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# Consumption Expenditure and Female Poverty: A Review of the Evidence

*Julian A. Lampietti<sup>a</sup> and Linda Stalker<sup>b</sup>*

## ABSTRACT

This paper sets out to answer two questions. First, are poor females at a significant disadvantage compared to males and non-poor females in terms of welfare indicators of such as health, education, nutrition, labor force participation, and time use? Second, are female-headed households over-represented among the poor? To answer these questions and maintain consistency in the definition of poverty, this review limits itself to the literature that includes consumption expenditure (or income) welfare measures. This includes more than 60 Poverty Assessments carried out by the World Bank since 1994 as well as other recent published and unpublished studies.

There is considerable variation in the nature and extent of gender inequality across countries, making it difficult to generalize that disparities between women and men are systematically larger below the poverty line. The evidence surrounding the incidence of poverty in female-headed households is also found to be country and case specific. For example, in a given context, *de jure* female-headed households may be disproportionately poor while *de facto* households are not. The evidence indicates that a more nuanced approach to understanding the relationship between headship and poverty is needed. This includes accounting for differences in household structure and as well as analyzing the process of household formation.

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## I. INTRODUCTION

Much attention has been drawn to the feminization of poverty in recent years. The UNDP's Human Development Report (1995) postulates that more than 70 percent of the world's poor are women. The International Fund for Agricultural Development (IFAD) estimates that from 1965 to 1988 the number of women in rural communities living below the poverty line rose more than the number of men (Jazairy et al. 1992). Lipton and Ravallion (1995) submit that women work longer hours to attain the same level of welfare as men do, and that poverty is more likely to be chronic for women and transient for men. Buvinic (1997b) suggests that women may be bearing more than their fair share of poverty in terms of health, nutrition, and education.

If these arguments are true, they have significant implications for both poverty analysis and the design of anti-poverty interventions. For example, if certain categories of women are worse-off than men are, then the process of targeting them through correlates such as gender may involve less error than other methods of targeting (Asian Development Bank 1993). More importantly, there may be higher social returns to targeting women than men (Lampietti et al. 1999; Pitt and Khandker 1998; Thomas 1997; Udry et al. 1995). If the benefits to society of investments in poor women's education, health, and nutritional status are significantly greater than similar investments in poor men one can justify public sector investment targeted towards women (World Bank 1995q).

Sen (1990) has been particularly articulate in dramatizing gender-based differences in child mortality, arguing that "over 100 million women are missing" in Asia and North Africa. However, the empirical evidence on the feminization of poverty in the developing world is ambiguous. Marcoux (1998) illustrates that there is no plausible assumption about the distribution of poverty that can support UNDP's claim that 70 percent of the world's poor are women. Ravallion (1994) and Marcoux (1998) dismiss IFAD's methods for estimating the number of rural women living in poverty.

Estimating the number of women living in poverty is a difficult, if not impossible, task. The primary obstacle is the absence of an acceptable individual level welfare indicator that can be compared for males and females. The most theoretically desirable indicator of current welfare – consumption

expenditure – is plagued with measurement problems. These problems have driven the literature on gender and poverty analysis in two separate directions. On the one hand, the feminist literature has largely focused on non-consumption indicators such as vulnerability, empowerment, and access to health care, education and land. On the other hand, the poverty literature has focused on differences in the welfare of individuals in male and female-headed households. While there is little doubt that female-headed households face a unique set of constraints, it is important to remember that their members represent only a fraction of the entire female population. Headship analysis can not and should not be considered an acceptable substitute for gender and poverty analysis.

This paper draws on the World Bank's Poverty Assessments and other published and unpublished literature to assess the evidence on gender and poverty. It addresses two questions. First, are females in poor households at a significant disadvantage in terms of non-consumption indicators of welfare? Second, are female-headed households over-represented among the poor?

To answer the first question we compare individual welfare indicators for poor and non-poor males and females. We examine a range of welfare indicators including health, education, nutrition, labor force participation, and time use. For some of these indicators we make within sex comparisons (poor and non-poor females) and for others we make between sex comparisons (poor females and poor males). We find that while poor females are often worse off over the range of welfare indicators, this difference is not always amplified below the poverty line.

