

A Global View of Poverty, Gender, and Household Composition

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Abstract

The share of the world's population living on less than \$1.90 a day has been cut by more than half since 2000. The pace of progress has slowed in recent years, however, and is likely to regress with the onset of the COVID-19 pandemic. Advancements toward achieving the goal of reducing poverty can be informed by more in-depth examination of the prevailing poverty profile across countries. This paper uses data from 91 countries to profile the poor through a focus on the demographic composition of households. It contributes to a growing body of literature on the profile of the poor based on household demographics, utilizing harmonized cross-country data. Three key findings related to household demographics and the profile of the poor

emerge. First, globally, the share of young girls who reside in poor households is almost 1 percentage point larger than the corresponding share of boys, principally driven by results from India. In most other countries, girls and boys (who generally reside with adults) are equally likely to reside in poor households. Second, along the life cycle, the next big difference in poverty rates by sex globally sits among household members ages 25–34, with South Asia and Sub-Saharan Africa driving these results. Third, analysis demonstrates that differences in household composition between women and men, including women's greater likelihood to be living in households with young children, are behind the observed gap in poverty rates by sex.

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A Global View of Poverty, Gender, and Household Composition

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Introduction

Understanding who is poor, including by age and sex, and the differences among groups—male/female, urban/rural, and by household attributes, including the presence of children—is a key element of development policy. Profiling the poor enables governments and other stakeholders to track development progress and implement informed policies and programs. With the expansion of national household surveys measuring poverty and the increased focus on harmonizing such data in recent years, a range of efforts have produced stylized facts about the poor. These global and regional profiles about households living in monetary poverty have applied the international \$1.90-a-day concept of poverty (often labeled extreme poverty) to compare across countries.¹ These efforts draw on a common set of core harmonized data, albeit with varying areas of focus updated over time. Olinto et al. (2013) undertook the first such effort with a profile of the poor in the dimensions of rural or urban location, age-groups, male or female, educational attainment, and access to basic services in 73 low- and middle-income countries. Castañeda et al. (2018) expanded on this effort, covering more countries (89) and in greater depth in dimensions. Newhouse, Suárez-Becerra, and Evans (2017) looked at the same 89 countries, specifically at the poverty profile of children compared with adults and the robustness to different equivalence scales. UN Women and the World Bank (2018) and Muñoz-Boudet et al. (2018) also covered 89 countries with updated poverty estimates and focused on the poverty profile with regard to gender (by age), the demographic composition of households, and the economic composition of households.

The objective of this paper is to contribute to this body of evidence. It expands on the work done by UN Women and the World Bank (2018) and Muñoz-Boudet et al. (2018) using updated data and additional analysis to explore the intersection between gender and poverty. The paper presents a stylized global view of poverty, specifically as it relates to sex and household composition. The work also drills down into regional patterns to highlight nuances that the global profile obscures. Arguably its main contribution is its extension of existing studies through a gendered analysis of poverty from a life-cycle perspective. The new analysis unpacks the patterns of poverty by demographics—mainly age, sex, and household membership structure—and applies additional robustness checks on the main results.

This work has the advantage of coverage. It investigates a lot of countries using a (fairly) consistent definition of poverty. However, as with the predecessor studies cited above, it faces well-known challenges. Monetary poverty is but one approach to measuring living standards, and it produces not nearly a complete picture of welfare. Second, quite relevant to an individual demographic focus (looking at poverty rates by people's age, or sex, or education), this approach relies on a household measure of poverty. By construct, intrahousehold variation is not captured. All people in a poor household are identified as poor, and the implicit

¹ The previous \$1-a-day poverty line relied on 1985 purchasing power parity (PPP) exchange rates (Ravallion, Datt, and van de Walle 1991). It has been updated as new PPPs have become available. The latest update was in 2015; when based on the updated 2011 PPPs, the line was reset to \$1.90 a day (Ferreira et al. 2015).

assumption is that household income or consumption is evenly distributed among household members. A substantial body of theoretical and empirical research refutes this claim. There are efforts underway to compute intrahousehold monetary poverty; see, for example, the discussion in chapter 5 of World Bank (2018). Recent work by Bargain, Lacroix, and Tiberti (2018) studies within-household variations in consumption in Bangladesh and estimates poverty rates of 13 percent among men and 33 percent among women. Calvi (2020) also uses consumption data and finds that, in a selection of households in India, 21 percent of women are living in poverty; the corresponding poverty rate among men is 15 percent. Yet, for cross-country analysis, such assessments are more challenging. Brown, Ravallion, and van de Walle (2019) use nutrition indicators to look at Sub-Saharan Africa and find that most underweight women do not live in households in the poorest 20 percent of the welfare distribution. However, for a comparable measure of monetary poverty, the researcher is still restricted to a household measure. The final challenge is that in seeking to cover a wider range of countries and allow a global picture, data gaps persist. On some countries, there are no data or the data that do exist have not been updated recently. In most countries, data are not available that would allow for households and individuals to be monitored over time.

Data

This study relies on the Global Monitoring Database (GMD), which is a collection of globally harmonized household survey data used to produce the poverty estimates published by the World Bank.² The GMD is the latest version of the data underlying the previous studies cited. The analysis in this paper uses surveys in the GMD on 91 economies in 2010–15, excluding high-income countries and countries on which data are lacking during the period. The total population in countries in the GMD is 4.6 billion, roughly 77 percent of the developing-world population and 86 percent of the total poor in 2015 (table 1).³ The GMD exhibits a wide regional population coverage of at least 87 percent in Central and South Asia, East and Southeast Asia, Latin America and the Caribbean, and Sub-Saharan Africa.⁴ Of note, the population coverage in Sub-Saharan Africa at 87 percent is an improvement over the earlier vintage of the GMD where coverage stood at 74 percent (see Muñoz-Boudet et al. 2018). Europe, North America, and Oceania, regions that comprise much smaller shares

² GMD (Global Monitoring Database), Global Solution Group on Welfare Measurement and Capacity Building, Poverty and Equity Global Practice, World Bank, Washington, DC.

³ The 14 percent of the poor who are not in the GMD are in countries on which there are survey data to measure poverty, but the data are outside the 2010–15 window of the GMD. All high-income countries are assumed to have a 0 poverty rate measured by the \$1.90 international poverty line. The GMD is regularly updated as new surveys are collected and harmonized into the data set. This paper uses the January 2019 version. An important difference with more recent versions of the data sets is that, for the purposes of this analysis, data on India back to 2011 are included.

⁴ The analysis uses the regional groupings followed by the United Nations Statistics Division in monitoring the Sustainable Development Goals. See “SDG Indicators: Regional Groupings Used in Report and Statistical Annex,” Statistics Division, Department of Economic and Social Affairs, United Nations, New York, <https://unstats.un.org/sdgs/indicators/regional-groups/>.

of the poor, have lower representation in the GMD. Meanwhile, data access issues restrict the GMD population coverage in North Africa and West Asia.

In each survey, as discussed above, a household-level money-metric measure of welfare is computed based on consumption or income depending on the concept used to measure national poverty in each country. The metric is computed into per capita levels. Below, the robustness of the stylized facts to the per capita approach is revisited.

Poverty is defined based on whether per capita household welfare, converted to international dollars using 2011 purchasing power parity (PPP) conversion factors, falls below a defined poverty line. The international poverty line of \$1.90 per person per day is used. This poverty line corresponds to the mean of the poverty lines found in the poorest 15 countries based on mean per capita consumption. All persons in households with consumption per capita lower than the international poverty line are considered poor (see the introduction).⁵ This assumes that all household members have an equal standard of living in the household, which, as discussed above, may mis-state critical personal dimensions of poverty and well-being.⁶

Table 1. Coverage of Low- and Middle-Income Countries in the GMD Sample, by Region

<i>Region</i>	<i>LMIC population in GMD, %</i>	<i>Countries in GMD, number</i>	<i>Countries not in GMD, number</i>
Central and South Asia	92.0	9	4
Europe and North America	20.9	8	3
East and Southeast Asia	88.6	18	23
Latin America and the Caribbean	91.2	18	6
North Africa and West Asia	51.3	7	8
Oceania	14.3	3	4
Sub-Saharan Africa	87.0	28	14
Total	76.8	91	62

Note: The GMD covers low- and middle-income countries on which a survey was run in 2010–15. The January 2019 version of the GMD is used.

Four Facts about the Demographic Profile of the World’s Poor

Drawing on existing studies and expanding in some strategic areas, the analysis begins with the global view and then focuses on regional patterns that deviate in salient ways. It highlights four key facts about the demographic profile of global poverty. The four facts focus on the risk of poverty among children and adults, by sex, by residency (particularly coresidence with children), and by household structure (particularly the presence of children, couples, or extended family members). Adult and child poverty are intertwined, of course.

⁵ Poverty is also monitored using other international poverty lines, as documented by Jolliffe and Prydz (2016), including a lower-middle-income international poverty line set at \$3.20 a day and an upper-middle-income international poverty line set at \$5.50 a day. This paper focuses on the \$1.90-a-day line, which is the one monitored by the Sustainable Development Goals.

