

**Impacts of parental migration on children left behind in Myanmar:
Evidence from a recent survey in Myanmar's Dry Zone**

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ABSTRACT

Myanmar's population has been on the move following structural reforms in 2011. Little is known empirically about migration impacts on left-behind populations. We analyze data from the 2017 Dry Zone Migration Impact Survey to examine how parental migration impacts upon under-15 children left behind. Specifically, we investigate types of care provision for children with parental absence and prevalence of unmet needs for care. We examine how the impacts vary by gender of the migrant parent, destination of migration, child's socio-demographic characteristics. We find that negative impacts of migration are limited to children whose mother or both parents migrated. Limited impacts are perhaps explained by the current migration patterns of the Dry Zone. Children with migrant parents are embedded in extended family networks. Households diversified risks by having different members fulfill different roles, including economic migration and care provision. Looking ahead, fertility decline and increased migration can pose new challenges to families in migration-source areas.

INTRODUCTION

Myanmar's 53-million population has been on the move at an unprecedented level following a series of political and structural reforms that began around 2011. According to the 2014 census which was the country's first national census in three decades, there were nearly 9.5 million internal migrants¹ and approximately 2 million international migrants². Furthermore, 12% of all households contained internal migrants, whereas almost 8% of them had international migrants. The actual level of population movements was likely to be greater than these census estimates (Department of Population, 2016a). Importantly, prevalence and patterns of migration vary significantly across regions and states in Myanmar. For example, states bordering Thailand such as Kayin and Mon States, cross-border international migration are more common than movements to other parts of Myanmar. Meanwhile, in other regions of Myanmar, internal rural-urban migration is more prevalent. There is nevertheless a consensus among experts that the levels of both internal and international migration will rise significantly within the next decade, given Myanmar's ongoing transformation from a rural, agriculture-based economy to a more urban, industry- and service-based economy (World Bank, 2016a).

Empirical evidence on patterns of migration, scale of migration from and within Myanmar, and the roles that remittances play in its economy has begun to emerge (for example, see Department of Population, 2016a; Gupta, 2016; Helvetas, 2015; ILO, 2015).

¹ The 2014 census defined internal migration as a movement of an individual (i.e., current household member) beyond his/her township for 6 months or more. It intends to capture permanent or semi-permanent changes of residence. The census' thematic report on migration focuses on migration within the 5-year period before the census "because of the need to closely match the characteristics of individual to the migration" (Department of Population, 2016a, p.10).

² The 2014 census asked respondents whether or not there were former household members who were living abroad. They were not included in the count (approximately 50.3 million) from the 2014 census enumeration of the population (i.e., the current population residing in Myanmar at the time of census, plus non-residents who were present in Myanmar on Census night).

However, much less is known about the impacts of migration on sending as well as destination communities (Griffiths & Ito, 2016). To fill the research gaps, we analyze data from the 2017 Dry Zone Migration Impact Survey to examine the impacts of parental migration on children under age 15 left behind in migration-source areas. Specifically, we ask the following research questions: To what extent does parental migration impact upon support arrangements for young children in Myanmar regarding provision of care, instrumental, and material support? Are children whose one or more parents are absent due to migration more disadvantaged than those who coreside with both parents in terms of unmet needs for various types of support? How does the impact of parental migration vary by gender of the migrant parent, destination of migration, child's age and other socio-demographic characteristics? Based on the empirical findings, we discuss how policy and support can be enhanced to increase the positive impacts of migration on migrant-sending households and to address its negative consequences.

BACKGROUND

Migration impacts on left-behind children from comparative perspectives

Three major theoretical perspectives exist for interpreting the impacts of migration on origin households and their members. First, *the alarmist perspective* views that a large volume of migration especially from rural to urban areas tends to have adverse effects on households and populations remaining in sending communities. For example, rural households may experience labor shortages. Young children and older persons in rural areas are potentially deserted and left to fend for themselves. On the contrary, *the household strategy perspective* views migration as a way to diversify economic risks for the origin households and as benefiting both migrants and family members who remain behind.

