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# Gender Differences in Poverty and Household Composition through the Life-cycle

A Global Perspective

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# **Abstract**

This paper uses household surveys from 89 countries to look at gender differences in poverty in the developing world. In the absence of individual-level poverty data, the paper looks at what can we learn in terms of gender differences by looking at the available individual and household level information. The estimates are based on the same surveys and welfare measures as official World Bank poverty estimates. The paper focuses on the relationship between age, sex and poverty. And finds that, girls and women of reproductive age are more likely to live in poor households (below the international poverty line) than boys and men. It finds that 122 women between the ages of 25 and 34 live in poor households for every 100 men of the same age group. The analysis also examines the household profiles of the

poor, seeking to go beyond headship definitions. Using a demographic household composition shows that nuclear family households of two married adults and children account for 41 percent of poor households, and are the most frequent household where poor women are found. Using an economic household composition classification, households with a male earner, children and a non-income earner spouse are the most frequent among the poor at 36 percent, and the more frequent household where poor women live. For individuals, as well as for households, the presence of children increases the household likelihood to be poor, and this has a specific impact on women, but does not fully explain the observed female poverty penalty.

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# Gender Differences in Poverty and Household Composition through the Life-cycle: A Global Perspective<sup>1</sup>

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#### Introduction

Eradicating poverty in all its forms and dimensions, including extreme poverty, is among the main challenges the global community and governments face. Achieving this goal by 2030<sup>2</sup> will require for governments to implement a set of policies aimed at investing in human capital, improving labor markets, expanding social protection, and implementing targeted policies to help groups of the population experiencing specific disadvantages. Various population subgroups, be they based on gender, ethnicity, race, or income, have faced and continue to face barriers that have slowed the rate of poverty reduction. Understanding how poverty affects subgroups in different ways is critical to realizing welfare goals.

A key area of concern has been the extent to which women and men face different levels of poverty and distinct barriers to poverty reduction. Our understanding of these differences, however, has been constrained by the available data. In the standard approach to measuring poverty, the primary source of information is household surveys and the key indicator is a money-metric measure of welfare based on consumption or income. Data are collected on the consumption or the income of each household, and not always of each individual living in those households<sup>3</sup>. This masks variation in individual-specific welfare levels, as intra-household disparities in access to income, consumption and other entitlements cannot be measured. The result is that gender differences in poverty rates are muted or not at all visible.<sup>4</sup>

In this study we show that, even with the existing constraints (which we discuss in greater detail below), there is still much to be learned about poverty and gender. Taking advantage of a global database of harmonized country-representative surveys constructed by the World Bank, we look at the ways in which men and women experience poverty differently. The focus of the study is on four key questions. First, in the absence of individual-level poverty data, what can we learn in terms of gender differences by looking at individual-level information? Here, we focus on the relationship between sex and poverty and explore available data to us such as age, location, education, marital status, and labor market participation. This is done at global level but is also explored at the regional level. Second, to the extent that there are differences by sex, are these related to specific moments of the lifecycle of women and men? Third, at the household level, are there specific types of households that are more likely to be poor than others and how does gender factor into this? And, finally, what are the channels that link individuals and households to poverty?

To answer these questions, we use two approaches. First, the study provides gender profiles of the poor at the global level, taking into account sex, age, marital status, education and employment. The global profiles are supplemented with regional profiles to begin to understand how geography, gender and poverty are related. Second, the study looks at household profiles of the poor. Given the limitations of work looking at households only by the sex of the household head, this study proposes two new typologies of households, a demographic one and an economic one.

This study makes three key contributions to the literature on poverty and gender. First, it provides a global picture of the connections between gender and poverty. By using the same global database and the same measure of poverty used by the World Bank to monitor the first Sustainable Development Goal and its own goal of eradicating extreme poverty, we are able to provide a global picture of poverty and

<sup>&</sup>lt;sup>2</sup> SDG Goal 1: By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day. (Resolution adopted by the UN General Assembly on 25 September 2015. 70/1).

<sup>&</sup>lt;sup>3</sup> In addition, the data is generally collected from one or two respondents "best informed", which may lead to under-estimates of consumption/income if not all consumption/income is shared and visible, which is the case when individuals work in different workplaces and keep separate accounts.

<sup>&</sup>lt;sup>4</sup> Grown, 2014; Lanjouw, 2012; Deere et al., 2012.

gender as well as regional comparisons. Second, by expanding on household typologies beyond headship, we show that using information on the full composition of the household, not just the sex of the head of household, contributes to a better understanding of gender differences in poverty. Finally, the study introduces a lifecycle approach that sheds new light on how poverty affects people over time.

The present study provides a compelling story of how a lifecycle approach, including age, family formation and living arrangements play a crucial role in the way women and men experience poverty. The analysis is presented in the following manner. Section 2 contains a brief literature review related to the key issues of the poverty and gender intersection as well as a description of the data set used for the analysis. The third section looks at gender profiles of the poor in both demographic and economic terms and some of the drivers of the observed differences. The work presented in Section 4 addresses the limitations of standard head of household analysis by introducing two new typologies of households and exploring how gender, poverty and household type are connected. The section ends with a discussion of the channels that link household type and poverty.

# What do we know about gender and poverty?

## Measuring poverty is a complex task

Measuring global poverty is a complex, data-intensive exercise. Data used comes from nationally-representative household surveys that capture a money-metric measure of welfare – either consumption or income. Each data set is harmonized and then a welfare aggregate is constructed. The World Bank's database includes almost 150 surveys from developing countries, of which 104 fall in the time period of analysis used in this report. This collection of survey data is then combined with complementary data on population size (growth), inflation, real economic growth, and Purchasing Power Parity (PPP) exchange rates to produce country-level, regional and, global estimates of poverty.<sup>5</sup> From there, population-level poverty figures are estimated by taking the household level welfare measure and dividing it by the number of people in the household. This assigns all consumption evenly to household members. Those individuals whose per capita consumption is below the value of the international poverty line (US1.90 in 2011 PPP terms) are classified as living in extreme poverty.<sup>6</sup>

The fundamental concern with this measure of poverty is that it assumes consumption or income is distributed and shared evenly within a household. True individual welfare is not observed and the household measure often ignores intra-household disparities in access, consumption, and other entitlements (Grown, 2014; Lanjouw, 2012; Deere et al., 2012), making the uniform distribution of consumption (income) to all household members inadequate. A substantial body of literature suggests that not all members of the household share equally the resources of the household (see, for instance: Haddad and Kanbur, 1990; and Chant, 2010). In fact, household income (consumption) may bear no relation to women's poverty because women may not necessarily be able to access it (Bradshaw 2002; Chant 2006, 2010; Bessell 2010, 2014). Predictions derived from a unitary model of household behavior, based on the notion of a single benevolent decision-maker or consensus amongst members, often do not find empirical support (Lundberg et al., 1997). In summary, the small differences in observed poverty between men and

<sup>5</sup> See Castañeda et al., 2016 for more detail. Note that national poverty measures differ as both the welfare aggregate and the value of the national poverty line will vary from the harmonized variables and international poverty line used here (World Bank, 2015).

<sup>&</sup>lt;sup>6</sup> The international poverty line corresponds to the mean of the poverty lines found in the poorest 15 countries ranked by per capita consumption (World Bank, 2015).

women may be less a reflection of reality and more a result of the fact that poverty is measured at the household level and by assumption all household members are classified as either in or out of poverty, and, the ratio, when considering all ages, of males to females is roughly 50/50 in both poor and non-poor households.<sup>7</sup>

In an attempt to get around this fundamental limitation, various researchers have developed alternative methods. The most common is to classify households according to headship and compare poverty across female- and male-headed households. However, several studies have contested the use of headship as a relevant analytical category for a number or reasons. First, countries use different and often non-comparable definitions of the terms "household" and "head of household". Second, there is ambiguity in the term "head of household" when the assignment of headship is left to the judgement of household members (or the survey enumerator). Third, the term "head of household" is not neutral; it is loaded with additional meanings that do not reflect internal conflicts in the allocation of resources (Buvinic and Gupta, 1997; Quisumbing et al., 2001; Budlender, 2008). In addition, the link between female headship and poverty may not be straightforward partly because female-headed households are a highly heterogeneous group and may well reflect self-selection, demographic processes, or others. Aside from socio-economic status, female (and male)-headed households show significant variation in terms of age, relative dependence, household composition, lifecycle, and access to resources beyond the household unit, among others, making such classification not very useful.

The fact that differences in poverty rates between female- and male-headed households cannot necessarily be ascribed to gendered differences in earnings, access to employment or control over resources, has led authors to explore alternative classifications of headship. Rogan (2013) explores four alternative classifications of households based on the absence of male householders or the dependence on female income in post-apartheid South Africa. The findings of this study suggest that there is an association between self-reported female headship and a female household member being identified as the main breadwinner. However, under a different classification of household head (e.g. who is the main responsible individual for the household that can be identified in the data), then the finding that female-headed households are increasingly more vulnerable to poverty (relative to male-headed households), is even stronger. A recent report also reveals that working-age women are more likely than men to be poor when they have dependent children and no partner to contribute to the household income. At older ages, women in developed countries are more likely than men to be poor, particularly when living in one-person households (United Nations, 2015).

In addition to looking at headship, there are several other approaches to circumventing the limitations of the household poverty measure. There are some innovative attempts to extract individual-level welfare information from household surveys. Such studies attempt to draw inferences about intra-household resource allocation by, for example, estimating the fraction of household expenditure that is consumed by each family member. Dunbar et al (2013) estimate individual resource shares for adults and children in Malawi by observing how expenditures on a single private good that can be ascribed to individual household members vary with income and household size. Their results indicate that the incidence of poverty is significantly higher for women (85 percent) than men (60 percent) and even higher for children (95 percent). Using a unique survey for Senegal that collected consumption data for sub-groups of household members ("cells") in non-nuclear households, Lambert et al. (2014) and De Very and Lambert

<sup>&</sup>lt;sup>7</sup> Castañeda et al. (2016)

<sup>&</sup>lt;sup>8</sup> There are multiple explanations for why women head households and these differences can lead to different outcomes that are not necessarily negative for women's well-being (Chant, 2003, 2008).

<sup>&</sup>lt;sup>9</sup> Dunbar et al. 2013; Bargain et al. 2014.

(2017) find significant inequalities within the household and a sizeable gender gap in consumption. Cells headed by males have approximately 77 percent higher consumption levels than cells headed by females. This difference is largely driven by inequality in non-food consumption. In Senegal, De Vreyer and Lambert (2017) collect consumption section for small groups of individuals within each household, and use that data to create an individual measure of consumption, leading to findings of within household inequality, and evidence of poor individuals living in non-poor households. Brown, Ravallion and van de Walle (2017) use nutritional status as a proxy for individual poverty and find evidence of undernourished women and children living in households that are above the bottom 40 percent of the poverty distribution (measured in terms of assets). Studies by Haddad and Kanbur (1990) and Bargain et al (2014) also find significant differences by sex when intra-household analysis is done. While these findings are important, individual allocations within households are rarely observed. There is no standard process to establish equivalence scales, which means relying on strong assumptions to understand the sharing process (Klasen, 2004; Grown, 2014)<sup>10</sup>. A further method for assessing intra-household welfare uses data on individual asset ownership for housing, land and business assets. Deere et al. (2012) show that the distribution of asset ownership by sex within households is much more equitable in some Latin American countries than a headship analysis would suggest. It might be the case that women in male-headed households often own property, either in their own right or as joint property with their spouses. Brown, Ravallion and van de Walle (2017) use asset wealth in households as a proxy for household poverty, and nutritional status to measure individual deprivation of women and children. They find evidence of deprived women in non-poor households measured by assets holdings. Still, the number of surveys which provide data that can be used for individual measures of poverty is quite limited and thus this approach can only be used in a handful of cases.