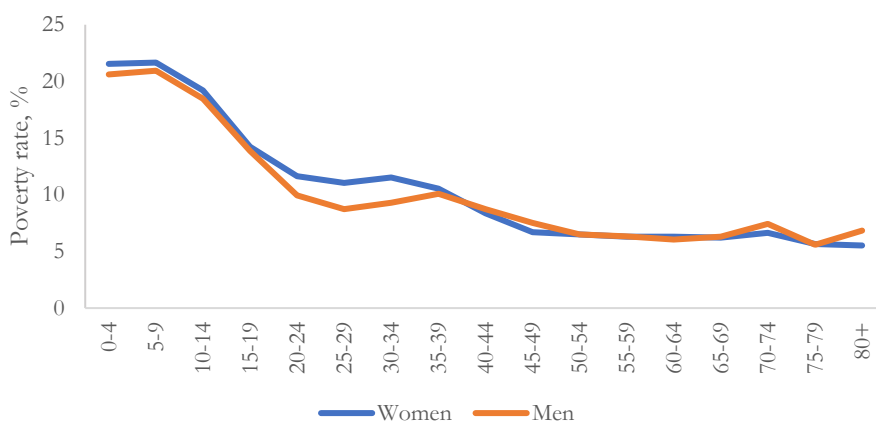
⁶ Female and male headship status are not used in this study to reflect gaps in poverty rate by sex. Using the sex of the household head to measure differences in poverty rates by sex would be flawed for one major reason: lots of women reside in male headed households (much less so adult males in female headed households).

For example, children rarely live without adults, and, so, if children are more likely to reside in poor households, then adults who live with children will also be more likely to reside in poor households.

Children are much more likely than adults to reside in poor households

A clear and consistent picture emerges that, globally, children are significantly more likely than adults to be poor, that is, they are more likely to live in poor households (figure 1). The poverty rate is 21.4 percent among children, compared with 10.6 percent among adults ages 18 or more. Poverty rates are highest among children ages 0–9, decrease among young adolescents and young adults, and stabilize among people ages 50 or more. On average, 20.4 percent of children ages 0–14 are living in poor households, compared with 9.2 percent among people ages 15 or more. Children are disproportionately represented among the poor, accounting for 28 percent of the total population, but 46 percent of the poor (figure 2). These children are also living in larger households, compared with people ages 15 or more (a mean of 5.8 and 4.5 household members, respectively). Specifically, they are living in larger poor households (a mean of 7.4 and 6.7 household members, respectively, and the children represent an average of 32.4 percent of the household members).⁷

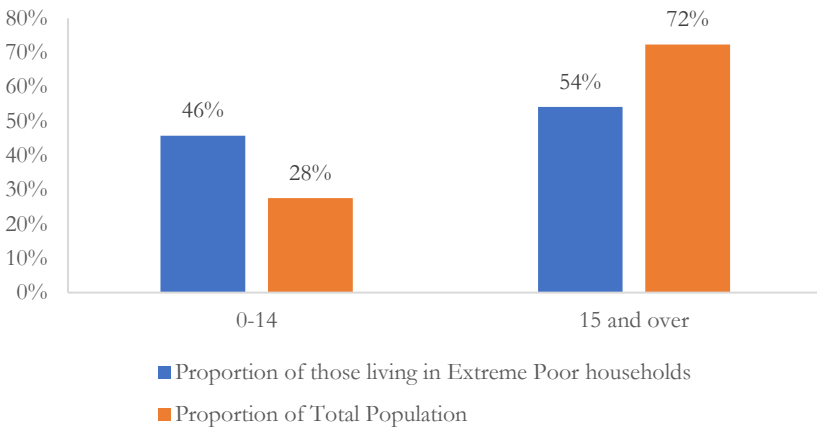
Figure 1. Global Poverty Rates Are Highest among Young Children and Decline among Older Groups



Source: Calculations based on data of the GMD.

⁷ Dependency ratios are higher among poor households than among nonpoor households across all world regions.

Figure 2. Globally, Children Are More Likely Than People Ages 15 or More to Be Poor

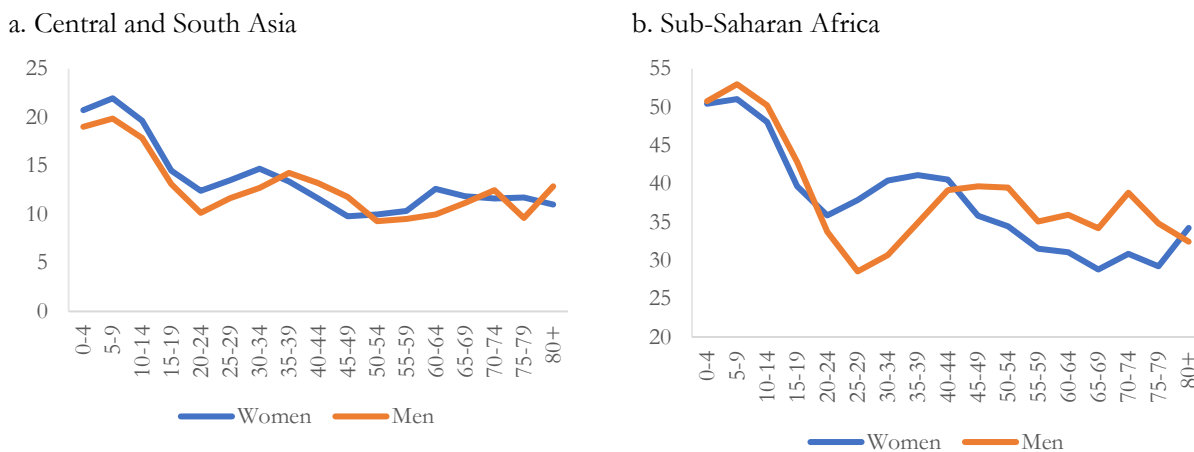


Source: Calculations based on data of the GMD.

A gap in poverty rates by sex has emerged and is concentrated in South Asia and Sub-Saharan Africa

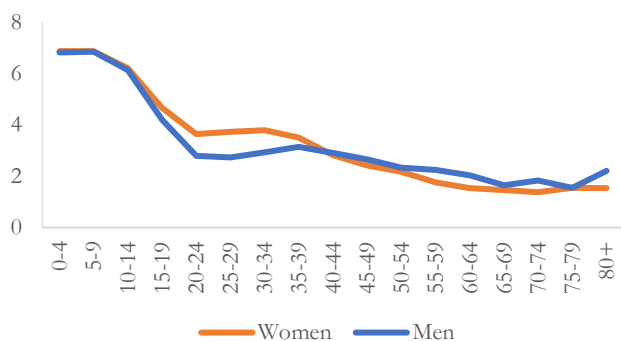
The gap in poverty by sex is nuanced by age. Differences in poverty rates by sex are concentrated among children and, to a larger degree, young adults (see figure 1). This global finding masks the regional drivers of these differences. Two regions stand out (figure 3, panels a and b): Central and South Asia and Sub-Saharan Africa, where 88.4 percent of the world’s poor reside. Poverty gaps by sex among young adults have also emerged in Latin America and the Caribbean (figure 3, panel c). However, a far smaller share of the world’s poor reside in this region (4 percent).⁸

Figure 3. Gaps in Poverty by Sex Are Concentrated in Three Regions



⁸ See appendix A, table A.1 for global and regional poverty rates by age and sex.

c. Latin America and the Caribbean



Source: Calculations based on data of the GMD.

Globally, girls are more likely than boys to live in poverty. But this finding is largely driven by the differences in poverty rates observed in Central and South Asia. In Central and South Asia, 21 percent of girls ages 0–14 are living in poor households, compared with 19 percent of boys ages 0–14. This difference in poverty rates in South Asia may reflect a preference for sons on the subcontinent that is more prevalent among poor households than among nonpoor households. This finding on Central and South Asia is revisited through robustness checks below. In Central and South Asia, the gender gap in poverty to the disadvantage of women continues to age 39, then switches to the detriment of men until age 50, when it switches back to the disadvantage of women ages 50 or more.

A gap in poverty by sex among children in favor of girls is observed in Sub-Saharan Africa. However, among individuals ages 20 or more, the gap in poverty rates by sex widens significantly and continues to age 45, when it switches and becomes greater among men.⁹

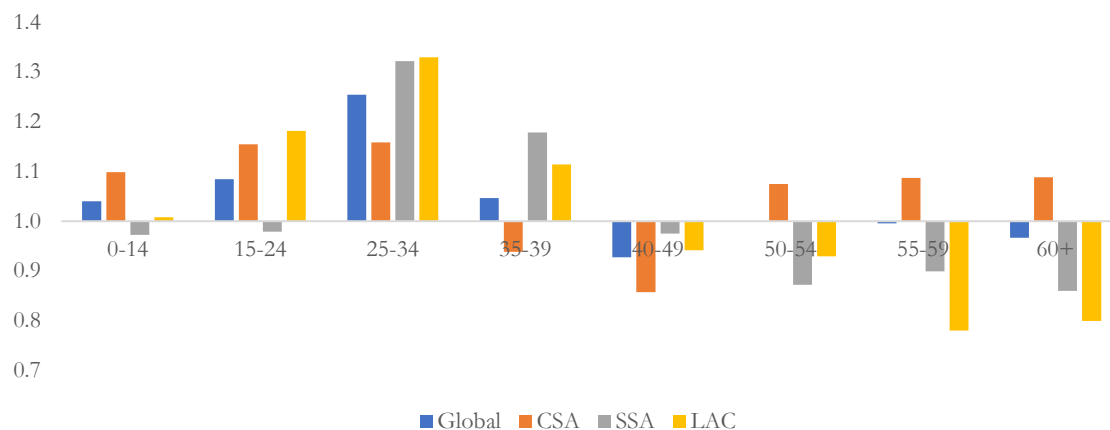
The gender gap by age is also evident in Latin America and the Caribbean. In this region, while differences are not observed among children, a gap in poverty by sex surfaces among young people ages 15–19 and continues to age 39. One reason may be the high levels of adolescent pregnancy in the region and the greater shares of lone-mother households.