To answer the second question we compare evidence on the incidence of poverty among male and female-headed households. The aggregate evidence is mixed and no systematic pattern of disadvantage emerges. There is, however, evidence to suggest that it is more difficult for certain categories of female-headed households to achieve the same level of welfare as male-headed households. A more subtle analysis, which is sensitive to alternative definitions of headship, is necessary in order to identify these households and understand the process of female-headed household formation.

The results of this literature review can, at best, be considered suggestive. The selection and computation of welfare indicators, the setting of poverty lines, and the choice of summary poverty

measures is not uniform across the studies examined. Furthermore, statistical testing to determine if observed differences in summary measures are significant is virtually non-existent. More systematic and rigorous analysis of gender is essential, particularly in the World Bank's Poverty Assessments, if development institutions are serious about maximizing the potentially large social benefits of investing in poor women.

## II. ANALYTIC FRAMEWORK

### A. Concept Measurement

It is widely acknowledged that poverty is a multi-dimensional concept – income, health care, nutritional status, education and leisure time all provide insights into individual welfare. This paper is limited to reviewing studies that include consumption expenditure as a welfare indicator. This welfare indicator has come under much criticism in recent years, particularly in the literature on gender and poverty (Baden and Milward 1995; Buvinic and Gupta 1997; Razavi 1998). There are, however, several excellent reasons to use it as a welfare indicator. First, it measures the command an individual, male or female, has over goods and services that are inputs into their welfare. Second, there is a strong theoretical basis for it as an indicator of current welfare. Third, it is perhaps the most common indicator of welfare used in poverty analysis.

It is well recognized that one of the difficulties with consumption expenditure is that it is measured at the household, not the individual, level. Therefore a rule, such as equal allocation of household consumption to each household member (e.g. per capita expenditure), must be used to go from the household to the individual as the unit of analysis. There are problems with the equal allocation rule. First, it changes the true dispersion of the data. Under this rule individual consumption will be under or over-stated, which will in turn under or over-state the incidence of poverty in the population. When using household-level data and assuming equal allocation, differentials between men and women can only arise if they do not share the same household or if there is a systematic difference in the ratio of males to females in households below the poverty line. Second, the equal allocation rule assumes equal consumption by all household members. Clearly this is not the case. Different household members have

different needs, for example young children consume less food than adults. Third, this rule implicitly assumes equal treatment of household members. There are two broad reasons why we might expect unequal treatment of males and females in poor, resource constrained households. One is related to the efficiency of household investments and the other to cultural biases. Poor households may invest less in the health, nutrition and education of females than males because the private returns to these investments are lower for females than males. Alternatively, they may invest less in females than males because of cultural biases, such as a desire to preserve the patriline.

Gender differences in welfare may be compounded by factors that go far beyond the household. Consider the relationship between income, culture, and education as illustrated by Colclough (1998). A variety of factors influence the decision to educate poor children at the household level – including the quality and quantity of education available, the price of education, and household demand for labor. There are also cultural practices that discriminate against girls – parents may not think girls need to be educated as they are going to be in another household once they marry. In school, teachers may not be as supportive of girls as of boys. In labor markets, females may face lower wages than males. And in society, educated women may not be deemed desirable as wives. These are just a few of the reasons that we expect to see fewer girls than boys in poor households attending school. Untangling the complex web of factors that determine differences in the welfare of men and women in poverty is well beyond the scope of this review. Therefore we restrict ourselves to assessing the empirical evidence of these differences.