Although exploratory work is also ongoing to determine feasible means to measure individual-level welfare in the context of nationally-representative surveys, individual-level welfare data is not yet available for a representative number of countries. Multidimensional approaches to poverty complementing standard measures with non-monetary metrics have become firmly established as a complement to income-based approaches. Alkire and Foster (2011) suggest a counting approach based on the concept of capabilities, which allow for both identifying the poor and aggregating the poverty measure. The most wellknown measure is the Multidimensional Poverty Index (MPI) proposed by Alkire and Santos (2014), including three equally weighted poverty dimensions—health, education and living standards—that are captured by a number of indicators. Several studies have estimated multidimensional poverty among women using the multidimensional approach and comparisons with standard poverty measures (e.g. income and asset poverty) show that considering additional dimensions leads to substantially different results (Batana, 2013). However, these measures, with few exceptions, have focused on a household-level assessment of poverty and hence, just like monetary approaches cannot provide information on intrahousehold dynamics (Gaddis, 2016). Furthermore, measuring multidimensional poverty at the individual level requires multiple decisions regarding dimensions, indicators, weights and cut-offs, among others (Ravallion, 2011).

In summary, the present model of welfare measurement may hide differences in poverty by sex by not providing individual-level information. While the ability to disaggregate or assign household spending or income to individuals is limited, the present paper explores how existing data, globally representative and harmonized at the global level, can shed light on gender differences by looking across the lifecycle and

<sup>&</sup>lt;sup>10</sup> The limited agreement on how to estimate equivalence scales (Deaton and Paxon 1996, Deaton 1997) results in a variety of equivalence scales that are not standard and lead to different results across countries, as poverty metrics are sensitive to the equivalence scale used. Varying the economy of scale parameter may change the relative poverty risks of different demographic subgroups of the population, notably the elderly and children (Lanjouw et al. 2000).

how other indicators of welfare can provide important insights into the way men and women experience poverty.

#### How women and men experience poverty has multiple dimensions

Understanding how different individuals experience poverty is crucial for the design of policies to reduce poverty. Gender differences are among the most important. Gender inequalities make women and girls more vulnerable than men and boys to poverty (World Bank, 2011) and they affect how men and women react to changes in poverty status. Differences in gender norms, intra-household division of assets, work and responsibility and relations of power drive these disparities (Grown, 2014). In many countries, females have lower levels of education, lower ownership and control over assets, and lower social indicators than men. Bargaining power is affected by control of resources (e.g. assets and income), legal rights, skills and knowledge, the capacity to acquire information, education, etc. Social norms also set the context of intra-household negotiation over time allocations, resources, and access to labor markets (Quisumbing, 2010). Social policies that facilitate universal access to services and mitigate shocks can serve to level the playing field and change both social norms and bargaining power. A few examples include policies providing adequate water and sanitation in schools, as in Almeida and Oosterbeek, 2016, conditional cash transfer programs where the benefits are given to women such as the *Progresa/Oportunidades* program in Mexico, or unemployment insurance and social pensions.

Access to and control over income and assets is an important component of welfare especially when a household dissolves, whether due to separation, divorce or death. This frequently determines the livelihoods available to members of household, and influences the distribution of resources within the household (Deere et al. 2012). Furthermore, it underpins women's greater vulnerability to poverty. Agbodji et al. (2013) show that inequalities in education and employment largely explain gender differences in poverty in Burkina Faso, while differences in access to assets and credit are the main sources of gender differences in Togo.

Gender inequalities in labor markets also contribute to women's greater vulnerability to poverty. Evidence suggests that even after controlling for individual characteristics, women in Latin America have a lower probability of participating in the labor market, a lower probability of being formal workers, and lower hourly wage remuneration (Costa et al., 2009). Moreover, because women are more likely to be informally employed, they are also more prone to be excluded from non-wage benefits such as health insurance, pensions, paid sick leave and maternity leave (ILO 2016). Women are more likely to be providers of unpaid care within the household (for children, those with disabilities and the elderly) (as shown in World Bank 2012). Tax policies also affect women and men differently over the lifecycle, and may not take into account transitions in roles and household types. For instance, the presence of children in combination with the tax treatment of the household's second earner in systems that tax the household's joint income, may lead to further fall in women's labor force participation (Grown and Valodia, eds. 2010).

Since specialization in any activity typically requires costly and considerable investments, gender differentials in early investments can result in larger gender differentials later in life. Lokshin and Mroz (2003) examine how a spectrum of gender differences vary across income groups over the lifecycle in Bosnia and Herzegovina. The results suggest that the main source of gender inequality comes from different investments in girls' and boys' education that increase with declines in income levels. At the same time, single women that come from poor households could be at a great risk of poverty because of limited labor market opportunities available to them compared than those available for males (Rosenzweig and Wolpin, 1994).

As it can be seen, much of the literature on gender differences and poverty are based on specific countries or case studies, and global or regional studies are infrequent<sup>11</sup>. The goal of the present paper is to expand this discussion to the bulk of the developing world and have a more global picture of poverty and gender. At the same time, the study makes regional comparisons that shed further light on critical policy concerns.

#### Data sources

This study uses the Global Monitoring Database (GMD), which is a collection of globally harmonized household survey data developed by the World Bank's Poverty and Equity Global Practice. The GMD contains a combined sample of 104 household surveys containing records representing 6.8 million individuals from 89 developing countries. Full details on the background of the GMD are given in Castañeda et al (2018). A crucial feature of the GMD is that, in general, the welfare aggregates are the same as those used to compute the poverty estimates that the World Bank publishes via PovcalNet and the World Development Indicators. These aggregates are based on a money-metric measure of welfare, either household per capita consumption or income, depending on the concept used to measure national poverty in each country. The analysis in this paper uses those surveys in the GMD collected in 2009 or later in an attempt to balance the competing goals of increasing global coverage while minimizing error that arises from extrapolating poverty figures forward to 2013. The survey of the concept used to measure that arises from extrapolating poverty figures forward to 2013.

The present version of the GMD is missing several labor variables in Sub-Saharan Africa. To rectify this, a process is underway to integrate an additional data set (the International Income Distribution Dataset) into the GMD. For this study, additional information on labor and education outcomes was merged from this additional dataset for 17 sub-Saharan African countries. <sup>15</sup>

It is important to note that regardless of the source, in several cases the labor information available is of insufficient quality to include the survey in the analysis. As economic empowerment is a key feature of household composition, particularly when the economic typologies of households is applied (see Section 4 below), surveys were discarded if reported labor market outcomes appeared inconsistent with other sources of data for the country. <sup>16</sup> For the 89 countries covered in the GMD a total of 18 were dropped due

<sup>11</sup> One of the few examples of regional work include ECLAC (2016) report including the poverty femininity index for Latin America and the Caribbean.

<sup>&</sup>lt;sup>12</sup> Important exceptions are India and China. In China, the analysis is based on the China Household Income Project Data from 2013, which is publicly available. However, the poverty line has been determined such that the poverty rate matches the official World Bank estimates (See Castaneda et al, 2018). For India, the data in this study is taken from schedule 10 of the Indian National Sample Survey, because it contains information on labor market outcomes. As in China the poverty line is set at the percentile corresponding to the official World Bank estimates, which in India are derived from schedule 1 of the National Sample Survey.

<sup>&</sup>lt;sup>13</sup> The term welfare refers to either income or consumption per capita, depending on which measure is used by the country for their national estimates. For more information on how these welfare aggregates are constructed, see Ferreira et al (2015).

<sup>&</sup>lt;sup>14</sup> As the GMD is updated when new surveys become available and are harmonized, it is important to note the 'vintage' of the data set used. Specific results of this analysis could vary as new data sets are added to the GMD although it is not expected that the overall story would be affected. The poverty and gender analysis presented here is derived from the September 2016 version of GMD with estimates of poverty figures lined up to (extrapolated to 2013).

<sup>&</sup>lt;sup>15</sup> The countries are: Burkina Faso, Chad, Republic of Congo, Democratic Republic of Congo, Ethiopia, Guinea, Malawi, Mauritius, Niger, Nigeria, Rwanda, Senegal, Sierra Leon, South Africa, Sudan, Tanzania, and Uganda. The I2D2 data set has been used for previous work on gender and labor at the WB.

<sup>&</sup>lt;sup>16</sup> Surveys for five countries were discarded because information on each individual's primary activity was either not present in the data or missing for more than 30 percent of the observations. Surveys from an additional two countries were discarded because, for more than ten percent of individuals, information on employment status was present even though the person's primary activity

to quality concerns for some of the analysis in this study (particularly the analysis involving economic participation variables). This reduced the sample to 71 countries. for any analysis including labor-related variables. For all other analysis the full 89 countries sample is used<sup>17</sup>.

Figure 1 shows the final sample. Tables 1 and 2 in the appendix show the nature of the sample and the sample's coverage in number of countries and population based on figures from the UNDESA Population Division. Countries in the sample have a total population of 4.8 billion persons, roughly 75 percent of the developing world population of 6.5 billion. Nearly 78 percent of the sample originates in middle-income countries, and East and South Asia account for nearly two thirds of the sample. The GMD sample has high regional coverage of developing countries in South Asia, East Asia and the Pacific, Latin America and the Caribbean, and Europe and Central Asia (above 87 percent); and partial coverage of Sub-Saharan Africa (74 percent). Because of low coverage in Middle East and North Africa (4.1 percent), results from this region are not presented<sup>18</sup>.

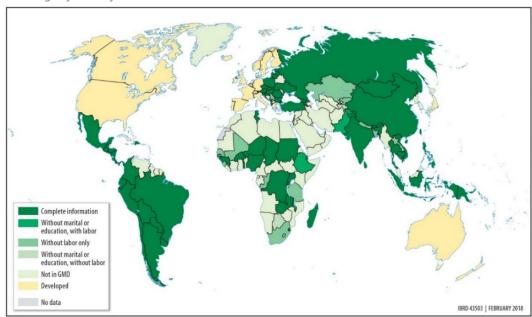


Figure 1: Coverage of Data of the GMD database

Depending on how each country measures poverty, welfare aggregates are based on household per capita consumption or income. For all of them, poverty is defined based on whether per capita household welfare, converted to international dollars using 2011 PPP conversion factors, falls below the poverty line. The World Bank uses the international poverty line (IPL\_ of \$1.90 per person per day, which corresponds to the mean of the poverty lines found in the poorest 15 countries ranked by per capita consumption, to define extreme poverty. For the remaining of the paper, references to poor individuals of

was coded as 'not working' suggesting miscoding in these surveys. Six other countries had to be dropped since, in their surveys, either the share of adults out of the labor force was less than 10 percent or all adults were reported as being out of the labor force. These surveys may have used non-standard recall periods for the labor statistics. Finally, due to a miscoding of employment status that made it impossible to distinguish between unpaid, paid, and self-employed workers in the survey data, another five countries had to be dropped from the analysis.

<sup>&</sup>lt;sup>17</sup> The sample used is noted for each table and figure in the paper.