According to this perspective, migrants in the non-agriculture sector are subject to different cycles of economic risks than their family members remaining in origin communities. Thus, each can serve as a form of insurance for the other, while at the same time each can contribute to the material wellbeing of the other in its own way. Furthermore, *the modified extended family perspective* posits that while migration leads extended family members to be geographically dispersed, advances in transportation and communication technology that accompany development permit members to maintain relationships and continue to fulfil at least some of the associated obligations. Family ties and an intergenerational support system remain intact although in modified forms.

Research on the impact of parental migration (including both rural-urban migration and international migration on the wellbeing of children in Southeast Asia is emerging (Nguyen, Yeoh & Toyota, 2007). Studies have shown nuanced findings. Various outcomes are examined, including school enrollment rates, academic performance, improvement in food habits, nutritious status, health-seeking behavior, caregiving arrangements, and health and psychological resilience of left-behind children (for example, see Asis, 2006; Jampaklay, 2006; Su et al., 2013). Existing evidence suggests that the effects of parental migration on child's outcomes are mixed depending on several factors such as types of outcomes being examined, the gender of migrant parents, and the roles of remittances. How parental migration is associated with the wellbeing of children left behind in Myanmar remains largely an open question.

The context of Myanmar's Dry Zone

The Dry Zone in central Myanmar covers a total of 58 townships in Mandalay, Magway, and Sagaing regions. Its area size of over 54,000 km² covers approximately 13% of

the country's total area. Accounting for roughly 30% of Myanmar's total population, the Dry Zone's population size ranges between 10 million and 14.5 million based on different sources (Department of Population, 2015; Mercy Corps, 2015). The area is more densely settled and more rural compared to the national average. Livelihoods in the Dry Zone depend greatly on the Southwest monsoon. The area is prone to erratic rainfall and prolonged dry spells. Given the environmental constraints, the Dry Zone is one of Myanmar's most food insecure regions (World Food Program, 2011). A 2010 report further reveals that approximately 43% of the Dry Zone population lives in poverty and 40-50% of its rural population is landless (JICA, 2010).

Labor migration has long been utilized as an important livelihood strategy by households in the Dry Zone. Most labor migrants remain in Myanmar. While Yangon is a popular domestic destination outside the Dry Zone, internal migration within regions especially seasonal migration is common. In Magway, for instance, seasonal migrants from various townships typically work in oil seed processing factories in Magway City several months a year before returning to their own farms during the planting season for groundnut and sesame (Helvetas, 2015). Furthermore, regarding gender differences in patterns of migration, research shows that there are no gender differences in levels of internal migration; yet, international migration is male-dominated (Helvetas, 2015). There is a clear gender division regarding the sectors of employment. Female migrant workers tend to be employed on tea plantations and in garment factories, or as domestic help. Their male counterparts are preferred in rubber plantations, mines, and construction sites.

Like elsewhere in Myanmar, major drivers of migration in the Dry Zone include lack of sufficient and year-round livelihood opportunities, landlessness and oversupply of labor in rural areas, crop failures and income-related shocks, adverse climatic conditions and

environmental changes, as well as better job and income opportunities in destination areas. Social networks play an important role in facilitating both internal and international migration. The role of governmental institutions in facilitating internal migration is almost non-existent. A qualitative study reveals that while internal migration is typically considered by households in the Dry Zone as a survival strategy particularly to diversify risks, international migration is adopted by medium to high landholding households as their wealth accumulation strategy (Helvetas, 2015). International migration is rarely experienced by landless or near landless households.

By and large, there is still a lack of systematic evidence regarding the impact of migration on households and communities in the Dry Zone. Furthermore, the extent to which migration can improve or worsen the economic situation of the households and the wellbeing of household members also remain an open question. The extent of the impact is likely to depend on the type of migration, skills of migrant workers, the sector of employment, and primary purpose of migration (i.e., household income maximization versus risk diversification).

DATA AND METHODS

Data

This study is based on analyses of the 2017 Dry Zone Migration Impact Survey. The survey is part of several ongoing research and programmatic activities for the Dry Zone Social Protection Project funded by the Livelihoods and Food Security Trust Fund (LIFT). The survey was conducted in 2017 by HelpAge International in collaboration with Myanmar Survey Research. The sample design of the survey specified randomly selecting 700 households in four townships in the Dry Zone (i.e., two townships in Mandalay and two in

Magway). The selection of study townships takes into consideration economic development levels and population age structure, in addition to accessibility and budgetary issues (McCarty and Whitehead, 2016).