## B. Data

This literature review draws on two data sources: (a) the World Bank's Poverty Assessments after 1994; and (b) published and unpublished literature that analyses gender and poverty using consumption expenditure or income. The Poverty Assessments, which are largely based on the analysis of nationally representative household surveys, are a rich source of data on poverty. Seventy-two Poverty Assessments were reviewed, each for a separate country. Sixty-four of them include a discussion of gender and some form of gender analysis. The most common analysis is a comparison of the incidence of poverty among

male and female-headed households.<sup>1</sup> In addition to the Poverty Assessments, where possible, findings from published and unpublished studies were included in this review.<sup>2</sup>

The 16 Poverty Assessments reviewed from the Latin America and Caribbean region all address gender; 14 specifically address the relationship between female-headed households and poverty. Twenty-eight Assessments from the Sub-Saharan Africa region were reviewed. Twenty-three of these discuss some dimension of gender and poverty that falls within the problem definition; of these, 21 address female-headed households and poverty. Of the 4 Assessments reviewed for the South Asia region, only 2 discuss female-headed households and poverty. All five Poverty Assessments for the Middle East and North Africa region, all 6 for the East Asia region, and all 10 for Europe and Central Asia discuss female-headed households and poverty.

There are important caveats to keep in mind with this review. First, different studies define poverty differently, making cross-country comparisons unreliable. Cross-country comparisons require first defining an absolute poverty line (preferably adjusted for purchasing price parity) and then evaluating the incidence of poverty (or other related welfare measures) across different countries. Restricting oneself to comparisons between poor and non-poor is artificial when comparing non-consumption indicators of welfare because such comparisons are sensitive to the specification of the poverty line. Unfortunately, none of the Poverty Assessments conduct sensitivity tests in the neighborhood of the poverty line. Moreover, using the dichotomous poor and non-poor classification does not adequately deal with non-linearities of welfare measures over the consumption expenditure distribution. Second, almost none of the studies test for the statistical significance of differences in welfare indicators, making results suggestive rather than conclusive. Third, studies are almost always based upon national level analysis that, for large diverse countries such as India, can mask important sub-national trends (Filmer et al. 1998). Where possible, sub-national evidence is presented. Fourth, the available literature on gender and poverty is likely to be subject to a form of publication bias. As Haddad et al. (1996) point out in reference to nutrition studies and gender, when ‘interesting’ findings are not

discovered studies are either not published or the hypotheses are revised to arrive at interesting findings. This implies that surveys of the published literature will likely overestimate differences in welfare.

### III. EVIDENCE ON FEMALE POVERTY

The remainder of this section examines the evidence on gender differences in well-being above and below the poverty line for the following welfare indicators -- health, nutritional status, education, labor force participation, and time use. Compiling this evidence from the literature is a difficult task because relatively little effort has been made to supplement consumption with non-consumption indicators of welfare in the poverty assessments.

#### A. Health

Health is a form of human capital that is critically linked to the development process. It influences land use, the supply and productivity of the labor force, and the enrollment and performance of children in school. There are several hypotheses about the expected direction of the differences in health by gender for households in poverty. It may be that in poor households the private returns to investing in male health are higher than in female health, or it may be that boys are considered more important for preserving the patriline (Saith and Harriss-White 1998).

Interestingly, Miller's (1997) review of medical and nutritional studies finds that discrimination against females is worse in the higher than in the lower socioeconomic classes.<sup>3</sup> This raises an alternative hypothesis that, in poor households, the private returns to investing in female health are the same or maybe even higher than in male health (Harriss, 1992). This could easily be the case because women undertake multiple jobs, including child-care and income generating activities, on behalf of poor households.

The interaction between health, gender, and poverty has been examined in several ways. For adults this includes access to health care (particularly during pregnancy), unwelcome fertility, maternal mortality, and birth weight. These indicators can only be compared for women above and below the poverty line. Maternal mortality and access to health care are correlated and reveal important differences between poor and non-poor women. Low birth weight is related the mother's nutrition, but we include it



here as it has implications for the future health of the infants. Unwelcome fertility is positively correlated with family size and we expect large differences in the fertility rates of poor and non-poor women.

Between sex comparisons of health indicators below the poverty line is best done by comparing differences in treatment received by boys and girls. For example, the analysis of vaccination rates among boys and girls is more indicative of differences in treatment than in needs. Where possible we look at differences in immunization rates for girls and boys under the age of 5. Additional indicators such as infant mortality and trips to qualified health care providers can also be important, but we only have data on the latter for one country.