<sup>&</sup>lt;sup>18</sup> Regional aggregates follow the World Bank geographic regions classification (see <a href="http://www.worldbank.org/en/where-wework">http://www.worldbank.org/en/where-wework</a>).

households will be with regards to the IPL (extreme poverty). As will be discussed in more detail in Section 2 below, all persons in poor households are considered to be poor and all persons in non-poor households are considered to be to be non-poor. This assumes that all household members enjoy the same standard of living, which, as discussed below, may understate the gender dimensions of poverty.

#### Gender Profiles of the Poor

Globally, the number of people living on less than \$1.90 a day (below the International Poverty Line) is 654.9 million, which corresponds to 12.5 percent of the total population included in our GMD sample. Table 1 shows that nearly half of the poor live in Sub-Saharan Africa (51.3 percent or 302.7 million), followed closely by South Asia (251.6 million). Slightly more than half of the poor are women (330 million), and men account for 49.7 percent of the poor (325 million). Poverty rates for females and males are similar (12.8 and 12.3 percent, respectively). These rates vary across regions, but gender differences are only statistically significant in South Asia, where female poverty rates are 15.9 percent, compared to 14.7 percent for males. Worldwide, this translates to 104 women living in poor households for every 100 men. In South Asia, 109 women live in poor households for every 100 men.

Household-level information can provide relevant insights when it comes to the gender profiles of the poor. Although, in the aggregate, female and male poverty rates are very similar, as shown in the tables below<sup>20</sup>, they mask variations according to individual characteristics, which are helpful to start developing a more disaggregated understanding of potential differences between men and women in relation to poverty.

Table 1. Proportion (and number) of poor population, poverty rates, and distribution of the poor by sex and region.

1.a. Population living in poverty by sex

	Number of poor (millions)	% poor of population	Female poverty rate	Male poverty rate	Female share of poor	Male share of poor
East Asia and Pacific	67.6	3.6	3.6	3.6	48.8	51.2
Europe and Central Asia	3.3	0.8	0.8	0.8	51.6	48.4
Latin America and Caribbean	29.4	5.3	5.5	5.2	51.8	48.2
Middle East and North Africa	0.3	1.9	2.0	1.9	50.7	49.3
South Asia	251.6	15.3	15.9	14.7	50.7	49.3
Sub-Saharan Africa	302.7	43.2	43.4	42.9	50.2	49.8
Total	654.9	12.5	12.8	12.3	50.3	49.7

<sup>&</sup>lt;sup>19</sup> These numbers refer to the weighted population ratio in the GMD dataset. As a reference, the population ratio (males per 100 females) was estimated at 101.5 for 2015, variating from 103.6 for lower-middle income countries, to 98.8 for low-income countries. The ratio for South Asia was estimated at 106.2 (Source: United Nations, Department of Economic and Social Affairs, Population Division (2017). World Population Prospects: The 2017 Revision, custom data acquired via website)

<sup>&</sup>lt;sup>20</sup> As noted earlier, the analysis assumes that all persons living in poor households are poor and all persons in non-poor households are non-poor. Therefore, female and male poverty rates are defined as the percentage of women and men who live in poor households.

1.b. Regional distribution of the poor by sex

	Female	Male	Total	
East Asia and Pacific	10.0	10.6	10.3	
Europe and Central Asia	0.5	0.5	0.5	
Latin America and Caribbean	4.6	4.3	4.5	
South Asia	38.7	38.2	38.4	
Sub-Saharan Africa	46.1	46.3	46.2	
Total	100	100	100	

Note: Total sample 89 countries

Source: WB Staff's calculations based on GMD.

The small differences we observe in the general numbers (disaggregated by sex alone) reflect the facts that: (i) poverty is measured at the household level and by assumption all household members are classified as either in or out of poverty, and (ii) the ratio of males to females is roughly 50/50 in both poor and non-poor households, (iii) 50 percent of the poor are children, with no observed gender differences in the poverty headcount rate<sup>21</sup>. Measuring poverty at the household level assumes no intra-household inequalities in access to income, consumption and other entitlements. Hence, gender differences in poverty rates are muted when looked through the lens of household-level poverty.

# Where are the gender differences? Demographic characteristics

Differences in poverty rates between women and men become more salient as we start looking at different population subgroups by available demographic and other characteristics. For example, take residence. Globally, we can observe that the majority of the poor live in rural areas, and 18.2 percent of rural residents live on less than \$1.90 a day. The corresponding rate for urban residents is 5.5 percent. This geographic difference in poverty rates, combined with the concentration of the poor in rural areas, means that about 80 percent of the poor live in rural areas, compared with 55 percent of the total population. Female poverty rates are slightly higher than male poverty rates in both urban (5.7 for women and 5.4 for men) and rural areas (18.7 for women and 17.9 percent for men). Women represent a larger share of the poor in urban areas, and men represent a larger share of the poor in rural areas (Figure 2b). However, these differences are not statistically significant at the global level. In all regions, poverty rates are higher for women than for men. Gender differences, however, are again only significant in South Asia where female poverty rates are about 1 percentage point higher in both urban and rural areas.

We also know that the poor tend to be young, and children are particularly at risk for poverty in the sample of 89 countries. Over one in five girls and boys ages 0-14 live in a poor household and they represent 44 percent of the poor population. As already documented by Newhouse et al (2017) using the same dataset, 19.5 percent of all children younger than 18 are estimated to live on less than \$1.90 per day, a bit over double the estimate for adults (9.2 percent). Girls and boys are consistently poorer than adults and seniors, and poverty is higher for children younger than 5 years of age, regardless of sex<sup>22</sup>. Among females, girls under 15 are the poorest. Their poverty rate is 8.5 percentage points higher than that of young women age 15-24, and over 14 percentage points higher than that of senior women (only 6.7 percent

<sup>&</sup>lt;sup>21</sup> See Newhouse et al (2016) and Castañeda et al (2018)

<sup>&</sup>lt;sup>22</sup> In this paper/section, children are individuals aged 0-14, young adults are 15-24, adults are defined as individuals ages 18-59, seniors are 60 and above. Prime-working age individuals are 25-54 and mature individuals are between 55 and 60 years of age.

of senior women are poor). The same pattern holds for males. Boys under the age of 15 are the poorest and their poverty rate is 8.4 percentage points higher than that of young men ages 15-24 and over 12 percentage points higher than that of senior men (only 7.3 percent of senior men are poor).

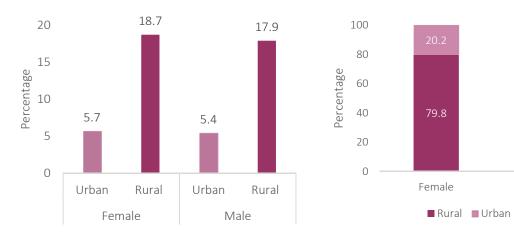
Figure 2. Poverty rates and geographic distribution of the poor by sex

2.a. Poverty rate geographic area and sex

2.b. Geographic distribution of the poor by sex

80.2

Male

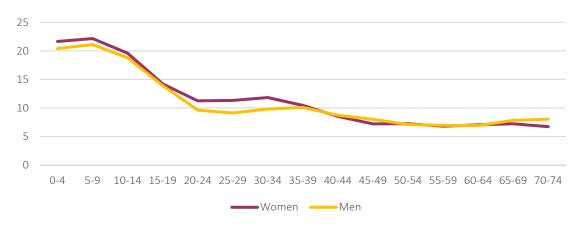


Note: Total sample 89 countries

Source: WB Staff's calculations based on GMD.

Children are the poorest across all regions, but the patterns vary by region (Appendix Figure A1). For example, in Sub-Saharan Africa, 49.3 percent of girls and 49.5 percent of boys live in poor households and boys represent a slightly larger share (51 percent) of poor children than girls do. Differences with other age groups are even starker than the global ones: boys and girls under 15 years of age are 10 percentage points poorer than their young adult (15-24) counterparts, and girls are 17.2 percentage points poorer than females above 60. In contrast, in South Asia, girls are poorer than boys (22.2 and 20.1 percent, respectively) and more numerous than boys among the poor (50.5 percent), but differences in poverty rates between children and older adults —although sizable—are smaller than in other regions.

Figure 3. Female and male poverty rates by age group



Note: Total sample 89 countries

Source: WB Staff's calculations based on GMD.

More importantly, introducing age as an element when measuring poverty starts to reveal important gender differences. Poverty decreases with age, especially between childhood and adulthood but it decreases at different ages for women and men. Poverty rates decrease sharply for women and men as they reach adulthood and tend to stabilize after 50 years of age. By age 25 (and up to age 34), women are two percentage points poorer than men, a significant and sizeable difference. In this age group, there are, on average, 120 women living in poor households for every 100 men. This gap coincides with the peak productive and reproductive ages of men and women, and can be related to factors such as household formation and income generation for both men and women, and the implications of such processes on their welfare. For example, it has been well documented that women's labor force participation goes down during their reproductive years, particularly when they have young children (see among others Aguero and Marks 2008, Goldin and Katz 2002). This pattern is consistent across regions, but gender differences in poverty rates vary widely. For the 20-34 age group, the average gender poverty gap ranges between 0.12 percentage points in Europe and Central Asia to 7.1 percentage points in Sub-Saharan Africa (see annex for graphs per region).

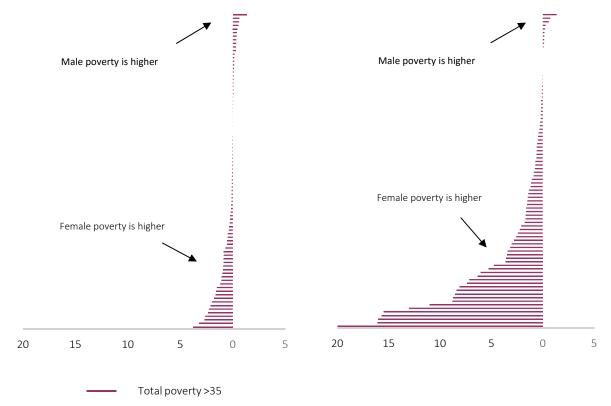
If we are able to see differences at the regional level, does the variation increase further when looking within the regions to the country-level differences? Not much. As in the larger groupings, female and male poverty rates are similar in most countries for which we have data available. Figure 4a shows that gender differences in poverty rates are rather small when all ages are averaged and poverty rates are disaggregated only by the sex of household members. More interestingly, consistent with overall and regional patterns, gender differences in poverty rates at the country level are more evident when focusing on individuals aged 25-34 (Figure 4b). Women in this age group are at least one percentage point poorer than men in 65 of the 89 countries included in the GMD sample.

The gap in poverty rates between men and women aged 25-34 is wider in the poorest countries. Female poverty rates are between 5 and 20 percentage points higher than male poverty rates in 17 of the countries included in the database. These are also the countries with overall poverty rates above 35 percent. Except for Haiti, all these countries are in Sub-Saharan Africa.

Figure 4. Gender differences in poverty rates

4.a. Poverty rates difference (male-female). All ages

4.b. Poverty rates difference (male-female). 25-34 age group



Notes: The dark lines indicate a total poverty rate higher than 35 percent. Total sample 89 countries Source: WB Staff's calculations based on GMD.

In later life, gender differences in global poverty rates tend to disappear and the percentage of poor women is slightly lower than that of men. Again, the global numbers mask regional differences, partly because of the population composition in each region, and life-expectancy differences by sex. For example, the difference in poverty rates between women and men age 60 and above is small across all regions, except for Sub-Saharan Africa, where men are 8 percentage points poorer than their female counterparts and where they represent a larger share of the poor than women. However, in this region, this age group accounts for about five percent of the population and four percent of the poor population, with no gender differences in either population shares.

