viable source for measuring the selectivity of migrant parents. In the absence of an instrumental design, we turn to the next best strategy, which is to account for several characteristics described earlier to partially control for issues of selectivity in the process of parental migration.

This study uses data collected from schoolchildren. The analysis employs two-level mixed-effects OLS linear regressions to examine the associations between parental migration and children's living conditions. Using multilevel modelling is motivated by the need to account for the dependency of observations in the survey design, in that child-level observations are nested at the school level. Collinearity tests were conducted to estimate the inter-associations among the independent variables. Results from collinearity tests showed normal tolerance values (0.8–0.9) and variation inflation factors (1–1.5) for all indicators.

A separate model is run for each of the three migration characteristics in relation to the living conditions of the children. First, we look at the effects of internal and international parental migration on the living conditions of the child. Second, we observe the effects of the marital status of internal and international migrant parents on the outcome. In the last step of the analysis, we look at which migrant parent is away (mother, father, both), whether the migration is internal or international and the association between migration and a child's living conditions. To isolate the effects of parental migration from those of divorce, the third model omits children whose parents are divorced or separated. We employed bivariate means comparison tests to look for differences in the means of the key indicators for the excluded and retained observations, and none were observed. For brevity, we only present the results of the full models.

## 4. Results

Table 1 presents the descriptive statistics for the key variables in our study. The sample comprises children living in households with an average asset index of 4.5 with no notable differences in the sub-samples of boys and girls. This value is twice as large as the average asset index for children at the start of their primary school. We observe only small differences by the gender of the child, with girls starting with a relatively smaller number of assets compared to boys (1.7 and 1.9, respectively).

More generally, 49% of the boys and 46% of girls have at least one migrant parent away, internally or internationally. Of all sampled children, similar proportions of boys and girls (23% and 22%, respectively) have internal migrant parent(s), and 26% of the boys and 24% of the girls have international migrant parent(s).

For both internal and international migration, parental divorce appears to be an important feature of family life. The samples of boys and girls with an internal migrant parent have similar percentages of parents divorced or separated (10% in each). The divorce rate for international migrant parents is slightly lower (7%). The data further show that 14% and 12% of boys and girls, respectively, have fathers who have migrated internationally. The rate of fathers who migrate internally is 9% for boys and 8% for girls. Children with mothers who have migrated internationally make up 3% of the overall sample on average, which is similar to the proportion of children whose mothers have migrated internally. On average, 5% of boys and 4% of girls have both parents away internationally – this rate is slightly lower than the proportion of boys and girls with both parents away internally (6% for each).

Children reported having a higher proportion of fathers with secondary and higher education (61%) than mothers (44%). This difference reflects the gender discrepancy in education achievements of older generations in many developing countries, including Ghana. Children also reported that they live with three other children on average, with more than half living with a younger sibling. While most boys and girls in our sample (66%) have never changed their caregivers, a substantial proportion of them (18% on average) have done so more than twice. Furthermore, while a large majority of children (81%) reside with caregivers with whom they have a good quality relationship, some children (18% of the boys and 25% of the girls) live with caregivers with whom they have a strained relationship.

Table 2 includes models of migrant parents who have migrated internally or internationally, both of which are common phenomena in Ghana. The results indicate that boys and girls with parents who migrate internally have less favourable living conditions than boys and girls whose parents are non-migrants. The relative effect size for girls ( $\beta = -0.64$ , Table 2) was larger than for the comparable effect size for boys ( $\beta = -0.37$ , Table 2), attesting to a stronger negative effect of the former on living conditions. These results are not surprising, considering how most internal migrants in Ghana come from rural areas and end up in other rural areas (Ackah & Medvedev, 2010), with fewer economic opportunities that can meaningfully contribute to better living conditions for their children. However, our results indicate that the living conditions of children with international migrant parents is not significantly different from children who live with their parents in Ghana. We are not again surprised by this result as international migrants are a major source of financial remittances to Ghana (Cebotari, 2020; Government of Ghana, 2016), which potentially goes to investments in improving the living conditions of households where children reside.