The data disaggregated by sex and age reveal that women are particularly vulnerable to poverty between ages 25 and 34, when the gender gaps are widest. While the difference in poverty rates by sex among 15- to 19-year-olds favors men in Latin America and the Caribbean and in Central and South Asia, the gap among that age-group favors women in Sub-Saharan Africa. By age 20, across these three regions and globally, a similar gap is apparent: women’s poverty rates are higher. Globally, among the 25–34 age-group, more women than men are living in poverty—123 women for every 100 men. (Figure 4 shows the femininity index of poverty by

⁹ In Central and South Asia, when the poverty rates are higher among men than women, the gap between poor men and poor women is about 1.5 percentage points. In Sub-Saharan Africa, the differences range between 3 and 7 percentage points. This requires exploration, including to account for survival rates and life expectancy among the poor.

age in selected regions and globally.)¹⁰ Women represent a higher share than men among the total poor in this age-group: 7.2 percent and 5.8 percent, respectively. In sum, globally and across regions, differences in poverty rates by sex are greatest among women in the prime reproductive years, a period in the life cycle during which they are most likely to be caring for young children.

Figure 4. At Ages 25–34, Relative Household Poverty Rates Are Greater among Women Than Men



Source: Calculations based on data of the GMD.

Note: The figure shows the factor by which the incidence of poverty is greater among women than among men. A number greater than 1 indicates that the poverty rate is greater among women.

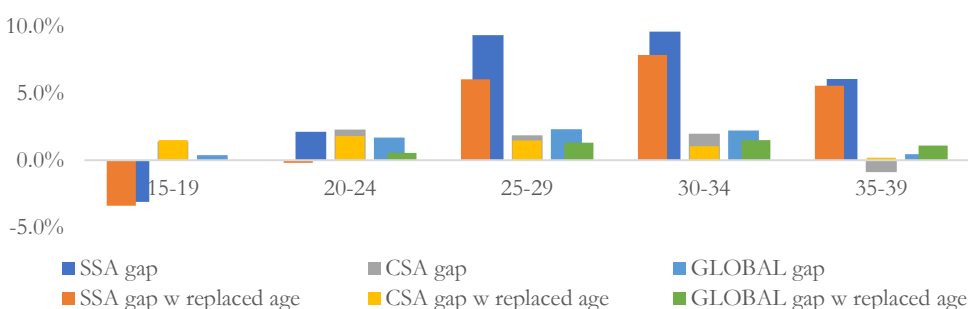
The differences in poverty rates among young adults may be explained by differences in the age at marriage and the age at first birth, that is, the age at family formation. Women tend to marry at a younger age than men and also marry men who are, on average, older. The mean age at marriage among women is 23.3 vs 26.6 among men globally, and the gaps are larger in some regions. The corresponding ages are 21.1 among women and 27.2 among men in Sub-Saharan Africa and 20.8 among women and 25.0 among men in Central and South Asia (UN Women 2019). Women form families and have children at a younger age than men of the same age cohort. In Central and South Asia, where women’s age at first marriage is lowest in comparison with other regions (20.8 vs 23.3 globally), gender differences in living arrangements are stark. Thus, 51.3 percent of women and 41.5 percent of men ages 25–34 live in households consisting of couples with children. Women in this age cohort are more likely to be living in households with children, and these households tend to be poorer than other types of households. Men in this cohort, in contrast, are much less likely to be living in households with

¹⁰ The index represents the following ratio: ((Number of women in poor households / Number of men in poor households) / (Total number of women / Total number of men)) *100. A result greater than 100 indicates that the share of women living in poor households is larger than the corresponding share of men; a result less than 100 indicates the inverse situation. See Femininity Index of Extreme Poverty and Poverty by Geographical Area (dashboard), CEPALSTAT, United Nations Economic Commission for Latin America and the Caribbean, Santiago, Chile, <https://estadisticas.cepal.org/cepalstat/tabulador/ConsultaIntegrada.asp?idIndicador=3330&idioma=i>.

young children and, in Central and South Asia, are more likely to be living with their parents.¹¹ These households exhibit much lower poverty rates.

To delve more deeply into this issue, the analysis explored the extent to which this underpins the gaps in poverty rates by sex among young adults. This was undertaken by considering the average age gap between husbands and wives in Central and South Asia and in Sub-Saharan Africa and equalizing this gap, that is, accounting for the age gap between married individuals and investigating the poverty rates among husbands who are the same ages as their wives. The results show that, globally, age differences between spouses explains to a certain extent the differences in poverty rates by sex among young adults ages 20–39. For example, in Sub-Saharan Africa, equalizing the age gap results in no difference in poverty rates by sex among the 20–24 age-group and shrinks the difference among older age-groups (figure 5).¹²

Figure 5. Gaps in Poverty Rates between Spouses Are Moderately Explained by Spousal Age Difference



Source: Calculations based on data of the GMD.

Adults who coreside with children show higher poverty rates

Among both men and women, coresidence with children is associated with higher poverty rates (figure 6).¹³ Women in Central and South Asia are more likely to be living in poor households if there are small children in the households.¹⁴ In the other regions, the likelihood is slightly greater among men, particularly in Sub-Saharan Africa. Controlling for individual characteristics (age, marital status, educational attainment, urban or rural location, and employment status) and household characteristics (including the presence or number of children in the household, household size, and the dependent or earner ratio) shows that women and men who

¹¹ In Central and South Asia, men account for 75 percent of the 25–34 age-group living in households composed of couples with children in which the children are all above age 18. This means that only 25 percent of adult children ages 25–34 living with their parents are women.

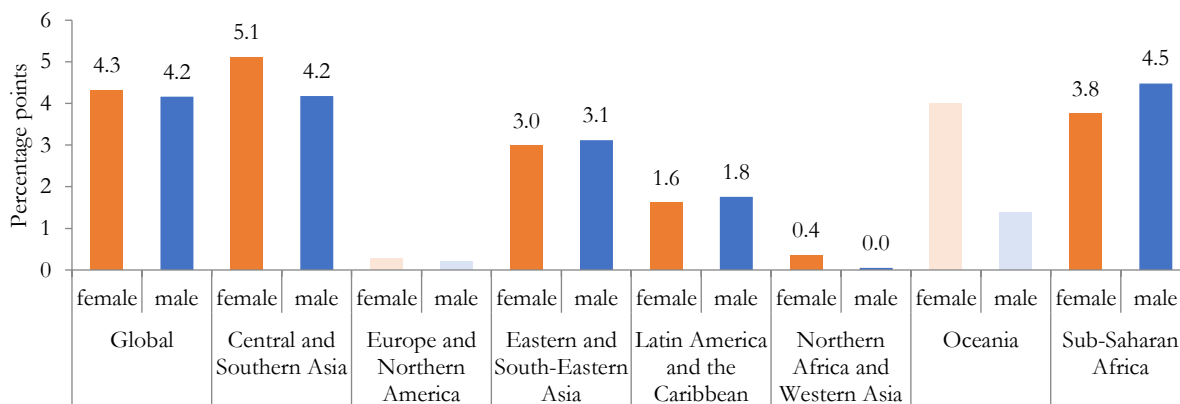
¹² The gap explained varies by age and region. Among the 40 or more age-group, this exercise shifts the difference in poverty rates from men (slightly higher rates) to women.

¹³ The child is not necessarily the biological child, stepchild, adopted child, or foster child of the household head or of the spouse of the household head.

¹⁴ These findings are explored below in the context of the types of households in which women and men are living.

coreside with one or more under-5-year-olds are around 4.2 percentage points more likely to be living in poverty than their counterparts who have no young children.

Figure 6. *The Probability of Poverty Rises among Adults Ages 18 or More If Under-5-Year-Olds Are in the Household*



Source: Calculations based on data of the GMD.

Note: The figure shows the difference in the poverty rate among adult women (men) living with or without children ages under 5. The estimates for Europe and North America and for Oceania are shaded out because they are not significant.

However, women assume the risk earlier in the life course and are more likely than men to be found in lone-parent households.¹⁵ Women ages 25–34—the age range among women who are most likely to have small children—who are living with young children are 4.3 percentage points more likely to be living in poverty than their peers who are not living with young children. Having a young child in the household also increases the likelihood of poverty among men in this age-group as well, but at a smaller level (2.2 percentage points).

Household demographic structure is integral to the profile of poverty

The combination of these three broad facts—the poverty gap between children and adults, the higher poverty rate among young adult women compared with young adult men, and the poverty implications among adults living with children—leads to a consideration of poverty by household demographic structure. Some household compositions are more prevalent than others among the poor, and some are more likely to include children and women in their reproductive years living in poverty.¹⁶ Building off the findings above, three household compositions are of particular interest: couples with children, that is, households in which a married or partnership couple is living with at least one coresident child of any age; lone-mother households in which a lone woman parent or caregiver of any age resides with at least one child; and extended households with children in which all persons are related to each other, but at least one nonminor individual is not within the parent-child family unit.¹⁷ These three household types are overrepresented among the poor: 50 percent of the

¹⁵ Lone-parent households are also known as single-parent households.