Latin America and the Caribbean (LAC). In the LAC region poor women are consistently worse-off in terms of health indicators than non-poor women (Table 1). This is true for Bolivia, Costa Rica, Haiti, Jamaica, Nicaragua, and Paraguay. Below the poverty line fertility is higher, maternal mortality is higher, and access to and quality of health care during pregnancy is lower. In Paraguay, in the capital city, 32 percent of poor women give birth at home. This is more than twice the average (14 percent) for women in the city. In Nicaragua, 23 percent of extremely poor women in rural areas give birth without the assistance of any health care personnel. The rates of poor women giving birth either at home or without access to qualified medical support presumably leads to a vicious circle of higher infant morbidity and mortality which in turn leads to higher fertility.

Sub-Saharan Africa (SSA). Blackden and Bhanu (1999) note there is a large gender differential in the region's sexual and reproductive burden of disease, but do not make comparisons between poor and non-poor females. Despite the obvious link between health and poverty only one Poverty Assessment (out of the 28 reviewed) compared health indicators above and below the consumption expenditure poverty line in SSA. In Djibouti, both the poor and very poor are more likely than the non-poor to give birth at home with a traditional birth attendant, suggesting higher maternal and infant mortality among the poor than the non-poor.

Middle East and North Africa (MENA). In North Africa, poor women have more home births and less access to health care than non-poor women (Table 1). In Morocco, poor women in both rural and

urban areas get fewer pre-natal visits and have more at-home births than non-poor women. In both Egypt and Morocco, poor girls have a lower vaccination rate than poor boys. In both countries, this gender gap is larger for children in poor households than in non-poor households and this difference is greater below than above the poverty line. In Morocco there is evidence to suggest that female children actually receive post-natal health consultations more often than male children do.

East Asia (EA). In Mongolia and Viet Nam, poor women have higher fertility rates than non-poor women (Table 1). In Mongolia, poor women have less access to care during pregnancy and lower quality care (in the form of modern assistance at birth) than non-poor women. In Viet Nam, mothers in poor households have a higher probability of having low birth weight babies. Low birth weights occur 7 percent of the time in the lowest quintile of the consumption distribution compared to less than 4 percent of the time in the highest quintile. In Indonesia, Frankenberg et al. (1999) examine household response to the economic crisis and find no significant differences (before and after the crisis) in health care use patterns by gender of child or by the size of the household in which the child lives.

South Asia (SA). Evidence from Pakistan suggests that poor women have higher fertility rates than non-poor women (Table 1). Alderman and Gertler (1997) find higher discrimination against girls than against boys in the choice of health care providers in poor households than in non-poor households. The probability of a low-income household taking a son to a doctor (vs. self-care or lower quality providers) is 5 percent higher than the probability of taking a daughter to a doctor. This is significantly higher than the 2 percent difference in the probability for the highest income group. Similarly poor girls are significantly (2 percent) more likely to receive self-care than poor boys. This difference declines to less than one percent in the highest income group.

Global Synopsis. The evidence is consistent across regions for a variety of health indicators. Poor women have higher fertility rates, higher maternal mortality, lower birth weights, and less access to qualified or modern health care during pregnancy than non-poor women do. These differences are persistent in both low and middle-income countries. The social benefits associated with reducing high fertility rates are well documented (World Bank 1993). This suggests that public sector investment in

basic and reproductive health services should be targeted at poor women. That consumption expenditure is positively correlated with women's health also speaks to its consistency as a welfare measure.

For children, the evidence from Egypt and Morocco indicates that in poor households boys appear to be favored over girls in terms of vaccination rates. In Pakistan there is evidence that girls receive lower quality health care than boys. Public sector investment in girls' health (over boys) may be warranted on both equity and, depending on the view one takes of the household, efficiency grounds.