Table 3 presents analyses that delves into the effects of parental migration and the marital status of the migrant parent in relation to children's living condition. Here we analysed whether migrating internally or internationally and being married or divorced have similar consequences on the living conditions of children, compared to the living conditions of children who live with both their parents in Ghana. We provide the analyses for girls and boys separately to examine any potential gender-specific effects. We observe no significant differences between the living conditions of boys of internal or international

**Table 1**  
Descriptive statistics of variables by the gender of children.

|   | Boys                     |     | Girls                    |      | Test statistic |
|---|--------------------------|-----|--------------------------|------|----------------|
|   | Percentage/<br>mean (SD) | N   | Percentage/<br>mean (SD) | N    |                |
| Living conditions index                             | 4.5 (1.9)                | 959 | 4.6 (1.9)                | 1141 | 0.03           |
| Internal and international parental migration       | 100                      | 959 | 100                      | 1141 | 1.38           |
| Non-migrant parents                                 | 51                       | 489 | 53.6                     | 611  |                |
| Parent(s) away internally                           | 23.4                     | 224 | 22.3                     | 255  |                |
| Parent(s) away internationally                      | 25.6                     | 246 | 24.1                     | 275  |                |
| Parental migration and marital status               | 100                      | 959 | 100                      | 1141 | 4.34*          |
| Non-migrant parents                                 | 51                       | 489 | 53.6                     | 611  |                |
| Parent(s) away internally & married                 | 13.1                     | 126 | 11.9                     | 136  |                |
| Parent(s) away internationally & married            | 18.7                     | 179 | 17.0                     | 194  |                |
| Parent(s) away internally & divorced/separated      | 10.2                     | 98  | 10.4                     | 119  |                |
| Parent(s) away internationally & divorced/separated | 7.0                      | 67  | 7.1                      | 81   |                |
| Parental migration status                           | 100                      | 742 | 100                      | 898  | 3.3**          |
| Non-migrant parents                                 | 60.5                     | 449 | 63.6                     | 571  |                |
| Father away internally                              | 9.2                      | 68  | 8.1                      | 73   |                |
| Mother away internally                              | 2.4                      | 18  | 2.9                      | 26   |                |
| Both away internally                                | 6.5                      | 48  | 6.3                      | 57   |                |
| Father away internationally                         | 13.9                     | 103 | 12.0                     | 108  |                |
| Mother away internationally                         | 3.0                      | 22  | 3.2                      | 29   |                |
| Both away internationally                           | 4.6                      | 34  | 3.8                      | 34   |                |
| Child age (11–14 years)                             | 100                      | 959 | 100                      | 1141 | 2.8*           |
| (15–16 years)                                       | 33.8                     | 324 | 35.9                     | 410  |                |
| (17–18 years)                                       | 38.4                     | 368 | 37.2                     | 425  |                |
| Mother's education secondary or more                | 27.8                     | 267 | 26.8                     | 306  |                |
| Father's education secondary or more                | 43.5                     | 417 | 45                       | 513  | 0.5            |
| Total number of children living with the child      | 61                       | 585 | 61.1                     | 696  | 0.1            |
| The child is living with younger siblings           | 3 (2.3)                  | 959 | 3.1 (2.3)                | 1141 | 0.1            |
| The stability of care during child's lifetime       | 56.7                     | 544 | 54.9                     | 626  | 0.4            |
| Child never changed caregiver                       | 100                      | 959 | 100                      | 1141 | 0.5**          |
| Child changed caregiver once                        | 65.7                     | 630 | 65.5                     | 747  |                |
| Child changed caregiver twice or more times         | 16.7                     | 160 | 15.9                     | 182  |                |
| Resident parent                                     | 17.6                     | 169 | 18.6                     | 212  |                |
|   | 81.1                     | 778 | 80                       | 913  | 0.1            |
|   | 18                       | 173 | 24.8                     | 283  | 14.2**         |