¹⁶ The analysis here follows an approach similar to the approach of Muñoz-Boudet et al. (2018), with some variation in the demographic composition of households.

¹⁷ Unless clearly specified, children refers to all individuals ages under 18.

world's population and 71 percent of the poor reside in these sorts of households (table 2). With a few exceptions in some regions, this overrepresentation of each of the three categories holds.

Table 2. Household Demographic Structure Is Integral to the Profile of Poverty

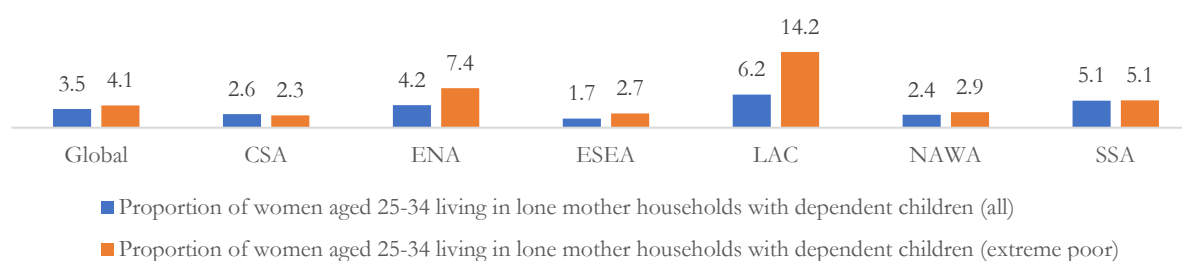
Region	Population share, %			Share among the poor, %		
	Couple with children	Lone mother with children	Extended family with children	Couple with children	Lone mother with children	Extended family with children
Global	35.4	3.8	10.3	44.9	5.4	20.9
Central and South Asia	40.8	3.0	12.3	49.4	3.3	20.3
Europe and North America	24.7	2.9	2.5	28.1	5.4	5.2
East and Southeast Asia	37.1	2.5	8.3	47.2	3.5	11.9
Latin America and the Caribbean	30.9	5.6	6.4	44.6	11.9	12.1
North Africa and West Asia	44.2	2.9	9.1	50.2	5.4	27.1
Oceania	36.4	2.0	16.1	48.5	1.0	28.4
Sub-Saharan Africa	29.8	5.6	15.4	41.3	6.6	23.3

Source: Calculations based on data of the GMD.

Among the poor, 45 percent live in households consisting of couples with children. Poor women are most frequently found in this type of household. Individuals ages 25–34 living in such households are overrepresented among the poor compared with other age-groups. Adults ages 25–34 account for 62.9 percent of the total population, but 74.3 percent of the population in poor households consisting of couples with children. And there is a gender gap in terms of who lives in poor households of this sort. Globally, 57.2 percent of the poor ages 25–34 living in such households are women, while the share of women in this group in the total population is 53.7 percent. This pattern replicates across regions. In Europe and North America, the share is 52.6 percent, and, in Central and South Asia, it is 58.9 percent.

Similarly, women are far more likely than men to live in lone-parent households, and such households tend to be poorer than households consisting of couples with children.¹⁸ In Latin America and the Caribbean, for instance, 14 percent of poor women ages 25–34 are living in lone-mother households with children ages under 18, and 6 percent of all women ages 25–34 are living in such households (figure 7).

Figure 7. In Some Regions, Lone Mothers Are Especially Vulnerable to Poverty



Source: Calculations based on data of the GMD.

¹⁸ Based on data on 86 countries and territories, an estimated 84.3 percent of lone-parent households are headed by women (UN Women 2019).

Note: Oceania, excluding Australia and New Zealand, is not shown owing to an insufficient sample size.

Households with a couple, children, and other adults, that is, extended family households with children, account for the second largest share of poor households, 20.9 percent. In the two regions with the highest poverty rates, Central and South Asia and Sub-Saharan Africa, about 40 percent of children ages under 18 are living in these extended households. Women who reside in such households exhibit a greater probability of living in poverty relative to women living in other types of households; they are 4.7 percentage points more likely to be poor than women living alone or in couple-only households, though women living alone and couple-only households account for only a small share of the poor and of the population in general. Residence in an extended family household also raises the probability of poverty among men, though the probability is lower, at 3.8 percentage points.

Four additional avenues for exploring these four facts

Underpinning these four broad facts are many nuances and avenues for further exploration, not least related to robustness of calculations to alternative specifications and concerning specific regional patterns. Here we look at four extensions to these findings – two related to technical specifications and two related to a more nuanced understanding of the results related to son preference and the role of household composition in explaining gaps in poverty rates by sex.

Do adult equivalence scales change the four facts?

The analysis of the demographic patterns of poverty relies on a per capita measure of consumption whereby it is assumed that children and adults have the same needs and that no economies of scale are associated with household size. As is common practice in poverty analysis, robustness checks may be used to explore whether the findings of the per capita approach hold after allowing the needs between children and adults to vary (usually assuming children have fewer needs) and allowing larger households to benefit from economies of scale. Newhouse, Suárez-Becerra, and Evans (2017), using an earlier version of the GMD, ran such robustness checks at the global level. The equivalence scale adjustment they undertook is based on a denominator other than household size (as used in per capita measures). Specifically, they use the following common formula:

$$AE = (n_a + \alpha * n_c)^\theta, \quad (1)$$

where the adult equivalence (AE) in each household is calculated based on the number of adults, n_a , the number of children, n_c , and two parameters, α and θ , that take values between 0 and 1. AE represents an

adjusted household size. Lower values of α capture the fact that children consume less expenditure relative to adults.¹⁹ Lower values of θ indicate the presence of some economies of scale.

In addition to adjusting household consumption by AE , the poverty line of \$1.90 also needs to be adjusted for economics of scale (see Ravallion 2015). Newhouse, Suárez-Becerra, and Evans (2017) apply the approach of Ravallion (2015) and compute the revised poverty line as follows:

$$Z^{ae}(\alpha, \theta) = 1.90 * \frac{\widehat{n}_{a,r} + \widehat{n}_{c,r}}{(\widehat{n}_{a,r} + \alpha * \widehat{n}_{c,r})^\theta}, \quad (2)$$

whereby a revised poverty line for the AE scale, Z^{ae} , is a function of the parameters α and θ and the median number of adults and children in reference (r) households. As reference households, households with consumption per capita between \$1.70 and \$2.10 are used.

The study replicates the work of Newhouse, Suárez-Becerra, and Evans (2017) by using the most recent GMD and extending the relevant analysis to examine patterns by household type and by region. The focus is on the implications of equivalence choice in the poverty rates of adults and children and in households with any child. The motivation for this work is twofold. First, mean household size varies across regions substantially, which implies that the economies of scale adjustment will have different implications for the poverty rates across regions. Second, children—who drive a lot of the poverty story—are also more likely to be living in larger households, and these may be more heavily affected by the economies of scale adjustment (table 3). The share of children in the population likewise varies across regions. Among the three household types that are the focus of this study (couples with a child age below 18, lone mothers with a child age below 18, and extended families with a child age below 18), the variation in household size may reorder the relative position of the households with respect to poverty.

Table 3. Children Reside in Larger Households Relative to Adults

Region	Average number of household members			
	Adults in all households	Children in all households	Adults in poor households	Children in poor households
Central and South Asia	5.2	6.1	6.5	6.8
East and Southeast Asia	3.8	4.6	5.5	6.3
Europe and North America	3.1	4.2	4.8	7.8
Latin America and the Caribbean	4.0	5.1	5.3	6.2
North Africa and West Asia	5.3	6.6	9.3	9.6
Oceania	6.8	6.8	8.6	8.6
Sub-Saharan Africa	5.8	7.1	7.2	7.8

Source: Calculations based on data of the GMD.

¹⁹ Equivalence scales applied in country-level poverty estimations (such as the Oxford scale and the Oxford-modified scale) usually assign α a value below 1, though one might argue that children are linked to high costs (especially in education and health expenditures in some contexts).

Globally, Newhouse, Suárez-Becerra, and Evans (2017) find that, in many commonly used two-parameter equivalence scales, poverty rates among children remain near the level measured using a per capita approach and, moreover, remain higher than the poverty rates among adults. However, because poverty rates among adults tend to increase, the gap between children and adults shrinks if equivalence is taken into account. The study replicates Newhouse, Suárez-Becerra, and Evans (2017) by using the latest GMD database (table 4).²⁰ A similar pattern emerges at the global level: adult poverty rates increase, and the gap between children and adults narrows. The analysis extends this to a regional view that is not in Newhouse, Suárez-Becerra, and Evans (2017), that is, the two regions with the higher poverty rates (Central and South Asia and Sub-Saharan Africa). If equivalence scales are applied by assuming economies of scale or by weighting children differently, the ratio falls, though not to the point where the poverty rates become larger among adults than among children.