What else do we know of men and women in the age group where the greater differences can be observed? We know that about 68 percent of women and men age 18 or above are married, and that by age 70 percent of the poor of that same age are married<sup>23</sup>. For those of a younger age, we find that ten percent of poor girls are married, compared with five percent of poor boys. For both, these rates are higher than those in the total population (six and two percent respectively). Figure 5 summarizes marital status for the poor. On average, we see small and not significant differences in poverty rates between women and men when looking at marriage and cohabitation. Differences arise when looking at those who have

<sup>&</sup>lt;sup>23</sup> Globally, the average mean age of marriage is of 26 years of age (source World Bank Genderstats)

never married (men more frequently than women, of which one third are living in India), those who are divorced or separated (women representing the majority of the poor in that group, a quarter of them being in Latin America and the Caribbean), and those who are widowed (women more frequently than men).

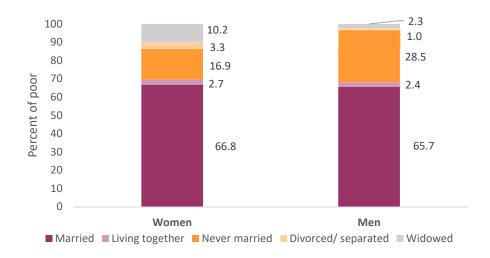


Figure 5. Distribution of the poor by sex and marital status (ages 15+)

Note: Total sample 89 countries

Source: WB Staff's calculations based on GMD.

A focus on gender differences in poverty through the lifecycle, as captured by age transitions (childhood to adolescence, to adulthood, to elder years) and the related changes in own household formation (marital status and living arrangements, and presence of children), reveals meaningful gender differences in poverty rates.

Early marriage is correlated with higher poverty for girls and boys, and marital shocks at that age make girls extremely vulnerable to poverty. Girls who are married or widowed in the 15-17 age group (only one percent of all poor girls) are 11.2 and 30.6 percentage points more likely to live in poor households compared to the average young women of that same age, among whom the most frequent marital status is single or never married<sup>24</sup>. Married young males have poverty rates 17 percentage points higher than the average men of that same age group. But, contrary to what we observe with girls, poverty rates are lower for the less than one percent of boys (0.13 percent) who report being divorced or widowers.

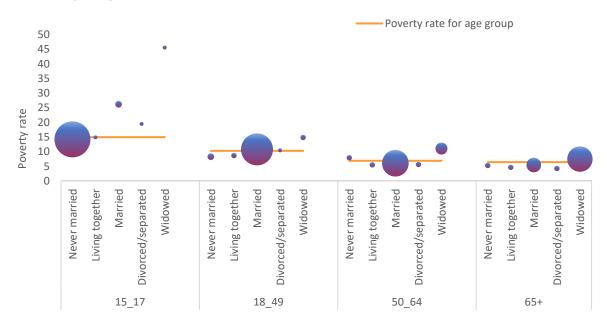
Figure 6 shows the impact of changes in marital status on other age groups, and how certain life-events at specific age groups correlate with higher poverty rates. Marriage is the most common marital status for women and men aged 18-64 (as noted by the size of the marker), and for both men and women, widowhood when experienced in that age group shows higher poverty rates. For women, divorce or separation also increases their poverty level (marginally) when compared with those who are married, whereas poverty rates are lower for men who are divorced or separated than for their married counterparts. Divorce and separation affect women more negatively than men, but do not necessarily translate into higher poverty rates for women. Yet, divorced/separated women aged 18-49 are more than

<sup>&</sup>lt;sup>24</sup> Marital status is only available for individuals 15 years old and above in the GMD. The data refers to marital status at the time of the survey.

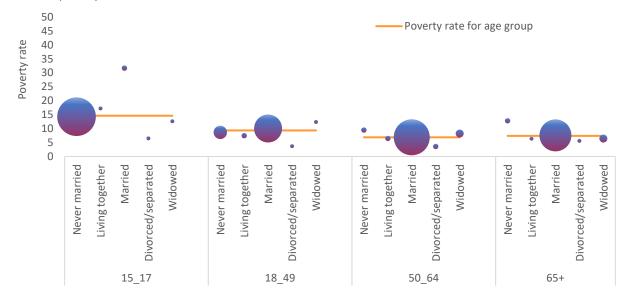
twice as likely to be poor than divorced men in that same age group. For women, widowhood, at all ages is a poverty increasing factor, although of declining value as women age. For men and women, remaining single by age 50-64 puts them at a higher poverty rate than their married peers of the same age.

Figure 6. Female and male poverty rate by age group and marital status

#### 6.a. Female poverty rate







Notes: The size of the dot represents the relative weight of each group within the total poor for the age group. Total sample 89 countries

These results suggest that early marriage is correlated with higher poverty rates for girls and boys alike, and that marriage and childbearing is correlated with higher poverty rates for men and women of peak childbearing and reproductive age (18-49 years old). Poverty rates for women in this age group - irrespective of marital status- are 3.4 and 3.9 percentage points higher than those for women in the 50-64 and 65+ age groups, respectively. Poverty rates for males of peak reproductive age are 2.5 and 2.0 percentage points lower than men in older age groups. On the other hand, married men and women in the 50-64 age group—an age group when the likelihood of having young dependents in the household decreases—face poverty rates between 3 and 5 percentage points lower than their married counterparts at peak childbearing and reproductive years.

#### Where are the gender differences? Economic characteristics

Gender differences in labor force participation and employment are well documented (World Bank 2011), and these differences impact women's ability to access and manage resources. Education gaps, on the other hand, have been closing over time. Worldwide, there are no gender differences in education enrollment rates between girls and boys (World Bank Gender Statistics 2017). But a closer look at the gender profiles of the poor through economic characteristics shows additional differences that build on those observed in terms of demographic characteristics.<sup>25</sup> Educational achievements and income-earning capacity (represented by employment status) are measured at the individual level in household surveys, allowing for inter-personal comparison and a broader understanding of well-being.

At a first glance, we see that formal education is inversely correlated with poverty, but the association between employment and poverty varies by sex and type of employment. In the GMD dataset, 41 percent of the poor population aged 15 and above have no education. The poor account for nearly a quarter of those with no education, and women are almost two thirds of the population, poor and non-poor, without any education. Globally, male poverty rates are slightly higher than female poverty rates at all levels of education. For example, in South Asia, the poverty rate for men with primary education or above are higher than for women with same education levels, the same can be seen for men with secondary and tertiary education. However, these differences are not statistically significant.

Female and male poverty rates decline sharply as education increases, especially for women. Overall, individuals with tertiary education are unlikely to be poor, as only 1 percent of women and 1.4 percent of men with tertiary education live under the poverty line. Interestingly, the share of women among the poor diminishes with education, but the opposite is true for men. Poor women represent 62.3 percent of the poor population ages 15 and above with no education, but only 36.9 percent of those with tertiary education. Across all age groups, women with no education are a larger share of the poor (see figure 7 for prime working age group). Men, on the other hand, comprise 38 percent of the poor with no education and 63 percent of the poor with tertiary. Notably, as more population reaches primary education (e.g. looking at the younger age groups), women's share of the poor is higher than for older cohorts. These patterns are, as before, driven by the two regions where most of the poor are concentrated, namely South Asia and Sub-Saharan Africa (Annex Figure A2). In East Asia and Pacific, the share of women among the poor decreases sharply when moving from no education to primary education, but remains stable

<sup>&</sup>lt;sup>25</sup> The sex-disaggregated statistics on employment status used here do not reflect the new definitions of work and employment adopted by the 19<sup>th</sup> International Conference of Labour Statisticians (ICLS) in 2013. These new definitions restrict employment to production of goods and services for pay new definition of employment and broadens the definition of work to encompasses volunteering, own production of goods and services, unpaid trainee work and other forms of work. In addition, statistics will no longer refer to 'inactive' population, instead they will report on population 'out of the labor force that the household surveys included in the 2013 version of the GMD predated these new definitions.

afterwards (around 47 percent). Europe and Central Asia also follows the same pattern, but unlike the other regions, women represent the majority of the poor with tertiary education (58 percent).

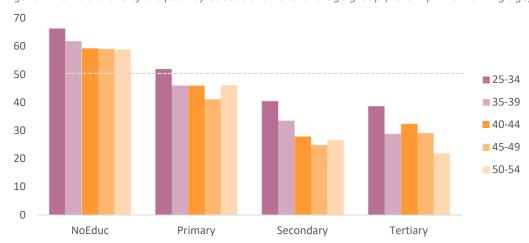
Table 2. Poverty rates by region, sex and educational level (ages 15+)

	Female				Male				
	No Education	Primary	Secondary	Tertiary	No Education	Primary	Secondary	Tertiary	
East Asia and Pacific	6.6	3.5	2.6	0.7	7.7	3.8	2.5	0.6	
Europe and Central Asia	1.0	0.3	0.4	0.1	1.2	0.5	0.4	0.1	
Latin America and Caribbean	7.9	5.5	2.6	1.0	8.4	5.0	2.0	1.0	
South Asia	20.5	14.1	7.9	1.7	21.9	16.4	9.7	2.1	
Sub-Saharan Africa	52.5	43.0	28.8	9.9	52.5	43.0	33.4	14.9	
Total	23.1	8.8	5.8	0.9	25.6	9.5	7.2	1.4	

Note: Total sample 89 countries

Source: WB Staff's calculations based on GMD.

Figure 7. Female share of the poor by educational level and age group (25-54 -prime working age)



Note: Total sample 89 countries.

Source: WB Staff's calculations based on GMD.

In the prime productive years, between 25 and 54 years of age, while the vast majority of poor men are engaged in paid or self-employment, over half of poor women are not in the labor force (not employed, seeking a job or available for employment)<sup>26</sup>. The relative importance of these different types of relationship to the labor force varies by sex (Figure 8). Globally, 40 percent of poor men are self-employed compared with only 19 percent of women. Sub-Saharan Africa and South Asia account for 83.5

<sup>&</sup>lt;sup>26</sup> There are no gender differences in pattern between rural and urban residence and employment status.

percent of poor self-employed men, but only 56 percent of poor self-employed women. But poor women in South Asia and Sub-Saharan Africa account for 83 percent of the poor women out of the labor force.

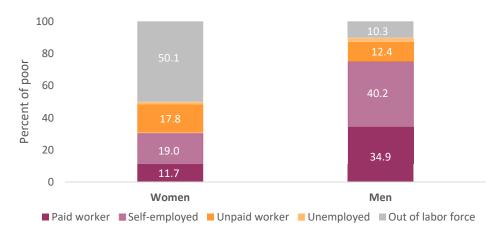


Figure 8. Distribution of the poor by sex and employment status (ages 25-54)

Note: Sample of 71 countries

Source: WB Staff's calculations based on GMD.

Table 3 shows that poverty rates follow a similar pattern for both women and men when we look at their labor market status. Unpaid workers are most likely and paid workers least likely to live in poor households. Unpaid workers have the highest female and male poverty rates across the different employment categories (21.6 and 21.9 percent, respectively). Unemployed women tend to be less poor in Sub-Saharan Africa, and both unemployed women and employed men tend be less poor in South Asia. Unemployed men in East Asia Pacific are most likely to live in poor households (but they represent a small share of the population). Overall poverty rates are the lowest for female and male paid workers (3.2 and 5.2 percent, respectively).