After the four townships were selected, a total of 35 urban wards and rural villages were randomly sampled using the PPS (probability proportional to size) approach. Household registries maintained by local officials were used as the sampling frame from which to select eligible households. For each ward/village, the survey team randomly interviewed 20 households that meet eligibility criteria for migration status. In total, 470 households with at least one migrant at the time of survey and 230 households without any migrants were included in the survey. For each sampled household, the survey team interviewed a household key informant who usually is the household head, spouse of the head, or other adult household member that are knowledgeable about household members, especially migrants. The survey team selected the key informants so that half were male while the other half female. The survey's response rate is 94.6%.

The survey asked household key informants about all children under age 15 in the households. Information reported by key informants allows us to examine children's demographic and social characteristics, their parents' presence in the household and migration status, as well as provision of care, instrumental support, and financial support for children. Approximately 52% of the 700 sampled households have at least one child under age 15. There is a total of 619 dependent children under age 15 in our sample. Approximately 54% of children under age 15 reside in Mandalay and the rest (46%) in Magway region.

Variable measurements

Migration terminologies employed in this study are by and large consistent with the 2014 census definition (Department of Population, 2016a) as well as terminologies used in previous migration research in Myanmar (e.g., World Bank, 2016b). For the purpose of our analysis, we define migration as a movement beyond township for at least one year.

Migrants are thus former or current household members³ who moved out for more than one year during the last five years prior to the survey (i.e., since 2012) to another township, elsewhere in Myanmar, or elsewhere outside Myanmar. They may have returned to this or different household in the current township. Additionally, we consider migrants as former household members who left less than a year ago but intend to remain away for at least a year. Our study also includes information about deceased household members who migrated during the last five years.

Since the study's main interest is to assess migration impacts on households in migration-source areas, our definition of migration intends to capture permanent and semi-permanent changes of residence that involve some geographic distance (at least movements between townships), rather than seasonal/temporary movements and intra-township movements. Furthermore, like the census definition, we focus on migration that occurs within the last 5 years prior to the survey. First, it provides a better indication of current mobility patterns (Department of Population, 2016a). Second, recall errors are less likely to be an issue when key informants were interviewed about patterns and decisions of recent migration in the household as well as remittances and other support from recent

³ In our survey, household members refer to individuals who regularly reside in the present household. Former household members are those who used to live in the present household for at least three months. Our study's definition of household membership is rather different from the 2014 census, which considered household members as those who spent the census night in the present household (i.e., the night of 29th March 2014).

migrants, compared to when being probed about information regarding migration that took place a long time ago.

Analytical approach

Our unit of analysis is children in sampled households (N=554). We first examine the extent to which children in the Dry Zone experience an absence of one or both parents due to migration. We then examine how socio-demographic characteristics of children whose parent(s) have migrated beyond township differ from the attributes of children who coreside with both parents in the Dry Zone. Furthermore, we explore the extent to which migration affects provision of care, instrumental support, and material support for children under age 15. We examine sources of support within the household as well as non-household sources of support (e.g., government or non-governmental programs). Lastly, we address patterns and differentials in unmet need experienced by children in the Dry Zone with a focus on children affected by their parents' migration.

RESULTS

Prevalence and patterns of parental migration in the Dry Zone

Table 1. Prevalence and patterns of parental migration among under-15 children in Myanmar's Dry Zone whose both parents are alive.

	All children (N=554)	Child's location of residence	
		Urban (N=165)	Rural (N=389)
<i>Parental migration status</i>			
% non-migrant parents	78.7	84.2	76.3
% at least one migrant parent	21.3	15.8	23.7
% only father migrate	18.4	13.9	20.3
% both parents migrate or only mother migrate	2.9	1.8	3.3
<i>Current destination of parental migration^a</i>			
% different township but same region	3.4	2.4	3.9
% different region/state within Myanmar	12.3	11.5	12.6
% other country	5.6	1.8	7.2
<i>Duration since migrant parent last moved out^a</i>			
% less than 1 year	7.4	4.8	8.5
% 1+ year	13.9	10.9	15.2

Source: 2017 Dry Zone Migration Impact Survey

^a For a small proportion of those whose both parents migrated, current destination and duration refers to mother's destination and timing. It is important to note that migrant couples in the sample tended to migrate to a similar location.