Table 4. Poverty Rates Shift Modestly under the Influence of Equivalence Scales

Measure	(a) <i>per capita</i>	(b)	(c)	(d)	(e)
	$\theta = 1$ $a = 1$	$\theta = 0.6$ $a = 1$	$\theta = 0.2$ $a = 1$	$\theta = 1$ $a = 0.6$	$\theta = 0.6$ $a = 0.6$
<i>Global</i>					
Adult poverty rate	10.6	13.3	18.1	12.8	15.0
Child poverty rate	21.4	21.8	23.35	20.5	21.1
Ratio of child to adult	2.0	1.6	1.3	1.6	1.4
<i>Central and South Asia</i>					
Adult poverty rate	14.6	18.6	25.9	18.6	21.5
Child poverty rate	22.4	23.8	26.8	21.5	23.1
Ratio of child to adult	1.5	1.3	1.0	1.2	1.1
<i>Sub-Saharan Africa</i>					
Adult poverty rate	36.2	37.9	42.3	37.4	39.0
Child poverty rate	50.1	47.7	45.7	47.0	45.7
Ratio of child to adult	1.4	1.3	1.1	1.3	1.2

Source: Calculations based on data of the GMD.

If the analysis focuses on household type, especially households with children, the story on which types of households are poorest shifts if economies of scale are taken into account ($\theta < 1$) (table 5). The poverty rate of extended households with children falls significantly if economies of scale are introduced, and the poverty gap between these households and households consisting of couples with children shrinks from nearly 10 percentage points to below 5 percentage points. Meanwhile, economies of scale result in a larger poverty gap between households with lone mothers with children and households with couples and children.

²⁰ Table 4 illustrates a subset of combinations. Column (b) approximates the scale of the Organisation for Economic Co-operation and Development (0.7 and 0.5 for each additional adult after the first adult and for each child, respectively). The results of the application of a modified scale of this sort (0.5 and 0.3) and the square root rule (dividing household size by the square root) would generally fall between columns (c) and (d).

Table 5. Poverty Rates Based on Equivalence Scales Can Shift the Rank by Household Type

Measure	(a) per capita	(b)	(c)	(d)	(e)
	$\theta = 1$ $a = 1$	$\theta = 0.6$ $a = 1$	$\theta = 0.2$ $a = 1$	$\theta = 1$ $a = 0.6$	$\theta = 0.6$ $a = 0.6$
<i>Global</i>					
Couple with at least one child age under 18	15.6	13.0	11.4	15.1	12.9
Lone mother with at least one child age under 18	16.7	17.7	20.4	14.7	16.4
Extended family with at least one child age under 18	25.1	15.4	9.4	26.3	16.1
<i>Central and South Asia</i>					
Couple with at least one child age under 18	16.6	13.1	11.5	16.1	13.2
Lone mother with at least one child age under 18	14.9	16.5	21.6	11.8	14.1
Extended family with at least one child age under 18	21.5	10.9	5.6	24.8	12.6
<i>Sub-Saharan Africa</i>					
Couple with at least one child age under 18	46.4	46.1	45.9	48.0	47.0
Lone mother with at least one child age under 18	38.4	44.6	51.3	38.0	44.4
Extended family with at least one child age under 18	51.3	41.6	32.9	52.4	41.6

Source: Calculations based on data of the GMD.

Two regions show the biggest change: Central and South Asia and Sub-Saharan Africa. If economies of scale with a change in θ to 0.6 are assumed, the poverty rates among lone mothers rise by 2 percentage points relative to the baseline in Central and South Asia and 7 percentage points in Sub-Saharan Africa. The effect among extended households is the opposite, that is, there is a large drop from 22 percent to 11 percent in Central and South Asia and from 51 percent to 42 percent in Sub-Saharan Africa. The changes are even larger with a θ of 0.2. There is no global consensus on an alternative to the per capita equivalence scale, but these shifts underscore the importance of robustness checks on per capita measures especially in regards to understanding the relative poverty rank of lone-mother households and extended households with children.

Does a focus on the poverty gap change the four facts?

A poverty rate measures the population share of people in poor households, but does not reflect how poor the poor are, that is, the distance of household income or consumption from the poverty line. A common measure that is complementary to the poverty rate is thus the poverty gap, which shows the average distance between the poverty line and households living below the poverty line. The gap is expressed as a percentage of the poverty line. Households that are living close to the poverty line need less income to escape poverty than those that are living far below the line. The poverty gap is calculated following the Foster-Greer-Thorbecke (FGT) formula for the poverty measure (Foster, Greer, and Thorbecke 1984), as follows:

$$P_{\alpha} = \frac{1}{N} \sum_{i \text{ with } y_i \leq Z} \left(\frac{Z - y_i}{Z} \right)^{\alpha}, \quad (3)$$

where y_i is the per capita consumption of household i ; Z is the \$1.90-a-day international poverty line; N is the total number of households; and α represents the extent to which the incomes of the poorest of the poor are more highly weighted. The higher the value of α , the greater the weight placed on the poorest. P is the poverty

rate if α is 0 because the sum becomes simply the number of people with consumption below the poverty line. If α is 1, the formula is known as the poverty gap index.

The study explored whether examining the poverty gap, rather than the poverty rate, changes the pattern observed across household types. It again looked specifically at the three most vulnerable types of households, all of which include children ages under 18. Generally, the rank of these vulnerable households is not affected by the use of a measure of the depth of poverty (the poverty gap), compared with the per capita poverty rate (table 6). Similar to the ranking by the poverty rate, lone-mother households are less well off than couple households with children. Extended family households exhibit the widest poverty gap.

Table 6. The Rank of Household Types Is Robust to Using the Poverty Gap Instead of the Poverty Rate

Region	Poverty rate, households with at least one child age under 18			Poverty gap, households with at least one child age under 18		
	Couple	Lone mother	Extended family	Couple	Lone mother	Extended family
Global	18.4	20.1	23.1	4.3	5.1	7.1
Central and South Asia	18.7	17.1	21.3	3.2	2.9	4.3
East and Southeast Asia	0.2	0.5	0.5	0.1	0.1	0.2
Europe and North America	6.3	6.8	6.6	0.9	1.0	1.4
Latin America and the Caribbean	4.7	6.7	4.3	1.3	2.0	1.6
North Africa and West Asia	4.6	7.3	9.4	0.9	1.3	2.2
Oceania	11.9	4.7	12.3	2.2	1.3	3.7
Sub-Saharan Africa	49.1	42.4	47.1	16.8	13.8	18.1

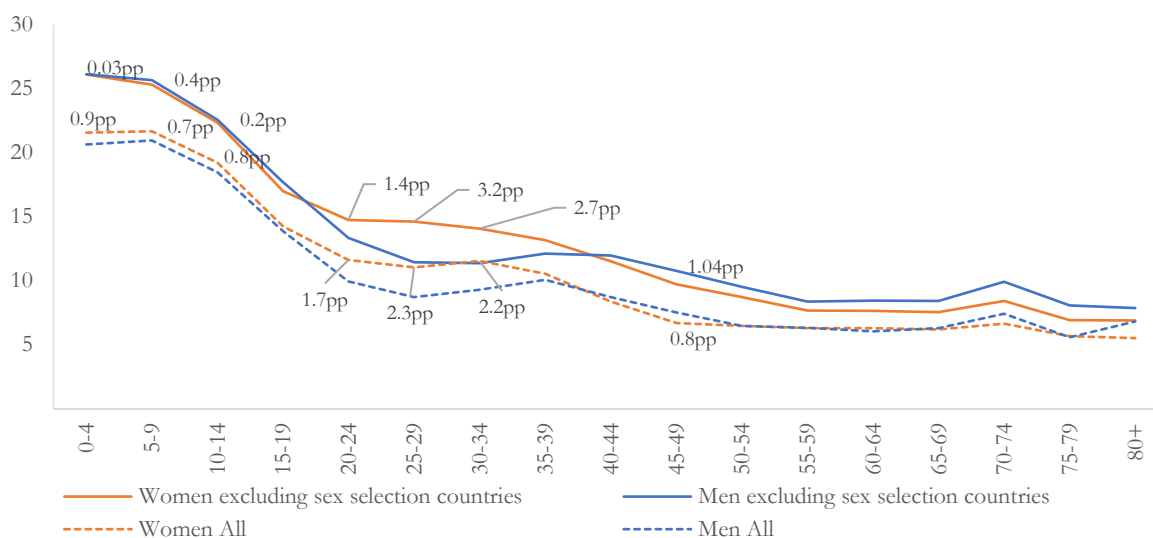
Source: Calculations based on data of the GMD.

The gender gap in child poverty: The role of the preference for sons

Poverty rates by sex and age show a gender gap in poverty among two specific age-groups: young children ages 0–9 and adults ages 25–34. The share of girls ages 0–9 who reside in poor households is almost 1 percentage point higher relative to boys of the same ages. The preference for sons and sex selection at birth may be driving this result. To explore this, the analysis examined poverty rates by age among countries divided into two groups: countries documented as exhibiting a preference for sons and other countries.²¹ The countries in which there is a son preference drive the gender gap in poverty among young children (figure 8). Among these countries, India alone explains most of the observed poverty gap between young girls and boys (not shown in figure 8). India explains 62.5 percent of the gap; the rest of the countries characterized by sex selection explain 25.0 percent of the observed gap. Overall, a girl is 0.8 percentage points more likely than a boy to live in a poor household. If the girl lives in India, her probability of living in a poor household shifts from 20.4 percent to 25.9 percent, while, for a boy, the shift is from 20.1 percent to 23.1 percent.

²¹ The countries in which sons are given preference have been identified by relying on the sex ratios at birth that are above the biologically normal sex ratio at birth (102–106 males per 100 females). In India, the India Sampling Registration System reported a rate of 111 for 2016.

Figure 8. Child Differences in Poverty Rates by Sex Are Concentrated in Countries Exhibiting Sex Selection



Source: Calculations based on data of the GMD.