**Table 1 (continued)**

|  | Boys                     |     | Girls                    |      | Test statistic |
|--|--------------------------|-----|--------------------------|------|----------------|
|  | Percentage/<br>mean (SD) | N   | Percentage/<br>mean (SD) | N    |                |
| The quality of child-caregiver relationship is distant |                          |     |                          |      |                |
| Number of assets at the start of primary school        | 1.9 (2.3)                | 959 | 1.7 (2.3)                | 1141 | 2.4*           |

Notes. Chi-squared tests were used for all comparisons except for the living conditions index, the total number of children, and the number of assets at the start of primary school, which used analysis of variance (ANOVA). Parental migration status excludes divorced/separated parents.

\*  $p < 0.05$ .

\*\*  $p < 0.01$ .

\*\*\*  $p < 0.001$ .

**Table 2**

Living conditions, and the internal and international parental migration.

|   | Boys     |        | Girls    |        |
|---|----------|--------|----------|--------|
|   | $\beta$  | SE     | $\beta$  | SE     |
| Internal and international parental migration                         |          |        |          |        |
| Non-migrant parents   | –        | –      | –        | –      |
| Parent(s) away internally   | –0.37**  | (0.14) | –0.64*** | (0.13) |
| Parent(s) away internationally  | –0.08    | (0.14) | –0.13    | (0.12) |
| Child age (11–14 years)   | –        | –      | –        | –      |
| Child age (15–16 years)   | –0.04    | (0.14) | 0.06     | (0.13) |
| Child age (17–18 years)   | –0.04    | (0.18) | 0.13     | (0.17) |
| Mother's education secondary or more                                  | 0.32*    | (0.13) | 0.40***  | (0.11) |
| Father's education secondary or more                                  | 0.65***  | (0.14) | 0.46***  | (0.13) |
| Total number of children living with the child                        | 0.04     | (0.02) | 0.04     | (0.02) |
| The child is living with younger siblings                             | –0.07    | (0.11) | –0.03    | (0.10) |
| The stability of care during child's lifetime                         |          |        |          |        |
| Child never changed caregiver   | –        | –      | –        | –      |
| Child changed caregiver once  | 0.16     | (0.14) | –0.25    | (0.13) |
| Child changed caregiver twice or more times                           | 0.10     | (0.14) | –0.24*   | (0.13) |
| Resident parent   | –0.09    | (0.15) | 0.30*    | (0.14) |
| The quality of child-caregiver relationship is distant                | –0.07    | (0.13) | –0.22*   | (0.11) |
| Number of assets at the start of primary school                       | 0.10***  | (0.02) | 0.11***  | (0.02) |
| _cons   | 3.68***  | (0.31) | 4.17***  | (0.30) |
| Random-effects parameters   |          |        |          |        |
| Log (SD) level two (schools)  | 0.41***  | (0.02) | 0.39***  | (0.02) |
| Log (SD) level one (individuals)                                      | 1.50***  | (0.33) | 1.48***  | (0.31) |
| Variance components: intraclass correlation estimates at school level | 0.23     |        | 0.27     |        |
| N (children)  | 959      |        | 1141     |        |
| N (schools)   | 22       |        | 22       |        |
| Log likelihood  | –1901.96 |        | –2267.38 |        |

Notes: Multilevel OLS regressions. Standard errors in parentheses.

\*  $p < 0.05$ .

\*\*  $p < 0.01$ .

\*\*\*  $p < 0.001$ .

migrant parents who are married compared to those who live with their parents in Ghana. We also see that having international migrant parents divorced is not negatively associated with boys' living conditions, again when compared to the control group. The only instance in which migration is negatively associated with the living conditions of boys is when it is internal and coupled with divorce ( $\beta = -0.69$ , Table 3).