Characteristics of children by parental migration status

	All children (N=554)	Parental migration status		Sig.
		Non-migrant parents (N=436)	At least one migrant parent (N=118)	
Child's characteristics				
Gender (%)				
Male	52.0	52.1	51.7	n.s.
Female	48.0	47.9	48.3	n.s.
Mean age	7.90	8.10	7.17	*
Age group (%)				
0-4	25.6	24.3	30.5	n.s.
5-9	32.5	32.6	32.2	n.s.
10-14	41.9	43.1	37.3	n.s.
Currently school attendance (%)				
Attending	65.9	66.5	63.6	n.s.
Not attending	4.0	4.6	1.7	n.s.
Not yet school age	30.1	28.9	34.7	n.s.
Relationship to head (%)				
Child	69.5	75.2	48.3	***
Grandchild	28.9	23.6	48.3	***
Other	1.7	1.2	3.4	n.s.
Household characteristics				
Location of residence (%)				
Urban	29.8	31.9	22.0	*
Rural	70.2	68.1	78.0	*
Household wealth (%)				
Lowest quintile	21.7	22.7	17.8	n.s.
2nd	19.1	16.3	29.7	***
3rd	19.7	18.8	22.9	n.s.
4th	19.0	18.6	20.3	n.s.
Top quintile	20.6	23.6	9.3	***
Support characteristics				
Primary caretaker (%)				
Mother	83.9	86.5	74.6	**
Father	2.9	3.4	0.8	n.s.
Sibling	1.8	1.6	2.5	n.s.
Other household members	7.2	3.4	21.2	***
Child care for self	4.2	5.0	0.8	*
Primary material support provider (%)				
Parents	91.2	94.7	78.0	***
Others	8.8	5.3	22.0	***

Source: 2017 Dry Zone Migration Impact Survey

Note: *** Difference between children with non-migrant parents and those with at least one migrant parent is significant at p=0.001; ** Significant at p=0.01; * Significant at p=0.05; n.s. Not significant p-value.

Caregiving and material support arrangements for left-behind children

Table 3. Descriptive statistics, types of care/support received by dependent children according to parental migration status, Children under age 15.

	All children (N=554)	Parental migration status			
		Non-migrant parents (N=436)	At least one migrant parent (N=118)	Migrant fathers (N=102)	Both migrant parents or migrant mothers (N=16)
Receipt of instrumental support (mean frequency ^a)					
Meal preparation	2.48	2.45	2.58	2.68	1.94
Personal care	2.24	2.20	2.42	2.53	1.69
Emotional support	2.42	2.42	2.42	2.47	2.06
Index of instrumental support (mean)	7.14	7.07	7.41	7.68	5.69
Perceived net needs (%)					
Daily necessity	60.6	59.6	64.4	66.7	50.0
Finance	38.6	37.6	42.4	43.1	37.5
Emotional support	64.4	65.1	61.9	63.7	50.0
Number of perceived net needs (mean, min=0, max=3)	1.64	1.62	1.69	1.76	1.38

Source: 2017 Dry Zone Migration Impact Survey

Figure 1.