Note: Countries documented as characterized by a preference for sons include Albania, Azerbaijan, China, Georgia, India, and Vietnam. The data show specific percentage point (pp) differences between males and females in various age-groups in the two types of countries.

The India-specific result on poverty gaps among young children may be driven by the well-documented pattern of son preference. Son preference holds irrespective of location (urban or rural), educational attainment, or economic status (Klaus and Tipandjan 2014; Mitra 2008). Perhaps the most salient evidence of son preference is the stark statistics on the number of girls per 1,000 boys in India. Moreover, this child sex ratio is worsening, falling from 927 in 2001 to 918 in 2011 (Chandramouli 2011).

Household surveys such as the ones used in the GMD are ill suited to capture son preference accurately. However, based on the available data, among households in which sibling relationships can be identified (in reference to the head of household), one may observe that poor girls are more likely to live in households with a larger number of children, particularly if a girl is the first born in the household. The average number of children in the household is higher in the case of poor girls (4.4) relative to poor boys (3.5), whereas among nonpoor children, the average number of children in the household is the same among the households of boys and girls (3.0). In the global data, by comparison, there is no difference in the average number of children in the households of boys and girls in poor households (4.5) or rich households (3.0).

A possible explanation of the gap is the differential fertility patterns between poor and nonpoor households. Son preference has been shown to influence fertility decisions; families frequently continue to have children until they reach their preferred number of boy children (Clark 2000; Kumar and Sinha 2020). The *Economic Survey 2017–18* of India shows that son preference is indeed strongly manifested in the last child (among women with completed fertility) (Ministry of Finance 2018). Differential access to sex-selection technologies (ultrasounds) between the rich and the poor may skew the number of children in households

across the wealth distribution.²² Ultrasounds are more common among urban women, women who have some educational attainment, and women in wealthier households (IIPS and ICF International 2017). And termination rates are highest among women in the top wealth quintile. Meanwhile, there is evidence that sex selection is more pronounced in more well-off households (Bhalotra and Cochrane 2010). Agrawal (2012) points to persistent son preferences and divergent access to ultrasound technology as drivers of differences in child sex ratios among rich and poor households. Richer households abort girls and restrict the total number of children they have; poorer or the poorest households continue to have children until they have a male child. This is consistent with the household size statistics by sex and poverty status cited above.

Gaps in the poverty rate by sex in the reproductive years: A possible explanation

Women and men ages 25–34 may have different life trajectories. The study therefore explored the data at hand to assess whether some household or individual characteristics—for instance, the presence of children, marital status, or household composition—might contribute to the poverty gap between these two groups.

By looking in more detail at household composition, the analysis found that combining household types—couples with children, extended family households, or lone-adult households—with the relationship to the household head of the members of the age-group of interest (25–34), and the number of household members ages under 15 (children) revealed that women and men are essentially living in different households and occupy different positions within these households.²³ The focus on the relationship between the individual and the household head is based on the household roster collected in the surveys from which the data used in the analysis are derived.

Table 7 presents the share of household types among the 25–34 age-group by sex and poverty status. Regardless of sex, households consisting of couples with children are the most common type among poor young adults. Women are more likely than men of the same age to be found in this type of household. Compared with men, women are more likely to be in lone-adult or extended family households. Men in the age-group are more likely to be living in households in which they are the adult child of the household head.²⁴

²² In India, prenatal sex selection was banned by the Pre-Conception and Pre-Natal Diagnostic Techniques Act as amended in 2004. However, the law seems to have curtailed sex-selective abortions only to a limited extent and only among women who cannot afford them in any case. For example, after adjusting for excess mortality rates among girls, Jha et al. (2011) find that selective abortions of girls have continued, and the number has increased from 0 to 2.0 million in the 1980s, from 1.2 million to 4.1 million in the 1990s, and from 3.1 million to 6.0 million in the 2000s.

²³ Appendix A, table A.3 has a detailed description of each of these individual and household categories. Based on legislation in most countries, age 15 marks the legal age to start working. However, robustness checks were conducted that included all children ages 18 or under, and the results, while more muted, are consistent with the findings on the selected age definitions of children.

²⁴ The household types illustrated in table 7 represent extensions of the basic types used thus far in the paper (couples with children, extended family households, and lone-parent households). The main addition is the consideration of the position in the household of the household member in the 25–34 age-group (head, spouse of head, adult child of head, or other household member) and the presence or absence of children ages under 15 in the household. These new categories

Both men and women in households consisting of couples with children, lone-parent families, and extended family have a greater chance of being poor, but women are more likely than men to be living in these poor households. The average number of children ages under 15 living with women is 2.1, while men tend to reside with fewer children (an average of 1.9 children per household). Both poor women and poor men are living in larger households relative to the nonpoor. These larger households consist of both more children (3.0 and 2.0 children in poor and nonpoor households, respectively) and more adults (3.0 and 2.5 adults in poor and nonpoor households, respectively).

Table 7. Household Compositions and Position in the Household, 25–34 Age-Group, by Sex

<i>The position of the 25- to 34-year-old in the household</i>	<i>All</i>	<i>Women, 25–34</i>		<i>Men, 25–34</i>		<i>Women 25–34</i>		<i>Men 25–34</i>	
		<i>Nonpoor</i>	<i>Poor</i>	<i>Nonpoor</i>	<i>Poor</i>	<i>Nonpoor</i>	<i>Poor</i>	<i>Nonpoor</i>	<i>Poor</i>
Member of the couple, household of couple with children	37.4	42.4	32.6	41.9	45.8	31.9	40.6		
Adult, household of lone-adult with children	1.7	3.1	0.4	2.9	4.3	0.4	0.5		
Adult (except child of head), extended family with children	15.7	20.2	11.3	18.3	35.8	10.2	21.7		
Adult child of head, any type of household with children	17.0	10.4	23.4	10.5	9.4	22.9	28.7		
Member, any household without children	28.2	24.0	32.2	26.5	4.9	34.6	8.6		
	100.0	100.0	100.0	100.0	100.0	100.0	100.0		

Source: Calculations based on data of the GMD.

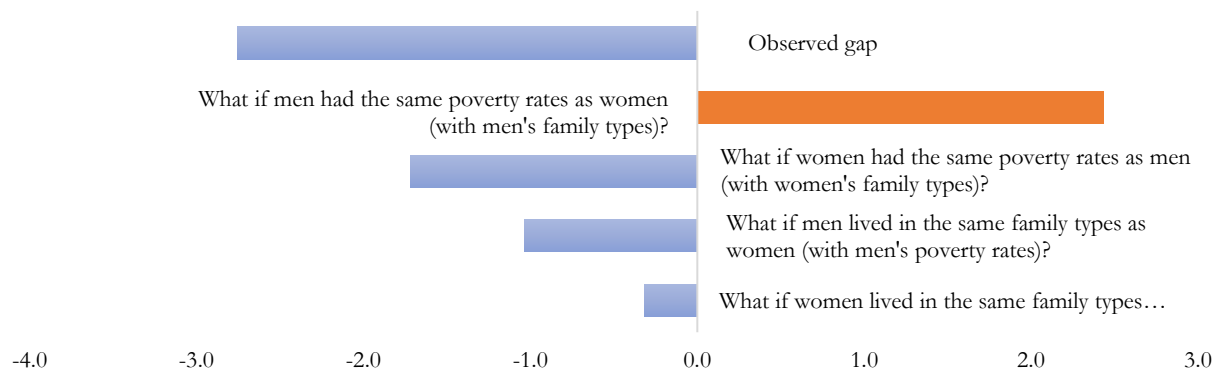
In the 25–34 age-group, the poverty rate among women is 2.3 percentage point higher than the rate among men. The analysis examined the drives of this difference by performing a simple exercise to compare the observed gap in poverty rates between men and women (disfavoring women) in four scenarios as follows:

- Assigning men the same poverty rates as women by household type, but keeping the distribution of men by household type constant
- Assigning women the same poverty rates as men by household type, but keeping the distribution of women by household type constant
- Assigning men the same distribution by household type as women, but keeping the men’s poverty rates by household type constant
- Assigning women the same distribution by household type as men, but keeping women's poverty rates by household type constant

The analysis reveals that the observed difference largely derives from household composition and not the differential poverty rates between men and women conditional on household type or the distribution by sex across household types. Figure 9 shows these differences.

are introduced because of the notable differences in the prevalence by sex among 25- to 34-year-olds. These differences reflect both later age at first marriage among men relative to women and the widespread practice of coresidence of young married couples with the parents of the husband, especially in South Asia, where the young husband is typically the adult child of the household head and the young wife is an adult in an extended family household.

Figure 9. The Gender Poverty Gap Mostly Reflects the Differences by Household Type between Men and Women



The results show that women are more likely to be an adult (unless they are the child of the household head) in extended family households with children (38 percent versus 22 percent among men). These women account for 20 percent of the total poor, while men represent 10 percent of the total poor. Men are more likely to be adult children of the household head in any type of household with children (29 percent versus 9 percent among women). These men are 13 percent of the total poor, while women make up only 5 percent. This is consistent with the older age at first marriage among men and the propensity of men to reside with their parents rather than move out prior to marriage. Women in this age-group appear to be less likely to be living in the households of their parents.

The largest group among the poor in the 25–34 age-group consists of the 46 percent of women and 41 percent of men who are part of the couples in poor households of couples with children. The women living under these circumstances account for 25 percent of the total poor, and the men account for 18 percent. While the likelihood that a woman is part of a couple in a household of a couple with children is the same among the poor as in the overall population, the corresponding situation is different among men; the likelihood is 8 percentage points greater among poor men than among all men.