**Table 3**  
Living conditions, parental migration and marital status.

|   | Boys     |        | Girls    |        |
|---|----------|--------|----------|--------|
|   | $\beta$  | SE     | $\beta$  | SE     |
| Parental migration and marital status                                 |          |        |          |        |
| Non-migrant parents   |          |        |          |        |
| Parent(s) away internally & married                                   | -0.08    | (0.17) | -0.57**  | (0.16) |
| Parent(s) away internationally & married                              | 0.00     | (0.15) | -0.01    | (0.13) |
| Parent(s) away internally & divorced/separated                        | -0.69*** | (0.18) | -0.74*** | (0.16) |
| Parent(s) away internationally & divorced/separated                   | -0.22    | (0.21) | -0.44*   | (0.19) |
| Child age (11–14 years)   | -        | -      | -        | -      |
| Child age (15–16 years)   | -0.04    | (0.13) | 0.05     | (0.13) |
| Child age (17–18 years)   | -0.04    | (0.18) | 0.12     | (0.17) |
| Mother's education secondary or more                                  | 0.31*    | (0.13) | 0.39***  | (0.11) |
| Father's education secondary or more                                  | 0.66***  | (0.14) | 0.46***  | (0.13) |
| Total number of children living with the child                        | 0.04     | (0.02) | 0.04     | (0.02) |
| The child is living with younger siblings                             | -0.07    | (0.11) | -0.02    | (0.10) |
| The stability of care during child's lifetime                         |          |        |          |        |
| Child never changed caregiver   | -        | -      | -        | -      |
| Child changed caregiver once  | 0.18     | (0.14) | -0.25    | (0.13) |
| Child changed caregiver twice or more times                           | 0.16     | (0.14) | -0.23*   | (0.13) |
| Resident parent   | 0.02     | (0.15) | 0.32*    | (0.14) |
| The quality of child-caregiver relationship is distant                | -0.05    | (0.13) | -0.20    | (0.11) |
| Number of assets at the start of primary school                       | 0.10***  | (0.02) | 0.11***  | (0.02) |
| _cons   | 3.56***  | (0.31) | 4.20***  | (0.30) |
| Random-effects parameters   |          |        |          |        |
| Log (SD) level two (schools)  | 0.82***  | (0.97) | 0.91***  | (0.11) |
| Log (SD) level one (individuals)                                      | 1.48***  | (0.28) | 1.48***  | (0.26) |
| Variance components: intraclass correlation estimates at school level | 0.24     |        | 0.28     |        |
| N (children)  | 959      |        | 1141     |        |
| N (schools)   | 22       |        | 22       |        |
| Log likelihood  | -1767.24 |        | -2098.39 |        |

Notes: Multilevel OLS regressions. Standard errors in parentheses.

- \*  $p < 0.05$ .
- \*\*  $p < 0.01$ .
- \*\*\*  $p < 0.001$ .

Our results for the case of girls are of interest. The findings indicate that internal migration of parents regardless of the marital status of the parent is more detrimental to the living conditions of girls, with a notably larger effect for when the migrant parent is divorced ( $\beta = -0.57$  for when migrant parent is married and  $\beta = -0.74$  for when migrant parent is divorced, Table 3). Furthermore, having international migrant parents who are divorced is negatively associated with the living conditions of Ghanaian girls ( $\beta = -0.44$ , Table 3). For these girls, parental divorce is a risk factor that limits the role of internal and international migration in improving their living conditions. The results may reflect the role of gender norms that disproportionately affect intergenerational resource transfers to girls in Ghana (Cebotari, 2020; Whitehead et al., 2007). The effects of gender norms are more present in a context of internal migration due to fewer opportunities for parents and subsequent smaller investments in girls. These findings are similar to those of other studies that associate marital separation of migrant parents with more vulnerabilities for children (Amato, 2010; Cebotari et al., 2018; Coe, 2011b; Nobles, 2011).