## B. Nutrition

Adequate food consumption is a critical component of current welfare and an important input into the formation of good health. Poverty is often defined in terms of whether or not people get enough to eat. Similar hypotheses to those for health made in the previous section exist about why females may have lower food intakes and worse nutritional outcomes than males in poor households. With food intakes it is particularly difficult to untangle differences in needs from differences in treatment at the household level.

Several studies have looked at gender differences in food intake, which is an important measure of current welfare. Appleton and Collier (1995) note that in Northern India it has been repeatedly demonstrated that boys are favored over girls in terms of food allocation. In Bangladesh, Pitt et al. (1990) find that an apparent pro-male bias in consumption disappears after controlling for energy exerted. Mason et al. (1999) estimate gender-specific food consumption profiles and compare them with actual calorie consumption collected at the individual level. They find that unadjusted consumption levels are substantially higher for males than females. However, after controlling for differences in needs, gender differences in consumption levels disappear. The authors conclude that while females in rural Bangladesh face many disadvantages compared to males, they are not disproportionately represented among the poor using the consumption metric. Miller (1997) reviews food allocation studies in South Asia and finds little evidence to support a gender bias among lower socioeconomic classes. In other parts of South Asia, the evidence is mixed (Harriss, 1990). In the Philippines, Haddad and Kanbur (1990) find that neither sex is over-represented among persons with inadequate calorie intake.

Anthropometric status provides a measure of past food intakes. Examples include the Body Mass Index (BMI) and height- or weight-for-age. In India, Watson and Harriss (1985) find that poor females have below average anthropometric status. Outside of South Asia Appleton and Collier (1995) review the literature and find there is little evidence of gender differences in anthropometric status. In SSA Svedberg (1990) reviews fifty studies and concludes that in general females do not appear to be at a significant disadvantage compared to males in terms of their anthropometric status. Appleton (1996) examines wasting and stunting for boys and girls in male and female-headed households below the poverty line in Uganda.

Few studies have examined gender differences in food intake or anthropometric status below a consumption expenditure poverty line. In India, Warriar (1992, cited in Srinivasan 1999) finds that girls in upper income groups are at a greater disadvantage compared to boys in terms of food allocation than they are in lower income groups. In Viet Nam, Desai (1995) examines BMI for adult males and females and finds that a greater percentage of women than men suffer from second and third degree chronic energy deficiency.<sup>4</sup> The gender gap appears to be largest for the lowest quintile and smallest for the highest quintile. This suggests that women bear the brunt of food shortages in poor households and that the nutritional status of adult women improves the most as welfare increases. This is consistent with Behrman and Deolalikar's (1990) general findings for South India that females eat less than males when food is scarce.

While there is considerable evidence supporting gender bias in food intake and nutritional outcomes, little has been done to understand the dynamics of this bias below the poverty line. The evidence as to whether poor females are worse off than poor males in terms of both food allocation and anthropometric status is mixed.

### C. Education

Education can increase welfare both as a consumption good and by contributing to human capital formation. In the former, parents gain welfare directly from knowing their children are being educated. In the latter, parents gain welfare through the higher earnings realized by more educated children. In

general the same arguments about efficiency and cultural biases apply to why we might expect to see a larger gender gap in education in poor households.

The private returns to educating boys are likely to be higher than to educating girls. Men have higher wages and often stay more closely tied to the household. Women have lower wages and often marry and move away. There is, however, evidence that suggests there are much larger social returns to educating girls than boys. This includes lower fertility, and reduced morbidity and mortality in the household (Schultz 1993).

Filmer (1999) investigates ways in which gender and wealth interact in generating within country inequalities in educational enrollment and attainment in 38 developing countries. The principal finding of the paper is that the wealth gap in enrollment is much larger than the gender gap in enrollment in almost all countries. This implies that public investments in education should be targeted at the rich-poor gap over the gender gap. A weakness with the study is the use of relative poverty lines to make cross-country comparisons. While this might be acceptable in a region where living standards are fairly uniform across countries, it confounds the true dispersion of gender gaps in education over the welfare distribution when they are not uniform. The analysis confirms that female disadvantage in education is a major problem in some countries. This disadvantage appears to be less related to measures of income, inequality, growth, or spending on education than geographic location.