The likelihood that a man or woman is an adult in an extended family household with children is, respectively, 16 and 10 percentage points greater among the poor than in the overall population. The difference between men and women is marked in households of any kind without children: 1 percentage point among women and 24 percentage points among men.

Among young women, living in extended family households or in lone-parent households is more disadvantageous because it increases the likelihood that they are poor relative to men. Women enjoy lower poverty rates if they reside in households as adult children either with their parents alone or with other relatives, while the probability of poverty increases among men in such circumstances, perhaps reflecting men's greater ability to start their own households.

Discussion

This paper provides a glimpse on the richness and complexity of the basic demographic profile of the world's poor available through a focus on age, sex, and household structure. Household-level poverty is influenced by the composition of members by age and sex. Children and those who are more likely to care for children—young adult women—are significantly more likely to reside in poor households. This finding is robust to a consideration of economies of scale or the measurement of poverty depth rather than simple poverty incidence. The analysis of household composition supports the view that the family situation of young women, particularly if they have children, determines a gap in poverty rates by sex that is most pronounced in Central and South Asia and Sub-Saharan Africa. However, it also shows that men face similar increases in the likelihood of living in poor households if there are children, and, in some regions, the likelihood of living in poverty is slightly greater among men than among women of the same age or among men who do not reside with children (their own or not). Accounting for life-cycle differences, for example, by spousal age gap, while muting some of the observed differences between men and women, does not explain the totality of the observed gender gap. In the case of children, the differences between girls and boys cannot be explained by life-cycle choices.²⁵

The information on differences in household composition and the relationship of the various household members to the household head confirms that women are more likely to coreside with small children and highlights additional differences between women and men during the peak reproductive and productive ages. Nonetheless, more research and more data are needed to shed further light on these differences.

Not only does a gender lens matter in poverty analysis in general, it also matters in relation to specific moments in the life cycle among women and men, specifically when they are raising young children. The presence of children increases the likelihood that men and women are living in poverty, though women assume the risk earlier in the life course and are more likely than men to face poverty in, for example, lone-parent households. As the analysis shows, the overlap between care responsibilities and the economically productive years is crucial in understanding the differences in poverty rates among young adults. Moreover, the findings highlight the importance of considering the influence of life stages (that is, periods when individuals are most likely to be caring for dependents), household composition (that is, the presence of children), and gender differences in the distribution of unpaid care and domestic work in an analysis of gender inequality among the poor. In the context of the impact of COVID-19, these issues do not lose significance. The pandemic has highlighted the implications of both occupational segregation (woman-dominated work is often more greatly affected) and the unequal care burden in households (including the gendered consequences of school and day-care closures). This underlines that tracking poverty needs to consider household types, along with the age and sex patterns in poverty data.

²⁵ Analysis with an updated version of the GMD (World Bank 2020) confirms these findings. Based on 2018 data, half the global poor are children ages 15 or younger, and women are overrepresented among the poor globally and also across most world regions, particularly Central and South Asia and Sub-Saharan Africa.

These broad regional and global patterns are insufficient for the identification of specific policy avenues. Yet, combined with other facts, they may help in determining policies to address the differences by age and sex, including how support for lone mothers and families with children could contribute to reducing poverty and narrowing the differences in poverty rates by sex, particularly among young adults. Continued effort is also needed to understand intrahousehold differences and inequalities from a monetary and a multidimensional angle and to continue to include a demographic household view in the analysis of poverty. In this regard, greater support and investment in gender statistics and gender analyses are critical.

References

- Agrawal, Sutapa. 2012. "The Sociocultural Context of Family Size Preference, Ideal Sex Composition, and Induced Abortion in India: Findings from India's National Family Health Surveys." *Health Care for Women International* 33 (11): 986–1019.
- Bargain, Olivier, Guy Lacroix, and Luca Tiberti. 2018. "Validating the Collective Model of Household Consumption Using Direct Evidence on Sharing." IZA Discussion Paper 11653 (July), Institute of Labor Economics, Bonn, Germany.
- Bhalotra, Sonia, and Tom Cochrane. 2010. "Where Have All the Young Girls Gone? Identification of Sex Selection in India." IZA Discussion Paper 5381 (December), Institute of Labor Economics, Bonn, Germany.
- Brown, Caitlin S., Martin Ravallion, and Dominique van de Walle. 2019. "Most of Africa's Nutritionally Deprived Women and Children Are Not Found in Poor Households." *Review of Economics and Statistics* 101 (4): 631–44.
- Calvi, Rossella. 2020. "Why Are Older Women Missing in India? The Age Profile of Bargaining Power and Poverty." *Journal of Political Economy* 128 (7): 2453–2501.
- Castañeda, Raul Andrés, Dung Thi Thuy Doan, David Locke Newhouse, Minh Cong Nguyen, Hiroki Uematsu, João Pedro Azevedo, and Data for Goals Group. 2018. "Who Are the Poor in the Developing World?" *World Development* 101 (January): 250–67.
- Chandramouli, C. 2011. "Census of India 2011, Provisional Population Totals: Rural-Urban Distribution." India Series 1, Vol. 2, Paper 1, Office of the Registrar General and Census Commissioner, Government of India, New Delhi.
- Clark, Shelley. 2000. "Son Preference and Sex Composition of Children: Evidence from India." *Demography* 37 (1): 95–108.
- Ferreira, Francisco H. G., Shaohua Chen, Andrew L. Dabalen, Yuri Dikhanov, Nada Hamadeh, Dean Mitchell Jolliffe, Ambar Narayan, Espen Beer Prydz, Ana L. Revenga, Prem Sangraula, Umar Serajuddin, and Nobuo Yoshida. 2015. "A Global Count of the Extreme Poor in 2012: Data Issues, Methodology, and Initial Results." Policy Research Working Paper 7432, World Bank, Washington, DC.
- Foster, James E., Joel Greer, and Erik Thorbecke. 1984. "A Class of Decomposable Poverty Measures." *Econometrica* 52 (3): 761–66.
- IIPS (International Institute for Population Sciences) and ICF International. 2017. *India: National Family Health Survey (NFHS-4), 2015–16*. Mumbai: IIPS.
- Jha, Prabhat, Maya A. Kesler, Rajesh Kumar, Faujdar Ram, Usha Ram, Lukasz Aleksandrowicz, Diego G. Bassani, Shailaja Chandra, and Jayant K. Banthia. 2011. "Trends in Selective Abortions of Girls in India: Analysis of Nationally Representative Birth Histories from 1990 to 2005 and Census Data from 1991 to 2011." *Lancet* 377 (9781): 1921–28.
- Jolliffe, Dean Mitchell, and Espen Beer Prydz. 2016. "Estimating International Poverty Lines from Comparable National Thresholds." *Journal of Economic Inequality* 14 (2): 185–98.
- Klaus, Daniela, and Arun Tipandjan. 2014. "Son Preference in India: Shedding Light on the North-South Gradient." *Comparative Population Studies* 40 (1): 77–102.
- Kumar, Sneha, and Nistha Sinha. 2020. "Preventing More 'Missing Girls': A Review of Policies to Tackle Son Preference." *World Bank Research Observer* 35 (1): 87–121.
- Ministry of Finance, India. 2018. "Gender and Son Meta-Preference: Is Development Itself an Antidote?" In *Economic Survey 2017–18*, vol. 1 (January), 102–18. New Delhi: Oxford University Press.
- Mitra, Aparna. 2008. "The Status of Women among the Scheduled Tribes in India." *Journal of Behavioral and Experimental Economics* 37 (3): 1202–17.
- Muñoz-Boudet, Ana María, Paola Buitrago, Benedicte Leroy de la Briere, David Locke Newhouse, Eliana Rubiano Matulevich, Kinnon Scott, and Pablo Suárez-Becerra. 2018. "Gender Differences in Poverty and Household Composition through the Life-Cycle: A Global Perspective." Policy Research Working Paper 8360, World Bank, Washington, DC.
- Newhouse, David Locke, Pablo Suárez-Becerra, and Martin Evans. 2017. "New Global Estimates of Child Poverty and Their Sensitivity to Alternative Equivalence Scales." *Economics Letters* 157 (August): 125–28.

- Olinto, Pedro, Kathleen Beegle, Carlos Sobrado, and Hiroki Uematsu. 2013. "The State of the Poor: Where Are the Poor, Where Is Extreme Poverty Harder to End, and What Is the Current Profile of the World's Poor?" *Economic Premise* 125 (October), World Bank, Washington, DC.
- Ravallion, Martin. 2015. "On Testing the Scale Sensitivity of Poverty Measures." *Economics Letters* 137 (December): 88–90.
- Ravallion, Martin, Gaurav Datt, and Dominique van de Walle. 1991. "Quantifying Absolute Poverty in the Developing World." *Review of Income and Wealth* 37 (4): 345–61.
- UN Women (United Nations Entity for Gender Equality and the Empowerment of Women). 2019. *Progress of the World's Women 2019–2020: Families in a Changing World*. New York: United Nations.
- UN Women (United Nations Entity for Gender Equality and the Empowerment of Women) and World Bank. 2018. "Spotlight on Goal 1: Gender Differences in Poverty and Household Composition through the Life Cycle:." United Nations, New York.
- World Bank. 2018. *Poverty and Shared Prosperity 2018: Piecing Together the Poverty Puzzle*. Washington, DC: World Bank.
- World Bank. 2020. *Poverty and Shared Prosperity 2020: Reversals of Fortune*. Washington, DC: World Bank. <https://openknowledge.worldbank.org/bitstream/handle/10986/34496/9781464816024.pdf>.