Table 4 presents analyses of whether the effect of parental migration on the living conditions of children in Ghana is conditional on who the

**Table 4**  
Children's living conditions and which parent has migrated.

|   | Boys <sup>a</sup> |        | Girls <sup>a</sup> |        |
|---|-------------------|--------|--------------------|--------|
|   | $\beta$           | SE     | $\beta$            | SE     |
| Parental migration status   |                   |        |                    |        |
| Non-migrant parents   |                   |        |                    |        |
| Father away internally  | -0.22             | (0.20) | -0.51**            | (0.19) |
| Mother away internally  | -0.19             | (0.39) | -0.39              | (0.31) |
| Both away internally  | -0.14             | (0.40) | 0.12               | (0.33) |
| Father away internationally   | 0.11              | (0.18) | 0.09               | (0.16) |
| Mother away internationally   | -0.14             | (0.35) | -0.22              | (0.28) |
| Both away internationally   | 0.05              | (0.43) | 0.76*              | (0.36) |
| Child age (11–14 years)   | -                 | -      | -                  | -      |
| Child age (15–16 years)   | -0.07             | (0.16) | -0.02              | (0.14) |
| Child age (17–18 years)   | -0.05             | (0.21) | 0.07               | (0.18) |
| Mother's education secondary or more                                  | 0.25              | (0.15) | 0.26*              | (0.12) |
| Father's education secondary or more                                  | 0.56***           | (0.17) | 0.37*              | (0.14) |
| Total number of children living with the child                        | 0.06*             | (0.03) | 0.05*              | (0.02) |
| The child is living with younger siblings                             | -0.21             | (0.12) | -0.06              | (0.10) |
| The stability of care during child's lifetime                         |                   |        |                    |        |
| Child never changed caregiver   | -                 | -      | -                  | -      |
| Child changed caregiver once  | 0.15              | (0.16) | -0.26              | (0.15) |
| Child changed caregiver twice or more times                           | 0.05              | (0.18) | -0.32*             | (0.15) |
| Resident parent   | 0.16              | (0.33) | 0.10               | (0.16) |
| The quality of child-caregiver relationship is distant                | 0.05              | (0.16) | -0.17              | (0.12) |
| Number of assets at the start of primary school                       | 0.07**            | (0.03) | 0.11***            | (0.02) |
| _cons   | 3.94***           | (0.43) | 3.91***            | (0.39) |
| Random-effects parameters   |                   |        |                    |        |
| Log (SD) level two (schools)  | 0.48***           | (0.10) | 0.61***            | (0.11) |
| Log (SD) level one (individuals)                                      | 1.19***           | (0.32) | 1.20***            | (0.28) |
| Variance components: intraclass correlation estimates at school level | 0.22              |        | 0.31               |        |
| N (children)  | 742               |        | 898                |        |
| N (schools)   | 22                |        | 22                 |        |
| Log likelihood  | -1381.39          |        | -1620.26           |        |

Notes: Multilevel OLS regressions.

<sup>a</sup> The samples exclude children with parents divorced/separated; Standard errors in parentheses.

- \*  $p < 0.05$ .
- \*\*  $p < 0.01$ .
- \*\*\*  $p < 0.001$ .

migrant parent is. We include three dimensions for internal and international migration separately: whether the migrant is the father, the mother or both parents.

Differentiating parental migration status is important because it shows whether the gender of the parent who migrates internally or internationally matters to the living conditions of boys and girls in Ghana. For this analysis, we again used children who live with their parents in Ghana as a control group. We also analysed boys' and girls' living conditions separately.

The findings show that the living conditions of boys of internal or international migrant parents, despite who migrates, are not significantly different from the boys who live with their parents in Ghana. The same is true of girls, except in two circumstances. First, girls with internal migrant fathers experience significant worse living conditions compared to girls who live with their parents ( $\beta = -0.51$ , Table 4). Second, girls with both international migrant parents are more likely to enjoy better living conditions compared to girls living with both parents in Ghana ( $\beta = 0.76$ , Table 4).