Globally, male poverty rates are higher than female poverty rates across the different labor market related categories (including for those out of the labor force). The biggest statistically significant average gender gaps are observed in those employment categories where both women and men represent a larger share of the poor. Among paid workers, male poverty rates globally are 2 percentage points higher than female ones, however this is reversed in South Asia and Sub-Saharan Africa. Among the self-employed, male poverty rates are 0.4 percentage points higher than female ones and such pattern (with slightly different magnitudes) is consistent across regions, except for Sub-Saharan Africa where women have higher poverty rates. This is an indication that, in most cases, self-employment is not a deliberate strategy for advancement for men but rather the only available option for employment. On the other hand, men out of the labor force are, on average, 2 percentage points poorer than women in the same situation. Regionally, this holds in South Asia and East Asia but is strongly reversed in both Latin America and Sub-Saharan Africa.

Table 3. Poverty rates by location and employment status, prime working age (25-54)

			Female	е				Male	<b>!</b>	
	Paid worker	Unpaid worker	Self- empl.	Unempl.	Out of labor force	Paid worker	Unpaid worker	Self empl.	Unempl.	Out of labor force
East Asia and Pacific	1.1	6.2	3.0	2.6	4.5	1.6	6.4	4.0	7.4	4.0
Europe and Central Asia	0.1	2.2	0.4	1.1	0.4	0.1	3.0	0.6	1.3	0.6
Latin America and Caribbean	0.6	12.8	3.0	9.8	6.1	0.7	24.3	4.6	15.9	9.7
South Asia	16.6	14.8	10.4	7.0	13.3	14.0	16.5	11.8	6.7	9.5
Sub-Saharan Africa	28.8	54.2	46.7	32.1	40.9	25.6	54.2	41.3	33.8	42.0
Total	3.2	21.6	11.2	7.9	11.1	5.2	21.9	11.6	10.4	13.2

Note: Sample of 71 countries

Source: WB Staff's calculations based on GMD.

# What explains gender differences in poverty rates through the lifecycle?

An initial look at the data indicates that gender differences in poverty appear to relate to age, in as much as age relates to life events such as marriage and to participation in economic activity. The previous analysis examined unconditional correlations between gender differences in poverty and demographic and economic characteristics. We now turn to conditional correlations, estimated from probit regressions of poverty status among adults 15-64 and demographic and economic characteristics. Since the relationship between poverty and those characteristics is complex and interwoven, the results should not be interpreted as causal relationships. However, they can provide useful information to explore the factors that help explain observed gender differences in poverty among different age groups. The regression uses individual-level data and regresses the poverty status (whether the individual lives in an extremely poor household or not) on a set of household and individual characteristics.

The analysis compares the unconditional results with three specifications. The first baseline regression includes as control variables a set of country dummy variables, an urban dummy, and the highest category of education attained by a household member<sup>27</sup>. Educational attainment is divided into four categories, no education, primary, secondary and tertiary education completed. The second specification adds the dependency ratio of the household (presence of children and elderly), as well as a dummy for the presence of adults, as controls. The third adds the individual's economic activity category, which distinguishes between out of the labor force, unemployed, paid employee, or self-employed. In each case, regressions are estimated separately for women and men to generate estimated average predicted probabilities holding the control variables constant.

What we find is that girls and young women face a poverty penalty that cannot be explained solely by the characteristics that are controlled for, or by the presence of children in the household. Figure 9 shows how the female poverty penalty, defined as the simple difference between predicted female and

<sup>&</sup>lt;sup>27</sup> As education is age-dependent, and we are including individuals who might still be in the process of completing their education (e.g. those younger than 25), we choose the highest level of education at the household level instead of individual education.

male extreme poverty rates, varies through the lifecycle when controlling for different individual and household characteristics. When looking at simple differences without controls, young women suffer from a sharp rise in the female poverty penalty between the ages of 20 and 30, from about 0.4 to over 2 percentage points. This penalty then falls and ultimately disappears by age 40. Moving from the unconditional difference to the base specification that includes country effects and household education slightly slows the increase in the gender disparity between ages 20 and 30. This likely results from controlling for country dummies, to the extent that poor women in their twenties are disproportionately prevalent in poorer countries, where young women face larger penalties in absolute terms. Controlling for household dependency ratio confirms that the pronounced spike in the female poverty penalty between the ages of 20 and 30 is due to the increased presence of young children. In this specification, however, girls and young women still face a 0.5 to 1 percentage point higher poverty rate between the ages of 0 and 15. Furthermore, when controlling for the individual's economic activity, women are a full percentage point more likely to be poor than men, all the way from birth until age 45. This is consistent with a higher share of men entering the labor force, and that labor force participation lifting more men than women out of poverty, particularly between the ages of 15 and 19. To sum up, there is an observed female poverty penalty, which increases with age and peaks at the 20-30 age group. Part of the sharp increase is due to the presence of young children; however, across all specifications we can observe a poverty penalty of 0.5 to 1 percentage point on girls and young women ages 0 to 15.

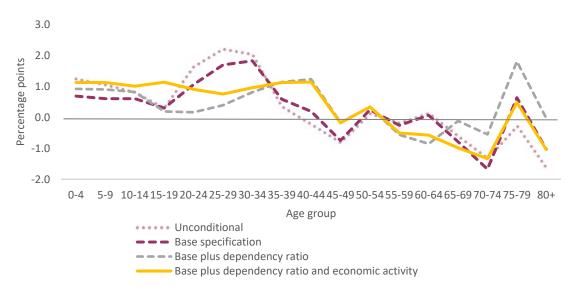


Figure 9. Difference between female and male poverty rates (poverty penalty), by age group and specification

Source: WB Staff's calculations based on GMD.

Notes: The Y axis represents the difference between predicted extreme poverty rates for women and men by age group, based on separate r. Sample of 71 countries

# Household Type and Gender: Looking beyond headship

Lessons from the individual-level analysis indicate that household composition, particularly the presence of dependents like young children, plays an important role when it comes to looking at gender differences in poverty through the lifecycle. In this section, we further explore household characteristics and composition to expand on gender differences when it comes to poverty. We seek to expand on

traditional headship measures, which have proved to be of limited use, to new ways of looking at household composition that might be more informative<sup>28</sup>.

Relying on self-reported headship for understanding gender differences in poverty hides substantial differences related to the type of households in which individuals live. <sup>29</sup> In the first place, looking at just headship does not account for the reasons why the household is headed by a particular individual (e.g. absence of a partner due to migration, family conflict leading individuals to leave their families, or others). Second, by being in most cases self-reported, household headship reflects social norms and views about who is understood as the head of the household (e.g. the breadwinner, the main decision-maker, the oldest man, etc.). These norms may vary across countries, within countries, or across income groups, and might privilege one sex over the other<sup>30</sup>. If we look at self-reported household headship, we can see that female-headed households are only a modest share of all households (23 percent), and an even smaller share of poor households (16 percent). Their poverty rate is lower than that of male-headed households (Table 4), but there is little else we are able to learn.

Table 4. Household poverty rate by self-reported headship, and distribution of poor households by headship

	Poverty rate	Share of poor households	Share of total households
Female headed households	5.8	16.4	23.5
Male-headed households	9.0	83.6	76.5
All households	8.2	100	100

Note: Total sample 89 countries

Source: WB Staff's calculations based on GMD.

Understanding the different ways men and women experience poverty requires household typologies that are neutral in relation to a normative or cultural view of household headship. Alternative operational definitions of household headship typically include one or both of two distinct dimensions: the demographic composition of the household, and the relative income/economic contribution to household resources (Rogan, 2013; Budlender, 2003; Fuwa, 2000; Buvinic & Gupta, 1997; Handa, 1994, 1996; Posel, 2001; Rogers, 1995; Rosenhouse, 1989; Varley, 1996).

Fuwa (2000), for example, suggests that households can be broken into three distinct groups based on the demographic composition of the household: those households with both male and female adult residents; those with only adult female residents; and those with only adult male residents (all in addition to children and elderly residing in those households). Similarly, with regard to economic contribution, households can be classified based on the sex of the person(s) in the household who contributes the highest share of the total household income. The household's income can therefore come from a male main or sole income provider, from a female main income provider or from joint contributors (as proposed by Rogan, 2013; and Fuwa, 2000). Other studies (Grown and Valodia, 2010; Rogan, 2013) have constructed

<sup>&</sup>lt;sup>28</sup> See Chant 2006, and Lampietti and Stalker, 2000 for a discussion on the issue.

<sup>&</sup>lt;sup>29</sup> A number of studies have contested the use of headship as a relevant analytical category for a number or reasons, including the lack of comparable definitions of the terms 'household' and 'head of household'; the ambiguity in the term 'head of household' when the assignment of headship is left to the judgement of household members; and the fact that the term 'head of the household' that do not reflect internal conflicts in the allocation of resources. See Buvinic and Gupta, 1997; Quisumbing et al., 2001; Budlender, 2008.

<sup>&</sup>lt;sup>30</sup> Survey enumerators as well as survey respondents might be affected by these norms.

"hybrid" compositions trying to capture both the presence and gender of earners and the demographic composition of those who are financially dependent in the household; one such designation is, for example, the "dual-earner" household meaning a married couple with dependent children. Based on the alternative definitions proposed in the literature, we explore two household classifications, a demographic-based classification and an economic-based classification. The *demographic* classification, is based on the adult composition of the household. This typology uses the demographic characteristics of the household, taking as a starting point the age and sex of the adults that live in the household (defining adults as those individuals of ages between 18 and 64), and distinguishing separate categories for elderly or seniors (those of age 65 or above), and households with dependent children (younger than 18).

The second classification, takes the *economic* characteristics of the household as a starting point, namely the presence and sex of all earners in the household. Earners are defined as any individual of age 15 or more that is engaged in economic activity. Households are then classified based on the presence of both earners and non-earner members who depend on the income earners (understanding as no earners children younger than 18, seniors 65 or older, and/or household members 15-64 who are not engaged in economic activity).

Both classifications are summarized in Table 5. In both cases, marital status is included in the specific analysis of some sub-groups such as adult couple (which distinguishes between married couples and other multiple adult households) in demographic terms, or couple-earner (vs. other multiple earner households), in economic composition terms.

Table 5. Household composition typologies

Demographic Composition: Sex and number of adults (18-64) in the household	Economic Composition: Sex and number of income earners (15+) in the household				
One adult female	One female earner				
One adult male	One male earner				
Two adults of opposite sex	Two earners of opposite sex				
Married or cohabiting couple	Couple earner				
Other two adult combinations	Other two earners combination				
Multiple adult households	Multiple earners household				
- Married or cohabiting couple and other adults	couple earner and other earners				
- Multiple adults	- Other multiple earner				
Only seniors (65+)	No earners				
Only children (-18)					

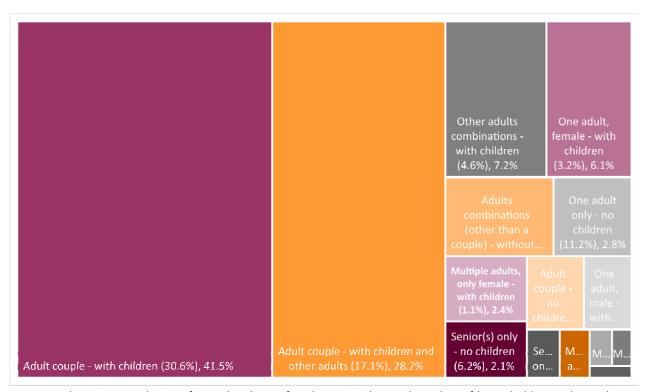
#### Demographic household composition

Looking at poverty status through the lenses of the *demographic* household typology shows that adult couple households (two adults of opposite sex who are married or cohabiting) with children are the largest share of poor households. These households are also overrepresented among the poor (meaning the share among poor households is higher than the share they represent among all households). These households represent 30.6 percent of all households, yet they account for 41.5 percent of households living in poverty (figure 10). Furthermore, adult couple households with children and other adults (i.e. extended family households), account for the second largest share among poor households (28.2 percent) and they are also overrepresented among the poor making up 17 percent of the total households in the sample. On

the other hand, adult couple households without children, are less likely to be poor. Their share among the poor is only 2 percent (compared with 8 percent of all households).