Appendix A. Additional Tables

Table A.1. Gaps in Poverty Rates by Sex and Broad Age-Groups, by Region and Globally

Age	CSA		ENA		ESEA		LAC		NAWA		OCE		SSA		Global	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
0–4	20.7	19.0	0.4	0.3	3.7	3.7	6.9	6.8	7.8	7.9	14.5	15.3	50.5	50.8	21.7	20.6
5–9	22.0	19.9	0.4	0.3	4.2	4.2	6.9	6.9	8.7	8.1	16.0	15.1	51.0	53.0	21.7	20.9
10–14	19.7	17.9	0.4	0.4	4.1	3.8	6.2	6.1	8.2	7.8	14.4	14.3	48.1	50.2	19.2	18.5
15–19	14.5	13.1	0.3	0.3	2.6	2.6	4.7	4.2	6.9	6.5	11.4	11.2	39.7	42.8	14.2	13.9
20–24	12.4	10.2	0.3	0.4	2.1	1.9	3.7	2.8	5.5	5.5	8.6	9.1	35.9	33.8	11.6	9.9
25–29	13.5	11.7	0.3	0.2	1.8	1.5	3.7	2.7	4.7	4.8	9.9	7.3	37.8	28.6	11.0	8.7
30–34	14.7	12.7	0.2	0.2	2.2	1.7	3.8	2.9	4.8	3.6	8.6	8.7	40.4	30.7	11.5	9.3
35–39	13.4	14.3	0.2	0.2	2.2	2.2	3.5	3.2	4.1	4.2	8.9	7.7	41.1	34.9	10.5	10.1
40–44	11.6	13.2	0.2	0.3	1.6	1.6	2.8	2.9	3.2	3.4	10.2	9.4	40.5	39.2	8.4	8.7
45–49	9.8	11.8	0.2	0.2	1.4	1.4	2.4	2.7	3.4	3.08	6.8	8.2	35.8	39.7	6.7	7.5
50–54	10.0	9.3	0.2	0.2	1.4	1.2	2.2	2.3	2.8	2.7	6.3	7.0	34.5	39.5	6.5	6.5
55–59	10.4	9.5	0.2	0.2	1.6	1.6	1.8	2.3	2.9	2.6	6.4	7.2	31.5	35.1	6.3	6.3
60–64	12.6	10.0	0.1	0.2	1.5	1.6	1.5	2.0	2.9	2.6	5.5	5.9	31.1	35.9	6.3	6.6
65–69	11.9	11.2	0.0	0.1	1.8	1.4	1.5	1.7	2.9	2.6	6.5	5.4	28.8	34.2	6.2	6.3
70–74	11.6	12.5	0.0	0.1	2.1	1.9	1.4	1.8	2.9	2.9	4.8	9.9	30.8	38.8	6.7	7.4
75–79	11.7	9.6	0.1	0.0	1.9	1.7	1.6	1.6	2.7	2.5	7.3	4.8	29.2	34.8	5.7	5.6
80+	11.0	12.9	0.1	0.1	1.9	2.5	1.4	2.2	1.9	2.6	13.4	19.7	34.3	32.5	5.5	6.8

Note: CSA = Central and South Asia. ENA = Europe and North America. ESEA = East and Southeast Asia. LAC = Latin American and the Caribbean. NAWA = North Africa and West Asia. OCE = Oceania. SSA = Sub-Saharan Africa.

Table A.2. Regression Results, 18+ and 25–34 Age Group

Descriptor	(1) Women, 18+	(2) Men, 18+	(3) Women, 25–34	(4) Men, 25–34
Age	-0.00140*** (0.000324)	-0.00210*** (0.000342)	-0.00582 (0.0142)	-0.00314 (0.0133)
Age squared	6.75e-06** (3.07e-06)	1.89e-05*** (3.54e-06)	8.70e-05 (0.000238)	2.95e-05 (0.000221)
<i>Education (no education is omitted)</i>				
Primary	-0.0772*** (0.00457)	-0.0781*** (0.00501)	-0.125*** (0.0108)	-0.0909*** (0.0115)
Secondary	-0.117*** (0.00637)	-0.110*** (0.00596)	-0.169*** (0.0104)	-0.122*** (0.0110)
Tertiary	-0.113*** (0.00825)	-0.117*** (0.00766)	-0.164*** (0.0113)	-0.128*** (0.0115)
Urban (=1)	-0.0275*** (0.00405)	-0.0284*** (0.00395)	-0.0361*** (0.00541)	-0.0362*** (0.00505)
<i>Labor force, employment status (paid employees are omitted)</i>				
Non-paid employee/family worker/Self employee/employer	-0.00236 (0.00256)	-0.000377 (0.00233)	-0.00191 (0.00467)	0.000450 (0.00389)
Unemployed	-0.0352*** (0.00609)	-0.0137*** (0.00466)	-0.0685*** (0.00717)	-0.0157** (0.00702)
Out of labor force	-0.0341*** (0.00319)	-0.0292*** (0.00305)	-0.0486*** (0.00566)	-0.0212*** (0.00746)
<i>Marital status (married are omitted)</i>				
Never married	-6.91e-06 (0.00242)	0.000469 (0.00221)	0.00337 (0.00491)	-0.00862** (0.00348)
Living together	-0.00190 (0.00255)	-0.00709*** (0.00269)	0.00669** (0.00319)	-0.00683* (0.00371)
Divorced/separated	-0.00510** (0.00240)	-0.00203 (0.00224)	-0.0104** (0.00517)	-0.0142** (0.00609)
Widowed	-0.0198*** (0.00306)	-0.0147*** (0.00471)	5.89e-05 (0.0154)	-0.0123 (0.0299)
Children <5 (=1)	0.0513*** (0.00474)	0.0508*** (0.00495)	0.0429*** (0.00547)	0.0212*** (0.00654)
Children <18(=1)	0.00939** (0.00365)	0.0252*** (0.00393)	-0.0146** (0.00703)	0.0271*** (0.00670)
Lone parent (=1)	0.0323*** (0.00525)	0.0297*** (0.00522)	0.0418*** (0.00965)	0.0447*** (0.00690)
Extended family (=1)	0.0541*** (0.00591)	0.0605*** (0.00573)	0.0586*** (0.00750)	0.0718*** (0.00641)
Couple with children (=1)	0.0141*** (0.00499)	0.0151*** (0.00436)	0.0262*** (0.00755)	0.0264*** (0.00587)
Dependent/earners ratio	0.0194*** (0.00134)	0.0162*** (0.00131)	0.0238*** (0.00197)	0.0147*** (0.00193)
Constant	0.105*** (0.0143)	0.0966*** (0.0122)	0.197 (0.212)	0.124 (0.199)
Observations	2,037,654	1,901,535	432,617	396,896
R-squared	0.191	0.173	0.212	0.166

Note: Robust standard errors in parentheses.

*** p < .01 ** p < .05 * p < .1

Table A.3. Household Types Used in the Decomposition Analysis of 24- to 34-Year-Olds

<i>Individual + household specific</i>	<i>Individual category (position in household + family type)</i>	<i>Definition</i>
With children	Head + spouse and children	This individual (age 24–34) is an adult (spouse or head) who lives with a partner (spouse or head) and children. This category includes any head and spouse and children as long as an individual (age 24–35) is a spouse or head.
Lone adult with children	Lone parent with children	This individual (age 24–34) is an adult (spouse or head) who has no partner and is a single caregiver of younger members ages under 15
	Lone parent with children and young relatives	
Spouse/head, or relatives, extended family household	Spouse/head in extended household with children	This individual (age 24–34) is an adult (spouse or head) who has a partner (spouse or head) and lives with children (ages under 15) and relatives
	Relatives in extended household with children	This individual (age 24–34) is in an adult whose relationship to the head is as other relative and who lives with members ages under 15. Other relatives are present, but not unrelated household members.
Adult children	Children in extended household with other children; no other relatives in the age-group, and spouse and head are not in the age-group	This individual (age 24–34) is a child of the head or of the spouse of the head and living with household members ages under 15 who are all children of the head and other relatives
	Children in extended household without other children; no other relatives in the age-group, and spouse and head are not in the age-group	This individual (age 24–34) is a child of the head or of the spouse of the head and living with relatives, but without members ages under 15
	Children are part of a couple with adult children	This individual (age 24–34) is a child of the head or of the spouse of the head; all other siblings are ages 15 or more
Other household without children ages under 15	One person	This individual (age 24–34) is an adult living alone and is single, divorced, married, and so on.
	Couple only	This individual (age 24–34) is an adult who has a partner (spouse or head) and lives without any other family members
	Spouse/head in extended household without children	This individual (age 24–34) is an adult (spouse or head) who has a partner (spouse or head) and lives with household members ages under 15 and relatives.
	Relatives in extended household without children	This individual (age 24–34) is a relative in an extended family and lives with members age above 15. Other relatives, but no unrelated household members are present.
	Nonrelatives; all other extended family; all other families with all adult members	Nonrelative family, extended family whose members are ages above 15, excluding any type of extended family listed above; any other family whose members are all ages above 15