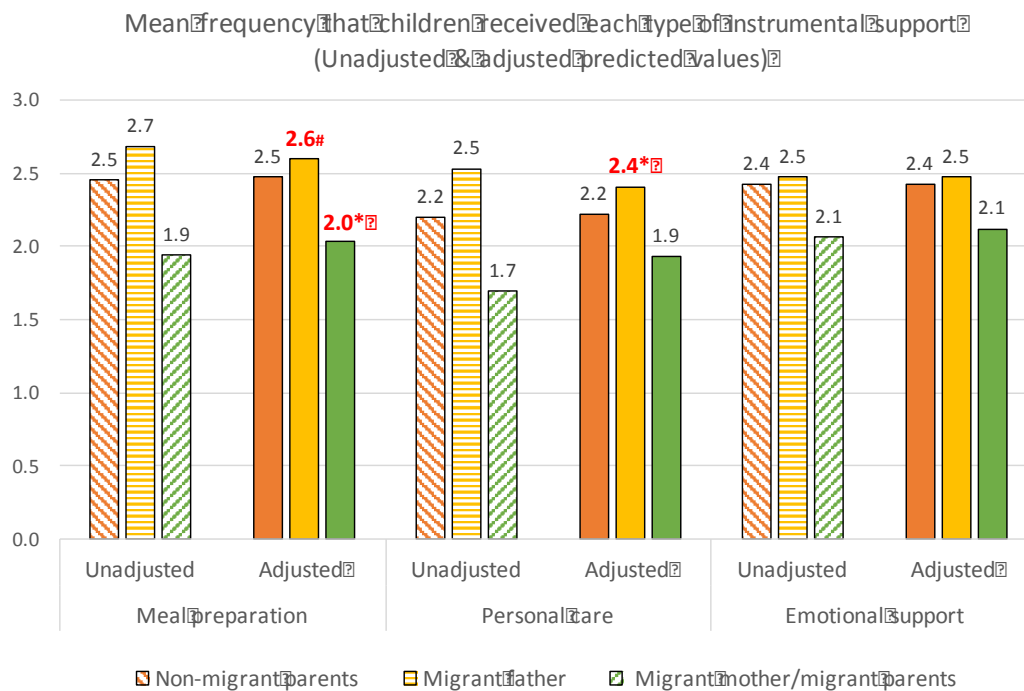


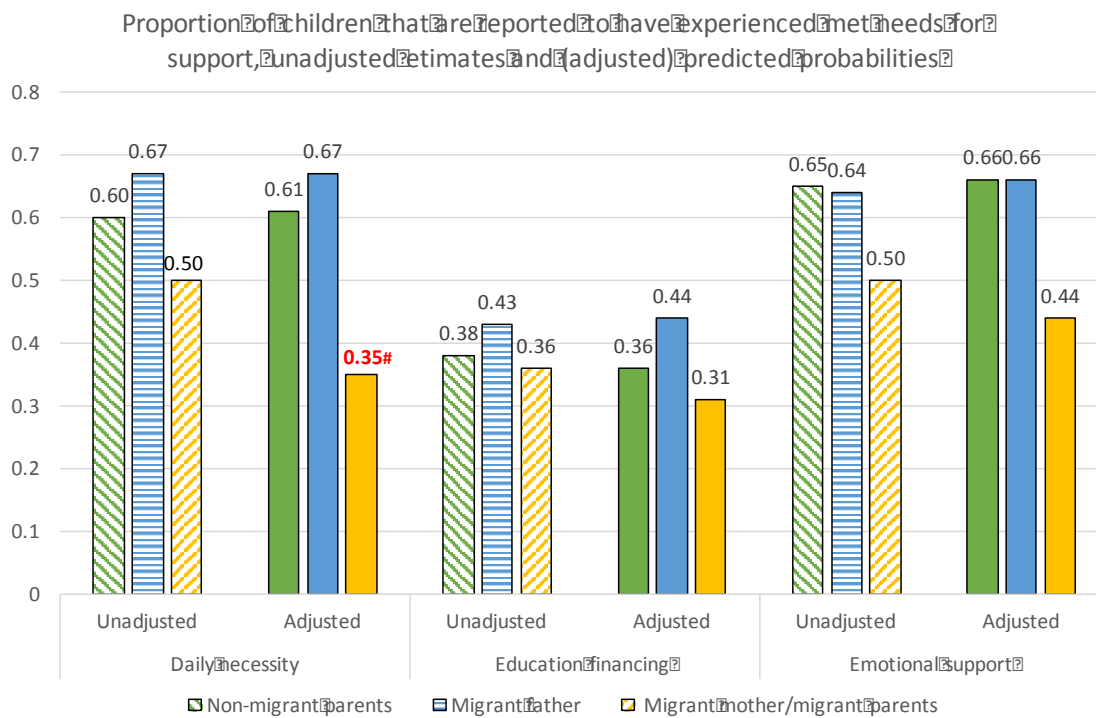
Figure 1 shows descriptive results indicating average frequency that children of different parental migration status received each type of instrumental support. We find that children with migrant mothers or those whose parents are both migrants received least frequent support for all three types of instrumental support (meal preparation, personal care and emotional support) compared to those with migrant fathers or those with non-migrant parents. The differences are particularly salient for meal preparation and personal care support and somewhat less so for emotional support. Please note that these findings are not adjusted for any socio-demographic, household and support differences between children of varying parental migration status.