Adult couple households with children, and adult couple households with extended family and children, together account for 70 percent of poor households. Sole female adult households with children are only 6 percent of poor households, which is double their share of total households.

Figure 10. Distribution of poor households by demographic household typology



Note: Numbers in parenthesis refer to the share of each type in the total number of households. Total sample 89 countries

Source: WB Staff's calculations based on GMD.

The demographic household classification clearly indicates that the presence of children in a household makes a difference in terms of poverty rates. Figure 11 highlights the demographic composition in a more aggregate fashion, focusing on the presence of children in relation to the adult composition of the household. Overall, households with children tend to fare worse than those without, regardless of the sex, age and/or the number of adults present in the household. Furthermore, the gaps in poverty rates between presence and absence of children are rather large for all groups. The graph shows two additional points. First, that households with one man and one woman and no other adults mainly consist of couples (married or cohabiting) and their children. Second, it shows that for the case of households with only one adult, those where that adult is the "sole-responsible" individual in the household (a woman in the majority of cases) make up the largest share of poor households (Box 1 provides more details on this specific group).

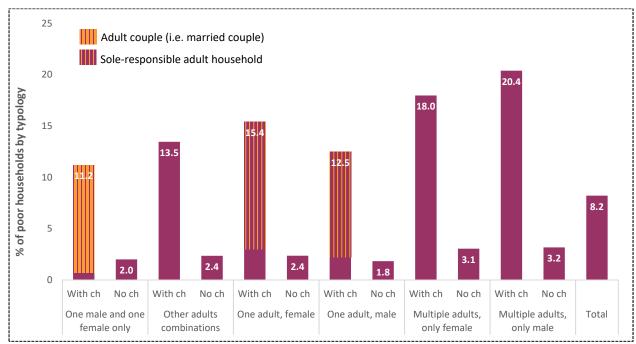


Figure 11. Poverty status by demographic household composition

Note: the figure shows the demographic classification in a more aggregate fashion; households are classified by the number of adults present (regardless of their marital situation), and the presence or not of children. "Sole-responsible adult" refers to households where the one adult is likely to be a single parent (see Box 1). Total sample 89 countries Source: WB Staff's calculations based on GMD.

Box 1. One adult-households: Untangling who the "sole-responsible" adult is.

One adult (female or male) households with children, or single-parent households, deserve special attention. This is especially true when thinking of female-headed households, which tend to be equated with single mothers and their children.

According to the demographic classification, the sample contains over 7 million poor households composed of one adult female and children. This is, equivalent to 6.1 percent of the total number of poor households (the share is 1.6 percent in the case of one-adult households where the adult is a male). By construction, one-adult-female households include the following possible combinations:

- 1. The female adult is the head of the household, she has no spouse -she is either never married, divorced/separated, or a widow, and she lives with children, or with children and seniors.
- 2. The female adult is the head of the household, is married, and she lives only with children in the household; the husband or partner is not present in the household.
- 3. The female adult is the head of the household, is married, and she lives with children and seniors; her husband may be one of the senior (65 or older) living in the household or might not be living in the household
- 4. The female adult is the spouse of the head, she lives with children or with children and seniors; the head (i.e. her spouse) is either absent or a senior living in the household,
- 5. The female adult is neither the reported head of the household, or the household head spouse; she lives with children only.

6. The female adult is neither the household head nor has a spouse; she lives with children and seniors; the head of the household may be a senior.

For the purposes of the analysis, we have defined as *sole-responsible* adult households those where the one adult (i) lives with children only (no seniors in the household) because, regardless of whether she is the head or is married, the spouse is not reported to be living in the household; or ii) is the head, has no spouse, and lives with children, or children and seniors, because the seniors most likely depend on her, and the senior is not a spouse (it is worth noting that households with senior members and children are 0.7 percent of all poor households). By this definition, of the 7 million of one-adult-female with children households that are poor, 81 percent are sole-responsible adult ones. In the case of one-adult-male households with children that are poor, 83 percent correspond to sole-responsible ones. While the difference is not large, it indicates how difficult is to define headship and household responsibility.

The demographic household composition analysis by regions reveals important variations in the shares of poor households in each group across regions. Numbers confirm that adult couple households with children, and with children and other adults (extended family), are the most common household type across all regions, and that they are the most frequent group to be found among poor households (Table 6). However, there are other types of households that gain relevance depending on the region. One adult female households with children are more prevalent among the poor in Latin America and the Caribbean and in Sub-Saharan Africa than in other regions but they are less prevalent among the total number of households.

In East Asia and the Pacific, and Europe and Central Asia, a non-negligible share of poor households are adult couple (e.g. married or cohabiting) households without children (4 percent). In Europe and Central Asia, extended family households (adult couple households with children and other adults) are more likely to be poor than the adult couple households with children and no other adults. In all other regions, the reverse is true. Finally, one adult households without children, regardless of the sex of the adult, constitute an important share of the poor (as well as an important share of the total number of households) in Latin America and the Caribbean and in Europe and Central Asia.

Table 6. Distribution of demographic household types across regions (poor households)

HOUSEHOLD TYPE	Region				
	EAP	ECA	LAC	SAR	SSA
One adult, female - no children	2.0%	2.9%	4.7%	1.1%	0.9%
One adult, female - with children	2.6%	2.3%	14.0%	3.2%	8.4%
One adult, male - no children	2.1%	7.7%	7.6%	0.7%	1.1%
One adult, male - with children	1.6%	0.4%	2.1%	0.7%	2.3%
Adult couple - no children	3.8%	3.8%	3.8%	1.7%	1.3%
Adult couple - with children	32.6%	20.4%	34.2%	44.3%	43.0%
Adult couple - with children and other adults	28.8%	34.3%	12.4%	32.6%	26.3%
Multiple adults no children	1.2%	1.3%	2.1%	0.3%	0.7%
Multiple adults, only female - with children	1.1%	1.2%	3.7%	1.2%	3.5%
Multiple adults, only male - with children	0.3%	0.1%	0.5%	0.3%	1.1%

Adults combinations (other than a couple) - no children	9.4%	7.9%	4.0%	3.9%	2.3%
Other adult combinations - with children	6.8%	15.8%	5.9%	7.8%	6.9%
Senior(s) only - no children	6.9%	1.8%	4.0%	1.7%	0.8%
Senior(s) only - with children	0.7%	0.0%	0.6%	0.1%	1.3%
No adults, children only	0.0%	0.2%	0.3%	0.4%	0.1%
Total	100%	100%	100%	100%	100%

Note: Total sample 89 countries

Source: WB Staff's calculations based on GMD.

# Economic household composition

The *economic* household composition assumes that a household member can be classified in one of two categories: as an *income earner*, meaning an individual 15 or older who is engaged in economic activity for pay, or a *non-earner* member, namely, those who depend on the income earners and/or depend on other income transfers such as social protection programs or remittances, for example. To differentiate on the type of income dependent, we distinguish between *earner dependent*, those non-earners 18-64, and *other dependents* which follows the traditional definition of children (younger than 18) and/or seniors (65 or older) who, are distinguished among the non-earners from the adults. (See Box 2 for more details about the non-earners).

#### Box 2. Child and senior breadwinners and non-earner members

According to the definitions above, children 15-17 and seniors 65+ can fall in either the earner or non-earner category. The more traditional definition of working age population covers those 15-64 (above legal age for work and below retirement age). For the case of this analysis we are including a wider definition covering those 15 and above.

In the case of youth ages 15-17, the GMD contains over 243 million people of which 52 percent are boys and 48 percent girls. The majority (70 percent) report going to school, 13 percent are not in school or employed, 10 percent are engaged in paid work, and 6 percent are engaged in unpaid work. Of those engaged in paid work 68 percent are boys, who also make the majority of those un unpaid work. Among those who live in poor households, 28 percent of young girls and boys are engaged in economic activity. 8 percent of girls, and 14 percent of boys who live in poor households are engaged in paid work.

These figures translate in: Households with children 15-17 as the only earners are a very small share of all households (0.3 percent). Households with seniors 65+ as the only earners are only 2 percent of all households. 4.3 percent of households have among their earners someone 65 or older (this number is slightly higher among poor households at 5.5 percent). Earners are concentrated mainly in the 18-64 age group.

The economic definition refers to earners as those who contribute with monetary income from paid work. It is important to acknowledge that some non-earners, are engaged in economic activity as unpaid workers or through contributions in-kind to the household. For example, they may engage in work that is not visible or accounted for as work such as unpaid domestic work.

One clear example of unpaid domestic work is found in households where women take care of children and/or the elderly. Examples of such households are (i) households with a male earner, a non-earner spouse, and children/senior dependents; (ii) households with a female non-earner, an earner spouse, and children/senior dependents; (iii) households with a male earner, without spouse, and with

adult non-earners, and children/seniors, since it may be that one non-earner adult female does care work.

The analysis of poverty by the economic characteristics of the household, confirms the previous findings that households with traditional dependents (children younger than 18 and/or seniors 65 and older (Figure 12)) fare worse than households without dependents. And, in most cases, having an earner dependent (i.e. household members 18-64 who are non-income-earners) also increases poverty rates (Figure 12). Households with an absence of an earner, combined with the presence of children and/or seniors, are the poorest type household (23.5 percent live in poverty), followed by households with a single female earner and dependents (16.8 percent live in poverty). Female single earner households with dependents of any type are also over-represented among poor households. They represent 5.5 percent of all households, but 7.9 percent of poor households.



Figure 12. Poverty rate by economic household composition

Note: Sample of 71 countries. Head couple earner refers to married/cohabiting earners. Source: WB Staff's calculations based on GMD.

Figure 13 presents a more disaggregated version of the economic composition. It distinguishes between non-earners who are children, seniors, *earner dependents* (aged 18-64), or a combination of any of these. The distribution of poor households shows that multiple individual households that include adults who are not actively engaged in economic activity (non-earners), and dependents, all depending on a single male earner, constitute the largest share of poor households. This result is consistent with the results from the demographic composition, in which extended family households are one of the most prevalent types among poor households, and are more frequent among the poor than the non-poor. Extended family households represent 21 percent of all households, yet they account for 36.2 percent of households living in poverty. Households with dependents and no earners are the second most common type among poor households. They represent 5 percent of all households but 14 percent of poor households.

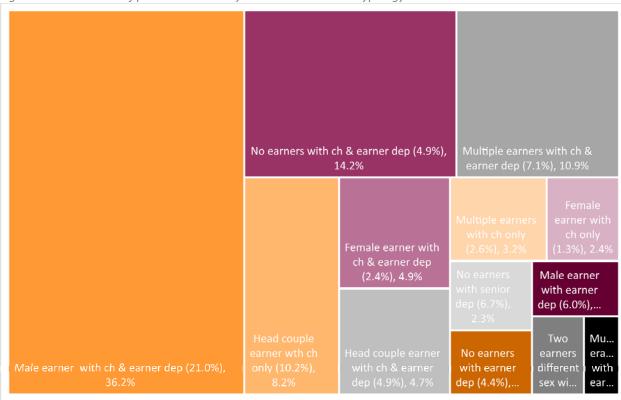
The share of extended family households living in poverty is eight times that of a similar type of household without dependents (16.8 vs. 2.1 percent). This difference also holds for the case of poor male single-earner households with earner dependents, where the poverty rate for those with dependents is six times that of those without dependents. On the other hand, households with a head-couple earner (a male and female earner, married or living together, with no other adults) are less likely to be poor. Although in their case, the presence of dependents also affects the level of poverty negatively.