Taking our analyses presented from Table 2 to Table 4, we summarise the key findings of our study which we discuss in the next section.

First, we noted the different implications of internal and international migration on children's living conditions. As such, children's living conditions are more volatile when parents migrate internally, compared to children who live with their parents, highlighting the poor opportunities that internal migration in Ghana may provide. Second, divorce is an important condition that nuances the effects of parental migration and children's living conditions. Third, which parent migrates internally or internationally is an important differentiating factor for the living conditions of girls.

We also note that the living conditions of children can additionally be understood by taking other confounders into account. The indicators measuring maternal and paternal education were significant positive predictors for the living conditions of boys and girls in our sample. Moreover, having a resident parent improves the living conditions of girls. However, a frequent change in the caregiver (i.e., two or more times) associates negatively with girls' living conditions. Finally, the presence of assets early in a child's life was a significant positive predictor for the current state of children's living conditions.

## 5. Discussion

This study aims to test associations between different types of parental migration and the living conditions of boys and girls in four urban areas with high out-migration rates in Ghana. In concurrence with the findings from previous studies, the results suggest that parental migration may, under certain conditions, be detrimental to the living conditions of children who stay behind. In fact, the overall effects in the living conditions of boys and girls are the results of two interlinked factors: the effects of economic resources as per the type of parental migration and the effects of family instability following parental divorce. Along this line of evidence, two results warrant discussion, as they add to the existing knowledge. First, parental migration is not necessarily a vulnerability for children. Depending on specifics in the status of parental migration, children may have living conditions better than or comparable to those of children living with both parents in Ghana. Second, the forms that parental migration take are important differentiating factors on whether children experience a decline in living conditions. The findings show that mechanisms linked to family instability due to parental divorce, internal parental migration and child gender are factors that pose distinctive risks to the living conditions of children who stay behind. These results are discussed below.

The results from our study indicate that having a parent away due to migration is not always associated with poorer living conditions for children. Overall, international parental migration involving parents in a stable marital union does not pose a negative risk to a child's living conditions when compared to those of children living with both parents. To our knowledge, there are no studies that comparatively examine the effects of internal and international parental migration on the living conditions of children. International migration has the potential to improve the material well-being of children through remittances that families receive from migrants abroad. International migrants have been reported to generate a higher level of remittances than internal migrants, although the remitting flow from abroad is often volatile (Antman, 2012; Cebotari, 2020; Lu, 2015; Poeze et al., 2017). Although international migration may generate a higher inflow of economic resources, the finding that children with parents abroad may not be better off regarding their material well-being than children who live with both parents may point to related ambivalent forces of parental separation, such as those associated with the long-term absence of parental care, supervision, and bonding (Cebotari et al., 2018; Coe, 2011b; Jordan & Graham, 2012; Wen & Lin, 2012). A possible challenge for future research would be to unpack the complexity of these factors in relation to the living conditions of children in migrant families.

When the marriage is stable, which parent migrates is also not a vulnerability for children. This finding is particularly important for maternal migration, as the existing research has consistently linked

mother-child separation to lower levels of well-being (Antman, 2012; Jordan & Graham, 2012; Parreñas, 2005; Xu et al., 2019). We found that children whose mother migrated internally or internationally experienced no significant differences in the living conditions compared to children living with both parents. In fact, girls whose mother and father are both international migrants are more likely to have better living conditions than girls living with both parents. Previous research has shown that mothers typically remit regularly and in higher amounts, and the money they send is more likely to be used for the upkeep of the family (Pfeiffer & Taylor, 2008). Furthermore, in our sample, children with internal and international migrant mothers were noticeably less likely to have a change in their care arrangement, and their caregivers were more likely to have higher levels of education (results not shown). This result may be explained by the fact that most children in our sample live in matrilineal Akan communities, where mothers are more involved in the decision-making related to children's care. Indeed, recent evidence in Ghana points to parental choice of caregivers with better education and socioeconomic status when the mother or both parents are away due to migration, especially for girls whom these parents consider more vulnerable when compared to boys (Poeze et al., 2017).