We utilize OLS regressions to determine the net association between parental migration status and support provision for children taking into consideration various control variables. Results are shown as adjusted predicted values for mean frequency of each type of support provision. Multivariate results suggest that parental migration does not necessarily disadvantage left-behind children. Negative impact is limited to meal

preparation among those with two migrant parents or migrant mothers. Predicted values are statistically significant at the level of $p < 0.05$. Interestingly, we find that a majority of children with migrant parents whose migrant parents are fathers appear to receive significantly greater frequency of meal support and personal care support. It is important to note that despite many concerns about the psychological wellbeing of left-behind children, results from the Dry Zone shows no significant difference in receipt of emotional support among children of varying parental migration experience.

Met needs for support

Figure 2



In addition to the extent of instrumental support received by children, the Dry Zone Migration Impact survey also asked key informants whether or not children received adequate support for each type of provision, including support for daily necessity, education financing, and emotional care. Figure 2 shows proportions of children that are reported to have experienced met needs in daily necessity, financial support for schooling, and emotional support. These proportions are unadjusted for differences in background characteristics among each group of children. Descriptive results show that smaller proportions of children with migrant mother or those with two migrant parents experienced met needs for all three types of support. This is somewhat consistent with prior descriptive findings for the extent of instrumental support children received. It is interesting to note that met needs for education financing may be of important concern in the Dry Zone.

Roughly only about two fifths of the sample reported met needs in financial support for education. Met needs in daily necessity and emotional support are higher.

Nevertheless, when other variables are taken into consideration, differences in met needs for support among those with non-migrant parents and migrant parents become statistically insignificant. Please note that in these multivariate analyses, we utilize binary logistic regressions to examine the net association between parental migration and met needs for support, controlling for covariates mentioned earlier. We reported adjusted estimates that are essentially predicated probabilities calculated based on multivariate results. The negative impact of parental absence due to migration is restricted to met needs in daily necessity among children with migrant mother or those with two migrant parents. Although there are greater proportions of children whose fathers migrated with met needs in daily necessity and education financing, the differences are not statistically significant from those with non-migrant parents. In other words, except for a very small proportion of children, results show no significant differences in met needs for support for a majority of children suggesting very limited implications of parental migration for support provision for children in the Dry Zone.

Study limitations

Our study provides empirical evidence and new insights that allow researchers and policy makers to better understand the needs of populations remaining in the Dry Zone who are affected by migration. Nevertheless, it is not without limitations. First, given the cross-sectional nature of our dataset, we are restricted in addressing definitive causality between migration and various household-level and individual-level outcomes. Our study highlights

the important need for more rigorous investigation of the causal links between these phenomena in future research.

Moreover, our analyses are limited by the study's relatively small sample size. For example, since we do not have enough observations of children whose parents are both migrants, we are unable to examine nuances related to their unmet needs in daily necessity and instrumental support. Having a larger sample would permit a more refined examination of correlates and determinants with unmet needs among these populations. Furthermore, information pertaining to social, economic, and emotional needs of household members is subject to knowledge and attitudes of key household informants. Future migration impact surveys can be improved by interviewing not only key household informants but also household members of interest (e.g., dependent children).

Furthermore, since several sampled villages are target villages in HelpAge International's Dry Zone Social Protection Project, we may risk having non-typical villages because of potential effects of the HelpAge activities and programs. Lastly, the survey is not national or regional in scope. Thus, it is limited when it comes to make regionally or nationally representative claims based on our empirical findings. Nevertheless, the Dry Zone covers a significant proportion of Myanmar. Understanding the impacts of migration on households in the regions based on nuanced research is thus critical for Myanmar's economic growth and poverty reduction.