In general, the presence of dependents increases the share of each earner composition household among the poor (regardless of presence, sex or number of earners), in line with finding of the demographic composition. The combination of children and non-earner adults (with or without seniors) is the one that matters the most. In fact, households with this combination of dependents represent 72.5 percent of poor households (but less than half of all households), as opposed to households where dependents are only non-earner adults which make up only 6 percent of poor households, or where the dependents are only seniors which make up 4 percent of poor households.<sup>31</sup>

As with the demographic composition, we observe variation across regions in the types of households that are more prevalent among the poor (Table 7). Even though sole female earner households are less frequent among the poor in the aggregate, they make up the largest share of poor households in Latin America and the Caribbean and Sub-Saharan Africa, particularly if they have children and other dependents (7 and 8 percent respectively). The most frequent household type varies by region. The largest group is households with a male earner, children and other dependents (particularly an earner dependent, typically a spouse or cohabiting partner). This group ranges from over half of all poor households in South Asia, to about 25 percent of all households in the other regions. The second largest group in terms of share of poor households is households with dependents but no earners. These households where no labor income earner is reported, but that may include unpaid or contributing family workers or receive social transfer or remittances, represent 48 percent of poor households in Latin America and the Caribbean (compared to only 2 percent of all households in that region), and 37 percent of poor households in Europe and Central Asia (where two thirds are senior individuals' households which probably have pensions as their main income source). In Sub-Saharan Africa, the share of no-earner households among the poor is larger than male earner households with dependents, and, as in Latin America, most of these households are composed by children and non-earners 15-64. For South Asia, the second largest household type among the poor is multiple earners households with dependents (18 percent).

<sup>&</sup>lt;sup>31</sup> In the aggregate, households with dependents who are seniors (no children) represent a higher share of total households (10.4 percent), so do households where dependents are non-earner adults only (17.4 percent); households with children and non-earner adults represent a lower share in the aggregate (42.1 percent)) than among the poor households (72.5 percent) which means this typology is overrepresented among the poor.

Figure 13. Distribution of poor households by economic household typology



Note: Numbers in parenthesis refer to the share of the typology in the total number of households. Distribution graph shows typologies that represent at least 1% of total poor (IPL) households only. Sample of 71 countries Source: WB Staff's calculations based on GMD.

Table 7. Distribution of economic household typologies across regions (poor households)

Household Type	Region				
	EAP	ECA	LAC	SAR	SSA
Female earner with children only	0.4%	0.4%	2.5%	1.0%	3.8%
Female earner with children and other dependents	3.8%	6.4%	6.9%	1.9%	8.4%
Female earner with earner dependent only	0.5%	2.9%	1.0%	0.1%	0.4%
Male earner with children only	0.9%	0.3%	0.3%	0.1%	0.4%
Male earner with children and other dependents	25.2%	23.3%	26.2%	53.0%	26.0%
Male earner with earner dependent only	2.4%	4.9%	2.2%	2.5%	1.2%
Head couple with children only	4.8%	2.0%	2.0%	5.5%	11.7%
Head couple with children and other dependents	6.0%	1.4%	1.7%	4.0%	6.5%
Head couple with earner dependent only	0.2%	0.8%	0.1%	0.1%	0.2%
Multiple earners with children only	5.8%	0.2%	0.5%	2.1%	3.1%
Multiple earners with children and other dependents	12.4%	6.4%	2.8%	18.1%	5.6%
Multiple earners with earner dependent only	2.3%	1.3%	0.3%	1.6%	0.3%
No earners with dependents	17.7%	37.1%	48.0%	3.8%	27.1%
Two earners different sex with dependents	3.6%	2.5%	1.1%	2.3%	1.8%

Any earner type with no dependents	7.5%	5.4%	2.0%	1.5%	2.5%
Any earner type with senior dependent	6.7%	4.6%	2.4%	2.5%	1.0%
Total	100%	100%	100%	100%	100%

Note. Some groups have been collapsed for presentation purposes. Sample of 71 countries Source: WB Staff's calculations based on GMD.

#### In which types of households do poor women live?

Results at the individual level, show that by age 20 to age 34, women are two percentage points poorer than men, which is a significant difference. At the household level, adult couples with children and single male earner with children and a non-earner dependent are the most numerous among the poor. At the individual level, marriage is the most frequent status for women in the 20-34 age group.

All these findings suggest household formation and income generation are possible factors associated with individuals living in a poor household. In fact, both poor and non-poor women concentrate in the *adult couple household with children (with or without other adults)* group. However, the share of women living in households with children is higher among poor women (more than 90 percent) than among non-poor counterparts (75 percent of total non-poor women, and 77 percent among the 20-34 age group). Similarly, the share of non-poor women living in households without children is higher than among poor women. Looking through the lenses of the economic composition, more than half of poor and non-poor women live in households with children and with children and earner dependents, and where the earner is a single male or a head couple. This is also the case among women 20-34. As in the demographic composition case, women are concentrated in the most frequent household type found among the poor. Yet, the shares of poor women (both all women and women ages 20-34) living in households with both children and non-earner adults (i.e. more members depend on the income earner) is higher than among non-poor women.

These patterns also hold true across regions, where the highest share of poor women living in households with children is found in Sub-Saharan Africa (97 percent, compared to 88 percent among non-poor women), and the lowest in East Asia and the Pacific (86 percent, compared to 67 percent among non-poor women).

Table 8. Distribution of poor and non-poor women by demographic and economic household compositions, global.

Demographic household typology	All women		Women 20-34	
	Poor	Non-	Poor	Non-
		poor		poor
Adult couple - with children (30.6%)	38.3%	33.6%	43.0%	37.6%
Adult couple - with children and other adults (17.1%)	37.6%	28.1%	36.2%	27.8%
Adult combinations (other than a couple) - without children (13.6%)	2.6%	12.0%	3.6%	13.3%
One adult only - no children (11.2%)	0.7%	3.3%	0.3%	2.8%
Total (72.5%)	79.2%	77%	83.1%	81.5%

Economic household typology	All women		Women 20-34	
	Poor	Non-	Poor	Non-
		poor		poor
Male earner - with children & earner dep (21.0%)	41.7%	28.1%	39.8%	28.2%
Head couple earner - with children only (10.2%)	10.6%	15.0%	10.4%	14.4%
Multiple earners - with children & earner dep (7.1%)	15.0%	12.2%	15.0%	13.3%
No earners - with senior dep (6.7%)	0.9%	4.3%	0.2%	0.3%
Total (45%)	68.3%	59.5%	65.3%	56.2%

Note: Numbers in parenthesis refer to the share of each typology in the total number of households; table shows the four typologies with the highest shares among total households. Sample of 89 countries for Demographic typology, and 71 countries for Economic Typology

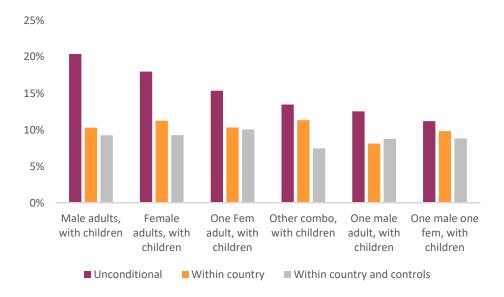
Source: WB Staff's calculations based on GMD.

The previous sub-sections examined the share of different types of households that are poor, classified both according to their demographic and economic composition. On the demographic side, in general households with children are more likely to be poor than similar households without children. However, of the households with children, the most common types of households -- those with children and an adult couple, with or without other adults present -- have a smaller share in poverty. On the economic side, households with both adult and child dependents are disproportionately poor, particularly those with no earners, a single female earner, or to a lesser extent, a single male earner. Among households without grown dependents, single female earner households are the poorest.

This final section considers the extent to which these results are robust when controlling for additional characteristics. For each type of classification, we consider three specifications. The first contains no controls and therefore reflects the unconditional relationship between household type and extreme poverty. These are equivalent to the unconditional results presented at the individual level. The second controls for a full set of country dummy variables, and therefore only considers within-country variation in poverty and household type. The third specification adds four additional household characteristics as controls: the maximum educational attainment category, the average age of earners, and household size, and an urban/rural dummy. As can be seen in Figure 14 below, adding even country dummies significantly attenuates the differences in poverty between the different types of household that contain children. With the full set of controls, single female adults with children are the poorest, followed by households with children and multiple female or male adults. The differences in poverty rates between households with children and without remains, but is reduced, to about 2 to 3 percentage points (results shown in annex, Tables A7 and A8).

With respect to the economic classification (Figure 15), introducing controls also greatly reduces the penalty for household types with both adult and traditional dependents (children an elderly). Nonetheless, the penalty for these types of households remains larger than for others, except for households with one male earner and both earner dependents and traditional dependents. Controlling for other characteristics, 9.8 percent of households with a one female earner and traditional dependents, but no adult dependents, are poor. This is close to the 11 percent share for households with no earners and both adult and traditional dependents. This is still significantly larger than other households that are unlikely to be in poverty, such as those with one male earner and traditional dependents, or household couples that both work and support both traditional and earner dependents. Not surprisingly, the economic classification, to a greater extent than the demographic classification, remains an important determinant of household poverty status after controlling for selected household characteristics and country dummies.





Note: Sample of 89 countries

Source: WB Staff's calculations based on GMD.

Figure 15. Probability of extreme poverty for selected household economic types by specification



Note: Sample of 71 countries

#### Conclusions

This analysis provides a glimpse of the richness and complexity that can be seen introducing a gender lens to poverty analysis. The findings of this study indicate that incorporating such a lens can provide important insights for policy design which has, to date, not included a systematic analysis of gender differences when it comes to policies to eradicate extreme poverty.

At the global level, four main findings appear. First, not only does a gender lens matter for poverty analysis in general it also matters in relation to the moment in the lifecycle for women and men (e.g. their marital status, presence of children and dependents in their households, when and if they join the labor market, and the responsibilities for reproductive work).

Second, children and dependents, demographically and economically, are an important vulnerability factor particularly for women during their reproductive years. Care responsibilities overlap with economically productive years (high labor market participation and best time for income generation years), making women specifically vulnerable due to multiple demands on their time.

Third, for both men and women, pooling resources, meaning having more adults working for pay in a household, appears to be a protective factor against poverty. Formal education is also a strong protective factor against poverty, especially for women.

Finally, at the household level, no one single element, whether it is self-declared headship, adult composition, or earner composition, seems to be enough to determine household-level poverty, so complementary approaches are required to look at household-level poverty and its main determinants.

This paper provides important insights based on the exploration of a dataset like the GMD, and it suggests the value of continuing this type of analysis to further understand gender, and other differences within poor and vulnerable households. A clear further research agenda for evidence-based policy decision-making at the country or regional level, leveraging new data being collected can build on these initial findings. Among these, expanding from income and consumption based approaches to explore the multi-dimensions of poverty and how these can vary between women and men is an important one.