Saith and Harriss-White (1998) review national and micro-level studies of female education in SA and SSA and suggest that “family poverty in rural and urban areas is probably the most important reason for holding girls back from school or withdrawing them earlier.” They claim this bias is partly a function of social risk. Social risk can include the risk of pregnancy or the fear of being unable to marry-off an educated daughter (Saith and Harriss-White 1998).

Latin America and the Caribbean. In LAC girls and boys appear to receive equal amounts of education. The exception is Bolivia, where it appears that there is a bias against girls, and that this bias is amplified below the poverty line (Table 2). Separating the Bolivia data by ethnic group reveals a stark

picture. In urban areas poor indigenous girls are at the greatest disadvantage in terms of school attendance.

Sub-Saharan Africa. In SSA no clear pattern of disadvantage emerges between males and females below the poverty line (Table 2). In 6 out of 11 countries girls receive less education than boys in every income group. In the remaining 5 countries there are no differences. In Djibouti and Niger, females are considerably worse off than males over the entire consumption expenditure distribution. In Kenya, there is no difference in primary school enrollment, but poor girls receive less secondary education than poor boys. In the Mauritania Poverty Assessment girls appear to have higher enrollment rates in urban areas and boys in rural areas. The Poverty Assessment postulates that girls' enrollment rates in urban areas may be higher because there is less demand for domestic labor – caring for siblings, collecting water or gathering firewood – than in rural areas (World Bank, 1994i).

In Madagascar, Rwanda and Tanzania, there is no difference in enrollment between boys and girls in poor households. In Côte d'Ivoire, Malawi and Zambia, the gender gap in education appears to become larger below the poverty line. In Lesotho, boys have a lower school enrollment than girls, but this is not associated with poverty. In Togo, anecdotal evidence suggests that girls from poor rural families are sent to work for urban households rather than to school (World Bank, 1996p).

Middle East and North Africa. In MENA girls appear to be worse off than boys (Table 2). In Egypt and Yemen both poor and non-poor girls receive little education. In Morocco and Algeria the gender gap is largest for children in poor households. In the former this gap is larger in rural areas, where almost 60 percent of poor boys are enrolled in primary school, compared to only 10 percent of poor girls. In Algeria poor girls have lower secondary school enrollment than non-poor girls. In urban areas 83 percent of non-poor girls are enrolled, compared to 76 percent of poor girls. In rural areas 61 percent of non-poor girls are enrolled compared to 51 percent of poor girls. The difference in enrollment rates for non-poor and poor boys is much less acute than it is for girls in both rural and urban areas.

East Asia. In Lao PDR, the gender gap in both literacy and secondary school enrollment is higher in the lowest quintile of the consumption expenditure distribution. The disparity in literacy between

males and females is 32 percent in the bottom quintile and 11 percent in the top quintile. Similarly, 51 percent of poor boys, compared to 37 percent of poor girls are enrolled in primary school. In Mongolia, boys appear to receive less education than girls do over the entire consumption expenditure distribution.

Thomas et al (1999) use panel data from Indonesia to explore the impact of the financial crisis on the welfare of households and finds that among poor households in urban areas, 15-19 year old males have been protected from the crisis at the expense of their younger brothers and sisters. In the rural sector, poor households substantially cut back on education expenditures on both male and female children.

South Asia. In SA, except for Sri Lanka, girls appear to receive less education than boys (Table 2). In Sri Lanka, enrollment rates for boys and girls are similar across the consumption expenditure distribution, implying equal opportunities for both sexes regardless of poverty status. In Pakistan, there is no additional interaction effect of being both female and poor; both men and women have low literacy rates in poor households compared to non-poor households. In India the gender gap in primary school enrollment is negatively correlated with the consumption expenditure distribution. In the lowest quintile of the distribution, the enrollment rate for boys is 43 percent as compared to 32 percent for girls. This relationship holds in all but two states. Haque et al. (1998) find that this pattern is even more acute in rural than in urban areas.