The results of this study also reveal different characteristics that enhance child vulnerability when parents migrate. The findings show negative effects of internal parental migration in relation to children's living conditions. However, the negative effects are mainly observed when internal parental migration occurs in the context of marital divorce. When we separate children whose parents are divorced from those whose parents are married, we find no negative effects on the living conditions of children when mothers, fathers (for boys only), or both migrate internally and the parents stay married. The living conditions of girls are also more negatively affected when parents migrate internationally and are divorced. This finding indicates that the negative results are mainly driven by cases in which migration and divorce coalesce. These findings align closely with recent evidence demonstrating that a child's well-being declines significantly when parents migrate and are divorced, mainly because this situation deprives children of emotional or material investments, or both (Abrego, 2009; Dreby, 2010; Mazzucato & Cebotari, 2017; Nobles, 2011).

We also found gender differences, in how parental migration is associated with the living conditions of boys and girls in Ghana. Overall, girls are more vulnerable to the negative effects of parental migration, especially when parents migrate internally or internationally, get divorced or when fathers migrate internally. However, when both parents migrate internationally and have a stable marriage, the living conditions of girls are more likely to improve. The living conditions of boys are less likely to be affected by parental migration. Only when parents migrate internally and are divorced are the living conditions of boys deteriorates. These gender differences may reflect the distribution of resources and investments based on context-specific gender norms. Evidence from Ghana shows that girls in migrant families are more prone to do household chores and change caregivers, and they are less likely to benefit from remittances when compared to boys (Whitehead et al., 2007). Indeed, auxiliary analyses (not shown) revealed that girls of migrant parents compared to boys changed caregivers more often and received less monetary and in-kind remittances, and these outcomes were worse among girls whose parents divorced. Ghanaian girls are also more emotionally affected by parental migration, especially when parents get divorced (Cebotari et al., 2018).

However, investments in the quality of care were found to favour girls of migrant parents not affected by divorce in Ghana (Poeze et al., 2017) and elsewhere (Antman, 2012; Cebotari, 2018). This may explain the finding that shows the net benefits in the living conditions of girls whose parents are abroad and in a stable marital relationship. Further research should consider the implications of these and other factors in shaping children's living conditions and other related outcomes.



### 5.1. Limitations

The limitations of this study are worth noting. The findings presented here do not imply any causal connections between migration characteristics and children's living conditions. Longitudinal evidence is needed to determine any causality among these associated factors. Although we use innovative data based on children's reports, we lack reliable information related to remittances, length of separation, caregiving practices, gender and social norms of care, and this is because children have difficulties quantifying these dimensions and may under-report them. This study includes school children in four urban areas in Ghana, and thus the generalizability of the findings is limited due to this study's locality. For instance, the findings may not apply to children who dropped out of school or those who reside in rural areas. A final limitation relates to the highly selective process of migration. No empirical methodology can completely account for the process of migrant selectivity, and we caution readers to be alert to this limitation.

### 5.2. Conclusions

Despite the limitations, this study contributes to the literature of child well-being by examining migration patterns and determinants of children's living conditions through a comparison of children of migrant parents with those living with both parents in Ghana. The findings demonstrate that parental migration is not always a disadvantage for children. Rather, several risk factors associated with internal migration, marital divorce and the gender of the child may negatively affect children's living conditions when staying behind. The response to these potential adverse conditions is not to impede parental mobility but to design effective programmes that can help both parents and children mitigate the risks and costs of separation: support, assess and deliver good-quality substitute child care; assist in the transmission, receipt and investment of remittances in children; conduct intra-household assessments of poverty levels for each child with a focus on gender differences; provide counselling and help for children in migrant families affected by divorce; and undertake efforts that allow migrant parents and children to reunify regularly in either the sending or destination setting.

### 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.

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