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# Annexes

Table A1: Creation of the final sample GMD

	Number of countries	Number of surveys	Number of households*	Number of individual records*
GMD sample	89	104	2,055,717	7,649,676
Primary activity reported for 70% of observations	84	99	1,986,637	7,337,596
Primary activity consistent with employment status	82	97	1979442	7,302,438
Share of adults out of labor force 10% >100%	76	91	1918371	7,023,895
Employment status distinguishes between unpaid, paid, and self-employed	71	86	1865369	6,799,153

*Note:* \* weighted sample

**Source**: Global Micro Database, authors' calculations

Table A2: Characteristics of the final sample GMD

	Number of countries	Population	Share of sample population	
Total*	71	4,835,078,613	100%	
Income Group				
Low Income	13	337,990,810	7.0%	
Lower Middle Income	25	2,241,252,372	46.4%	
Upper Middle Income	20	1,988,304,246	41.1%	
High income	13	267,531,185	5.5%	
Region				
East Asia & Pacific	10	1,882,772,025	38.9%	
Europe and Central Asia	18	382,406,458	7.9%	
Latin America & Caribbean	17	539,821,384	11.2%	
Middle East & North Africa	3	16,288,184	0.3%	
South Asia	5	1,460,853,641	30.2%	
Sub-Saharan Africa	18	552,936,921	11.4%	
Welfare Type				
Consumption	42	4,093,499,010	84.7%	
Income	29	741,579,603	15.3%	

Table A3. Poverty rate by sex and geographic area

Region	Female		Male	
	Urban	Rural	Urban	Rural
East Asia and Pacific	1.9	5.3	1.8	5.2
Europe and Central Asia	0.4	1.5	0.4	1.5
Latin America and Caribbean	3.4	13.3	3.0	12.8
South Asia	9.4	18.6	8.3	17.4
Sub-Saharan Africa	25.0	52.3	24.3	51.9
Total	5.7	18.7	5.4	17.9

Note: 89 countries

Source: WB Staff's calculations based on GMD.

Table A4. Femininity index by age group and region

	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	69-29	70-74	75-79	80+
East Asia and Pacific	0.94	1.01	0.99	1.03	1.00	1.13	1.07	0.95	1.01	0.91	1.20	1.01	0.99	1.05	0.80	1.12	1.00
Europe and Central Asia	1.23	1.06	1.19	1.11	1.26	1.05	1.15	0.83	0.79	0.94	1.02	0.95	0.87	0.67	0.60	0.80	0.48
Latin America and Caribbean	0.98	0.99	1.04	1.11	1.26	1.35	1.28	1.16	1.09	0.95	1.02	0.85	0.93	1.02	0.92	1.06	0.91
South Asia	1.10	1.10	1.11	1.14	1.24	1.20	1.17	0.97	0.89	0.84	1.09	1.12	1.25	1.03	0.90	1.19	0.83
Sub-Saharan Africa	1.02	0.98	0.97	0.91	1.11	1.28	1.26	1.13	1.05	0.96	0.88	0.82	0.80	0.73	0.83	0.87	0.87
Total	1.06	1.05	1.04	1.02	1.17	1.24	1.21	1.03	0.98	0.90	1.02	0.98	1.02	0.92	0.84	0.95	0.79

Note: 89 countries

Table A5. Poverty rates and distribution of the poor by sex and age group

# a. Poverty rates

	Female poverty rate							Male p	overty rat	e					60+				
	0-14	15-24	25-34	35-39	40-49	50-54	55-59	60+	0-14	15-24	25-34	35-39	40-49	50-54	55-59	60+			
East Asia and Pacific	5.8	3.4	3.2	3.1	2.5	2.7	2.9	3.3	5.9	3.4	2.9	3.3	2.6	2.2	2.9	3.3			
Europe and Central Asia	1.6	1.1	0.8	0.6	0.5	0.4	0.4	0.2	1.4	1.0	0.7	0.7	0.6	0.4	0.4	0.4			
Latin America and Caribbean	8.4	5.8	5.0	4.7	3.9	3.7	3.1	2.8	8.4	4.9	3.8	4.1	3.8	3.7	3.7	2.9			
South Asia	22.1	14.2	15.0	14.1	11.3	10.8	11.1	12.4	20.0	12.0	12.7	14.6	12.9	9.9	10.0	11.6			
Sub-Saharan Africa	49.3	38.9	40.9	42.7	40.9	36.7	32.6	32.1	49.5	39.5	32.1	37.7	40.4	41.5	39.5	40.1			
Total	21.2	12.7	11.6	10.5	7.9	7.2	6.8	6.7	20.1	11.7	9.4	10.1	8.4	7.1	7.0	7.3			

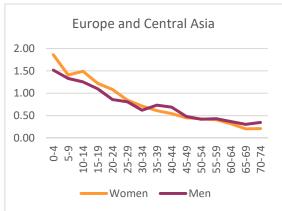
# b. Distribution of the poor, by sex, region and age group

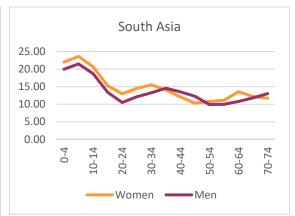
	Femal	Female 1							Male											
	0-14	15-24	25-34	35-39	40-49	50-54	55-59	60+	0-14	15-24	25-34	35-39	40-49	50-54	55-59	60+				
East Asia and Pacific	31.2	14.9	14.1	6.7	11.5	4.8	4.4	12.4	34.1	15.2	12.8	7.0	11.7	3.9	4.2	11.0				
Europe and Central Asia	36.2	19.3	15.8	5.8	8.4	3.9	3.7	6.9	35.1	18.1	15.8	7.2	10.1	3.6	3.5	6.6				
Latin America and Caribbean	39.8	18.3	15.0	6.3	8.9	3.6	2.5	5.7	44.5	17.3	12.2	5.6	8.9	3.5	2.8	5.2				
South Asia	41.8	16.8	15.4	6.0	7.9	3.0	2.6	6.4	42.2	15.7	14.1	6.7	9.9	3.0	2.5	5.8				
Sub-Saharan Africa	48.6	17.5	13.4	5.2	7.2	2.4	1.8	3.9	50.7	18.3	10.6	4.6	7.1	2.6	1.9	4.1				
Total	43.8	17.0	14.3	5.7	8.0	3.0	2.4	5.9	45.3	17.0	12.3	5.7	8.8	2.9	2.4	5.6				

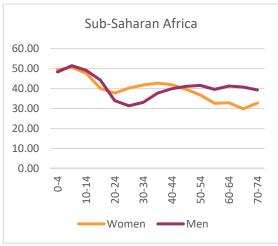
Note: 89 countries

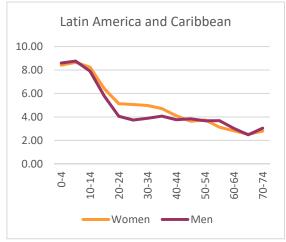
Figure A1. Female and male poverty rates using a life-cycle approach, by region











Note: 89 countries

Table A6. Distribution of poor and non-poor women by demographic household composition, global.

Demographic household typology	All wom	en	Women 2	20-34
Demographic household typology	Poor	Non-poor	Poor	Non-poor
Adult couple - with children (30.6%)	38.3%	33.6%	43.0%	37.6%
Adult couple - with children and other adults (17.1%)	37.6%	28.1%	36.2%	27.8%
One adult only - no children (11.2%)	0.7%	3.3%	0.3%	2.8%
Adult couple - no children (8.2%)	0.8%	4.6%	0.8%	4.6%
Senior(s) only - no children (6.2%)	0.6%	2.9%	n/a	n/a
Other adult combinations - with children (4.6%)	8.5%	7.3%	8.6%	7.3%
One adult, female - with children (3.2%)	5.6%	3.7%	3.8%	2.7%
Adult combinations (other than a couple) - without children (13.6%)	2.6%	12.0%	3.6%	13.3%
Multiple adults, only female - with children (1.1%)	3.4%	2.1%	3.3%	2.1%
One adult, male - with children (1%)	0.8%	0.6%	n/a	n/a
Multiple adults, only male - no children (1%)	0.0%	0.1%	n/a	n/a
Multiple adults, only female - no children (0.9%)	0.3%	1.1%	0.4%	1.8%
No adults, children only (0.5%)	0.1%	0.1%	n/a	n/a
Senior(s) only - with children (0.4%)	0.5%	0.4%	n/a	n/a
Multiple adults, only male - with children (0.3%)	0.2%	0.1%	n/a	n/a
Total	100%	100%	100%	100%

Note: Numbers in parenthesis refer to the share of each typology in the total number of households.

Table A7. Average poverty rates of demographic household classification, by specification

Demographic	Unconditional	Within country	Within country and controls
Male adults, with children	20.4%	10.3%	9.2%
Female adults, with children	18.0%	11.2%	9.3%
One Fem adult, with children	15.4%	10.3%	10.1%
Other combo, with children	13.5%	11.3%	7.5%
One male adult, with children	12.5%	8.1%	8.8%
One male one fem, with children	11.2%	9.8%	8.8%
No adults with children	8.5%	6.5%	7.7%
Male adults, no children	3.2%	3.5%	6.7%
Female adults, no children	3.1%	4.5%	8.1%
No adults without children	2.8%	6.7%	6.8%
One Fem adult, no children	2.4%	4.0%	6.4%
Other combo, no children	2.4%	4.5%	6.7%
One male one fem, no children	2.0%	3.6%	6.2%
One male adult, no children	1.8%	2.4%	6.1%

Note: 89 countries

Table A8. Average poverty rates of economic household classifications, by specification

Economic classification	Unconditional	Within country	Within country and controls
No earners, adult deps, traditional deps	19.4%	13.8%	11.0%
One female earner, adult deps, traditional deps	15.6%	10.8%	10.5%
One male earner, adult deps, traditional deps	13.1%	9.5%	8.3%
One female earner, No adult deps, Traditional deps	12.0%	8.0%	9.8%
Other multiple, adult deps, traditional deps	11.8%	10.7%	6.3%
Hh couple earners, adult deps, traditional deps	9.3%	8.2%	7.7%
Oth mult, No adult deps, traditional deps	8.7%	11.0%	7.7%
One male earner, No adult deps, traditional deps	6.5%	6.8%	8.3%
Two earners diff sex, adult deps, traditional deps	6.3%	8.0%	6.6%
Hh couple earner, No adult deps, traditional deps	6.1%	7.3%	7.8%
Two earners diff sex, No adult deps, traditional deps	6.1%	7.5%	7.7%
No earners, adult deps, traditional deps	3.7%	5.2%	9.5%
Oth mult, adult deps, traditional deps	2.8%	4.4%	5.9%
No earners, No adult deps, traditional deps	2.6%	6.2%	8.2%
One male earner, adult deps, traditional deps	2.5%	2.9%	5.2%
One female earner, adult deps, traditional deps	2.3%	3.5%	7.4%
Oth mult, No adult deps, traditional deps	2.1%	5.4%	7.4%
One female earner, No adult deps, traditional deps	1.8%	2.5%	4.6%
Two earners diff sex, No adult deps, traditional deps	1.6%	2.8%	5.9%
Two earners diff sex, adult deps, traditional deps	1.5%	3.2%	5.9%
Hh couple earner, No adult deps, traditional deps	1.3%	3.3%	5.7%
One male earner, No adult deps, traditional deps	0.9%	1.3%	4.1%
Hh couple earn, adult deps, traditional deps	0.6%	2.0%	4.6%

Note: 71 countries