DISCUSSIONS

Despite some limitations, our study extends current knowledge in important ways. It is among the first population-based studies to systematically examine the wellbeing of left-behind children in Myanmar. In sum, our findings are least consistent with the alarmist

view. Findings from the Dry Zone Migration Impact Survey reveal that parental migration has limited negative impacts on children remaining in the Dry Zone. Adverse impacts appear to be restricted to a small number of children whose mother or both parents migrated beyond township. These children reportedly receive less frequent instrumental support, particularly meal preparation. They also experience lower met needs particularly in daily necessity. Regarding receipt of instrumental support, children with migrant fathers do not appear to be more disadvantaged than those with non-migrant parents. In fact the opposite may be true. This group of children received significantly greater extent of instrumental support (particularly meal preparation and personal care) compared to those with non-migrant parents.

Limited negative impacts of migration on children in the Dry Zone are likely explained by the current patterns of migration in the Dry Zone. While migration is common, among households with children under age 15 migration tends to involve only fathers. It is relatively rare for mothers or both parents to migrate and leave their children behind. This is consistent with a prior study based on nationally representative data that shows skip-generation households (i.e., households with only grandparents and grandchildren) to be rare and much less common in Myanmar compared to a more developed neighboring country like Thailand.

Some negative impacts of parental absence due to migration may be offset by benefits from remittances from migrant parents. Our finding echoes the household strategy perspective. It is likely a household strategy not to have all working-age members migrate elsewhere. Households are likely to diversify risks by having different members fulfil different functions of the household. Since care provision for the young and the old are usually considered women's tasks and roles in the context of Myanmar, female household

members with young children are less likely to migrate. Children with migrant mothers and those whose parents are both absent due to migration tend to be older and thus are more likely to be independent and able to take care of themselves to some extent.

In support of the modified extended family perspective, results show that these children are generally not deserted by their migrant parents or extended family. However, they are often embedded in family networks and primarily cared for by other household members in case mother or both parents migrated elsewhere (usually grandparents).

Furthermore, the recent proliferation of cellular phone technology in Myanmar has greatly enhanced the ability for migrants and origin households to maintain social contacts and possibly other aspects of intergenerational support. Phones once were a rarity in Myanmar. According to the nationally-representative Myanmar Aging Survey conducted in 2012, only 10% of surveyed households have access to phones. Our 2017 survey shows that phone prevalence has skyrocketed. Nearly 90% of sampled households in the Dry Zone own at least one phone (either mobile or landline). Empirical findings further indicate that almost two thirds of migrants are in daily or weekly phone contacts with origin households. While the frequency of visiting is related to the destination of the migrants, phone contact is not particularly affected by distance of migrants. Slightly over half of international migrants talked daily or weekly to their origin households, while only 4% of them had less than yearly contacts including those that never had any phone contact. Regular phone contacts thus allow for maintenance of social support despite geographical separation. The greatly improved ability to communicate by phone also means that origin households can reach geographically dispersed migrants quickly when household needs for assistance arise. Further supporting the modified extended family perspective, results indicate that it is

extremely rare (less than 1%) for economic migrants to desert their origin households completely by not providing regular financial support, visits, or phone contacts.

Looking ahead, migration flows are expected to increase in the near future as Myanmar becomes more developed and urbanized. The country's transition to even lower fertility levels can pose new challenges to families in migration-source areas. The smaller family size suggests that the current situation, in which some household members migrate while others remain with dependent children or elderly parents, will be more difficult to maintain. Unless the whole family moves, the lack of healthy working-age family members who are coresident or live nearby can significantly change the implications of migration for the wellbeing of migrant-sending households and members who remain behind (e.g., shortages in farm labor, lack of caregivers for frail household members). Our findings provide a useful baseline. Nevertheless, continual monitoring of migration trends and their implications in Myanmar's changing socio-demographic context is critical for developing informed policies and programs that address the needs of migrant-sending households and prepare them to confront risks associated with migration.

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