Global Synopsis. Out of a total of 22 poverty assessments that include analysis of gender and education, girls are worse off than boys are in Djibouti, Niger, Kenya, Egypt, Yemen and Pakistan. The gender gap in education is amplified below the poverty line in Bolivia, Côte d'Ivoire, Malawi, Zambia, Morocco, Algeria, Lao PDR and India. In Mongolia and Lesotho the gender gap is reversed, with boys being worse off than girls. In Nicaragua, Madagascar, Mauritania, Rwanda, Tanzania, and Sri Lanka there is no difference or the analysis is inconclusive. Once again, we also do not find that any systematic pattern emerges between low income and middle income countries.

#### D. Labor force participation

Labor force participation may have positive or negative welfare effects. On the positive side, labor force participation is often associated with higher household welfare and greater individual control of household resources. It is also correlated with education, cultural practices, and domestic responsibilities. On the negative side it means longer hours worked and less leisure time.

There are several reasons we might expect to see differences in labor force participation by gender. First, if women face a lower reservation wage than men do, they will be less likely than men to enter labor markets. Second, it may simply be efficient for the household to divide its labor in such a way that women engage in home production and men enter labor markets. This might occur if women have greater responsibilities for child-care which increases the non-market value of their time. Third, it may be that women simply have greater preferences for time spent on non-market activities than men. Fourth, women may simply not be allowed to enter labor markets for cultural reasons.

The evidence on household welfare and labor force participation is particularly unconvincing because of problems with data collection. For example, it is unclear if poor women have low labor force participation rates because they can not find work or because they are not looking for work. Furthermore, informal sector employment is believed to be a very important source of income for poor women. Sethuraman (1998) suggests that women in poor households participate more in the informal sector than women in non-poor households do. Moreover, Correia (1998) reports that the majority of statistics on labor force participation do not capture informal sector employment.

Latin America and Caribbean. In LAC women participate less in the labor force than men (Table 3). In 6 out of 9 countries poor women have lower labor force participation rates than non-poor women. This is true in Bolivia, Columbia, Costa Rica, El Salvador, Guatemala and Nicaragua. In Trinidad and Tobago, there is no evidence of a difference in labor force participation between poor and non-poor women.

Sub-Saharan Africa. Out of 28 Assessments, only one discusses labor force participation for poor females in SSA. In Côte d'Ivoire poor women appear to have a higher participation rate than non-poor



women. The overall participation rate for all women is 63 percent and for men it's 78 percent. However, among poor women the participation rate approaches that of men.

Middle East and North Africa. The only evidence to support the claim that poor women have difficulty entering the labor force comes from Morocco, where poor women in urban areas have the highest unemployment rates. Additional evidence from Morocco suggests that women have low earnings compared to males, regardless of poverty status. In both Egypt and Yemen there does not appear to be a difference between the labor force participation rates of poor and non-poor females.

East Asia. Mason and Baptist (1996) analyzed unemployment and underemployment in Indonesia and found that poor women in rural areas have an underemployment rate of 59 percent compared to 41 percent for poor men. In urban areas, poor women have an underemployment rate of 44 percent compared to 28 percent for poor men. However, when underemployment is defined to include 'seeking additional employment' these gender gaps disappear.

In Vietnam, Vijverberg (1998) examines the percentage of males and females participating in non-farm self employment activities. Moving from the lowest to the highest quintile of the income distribution, participation in non-farm self-employment rises for both males and females. The difference between male and female involvement also appears to increase both in terms of participation and hours devoted to labor. While involvement in non-farm self-employment rises with income in both regions, there is male-female equality in the North until the fourth quintile. In the South, women are more engaged in non-farm self-employment at all levels. In sum, people engaged in non-farm self-employment activities live in households that tend to be better off than households with wage employees and, in particular, the farming class. This means that women are not at any clear disadvantage: while self-employed women in the South are slightly worse off than their male counterparts, in the North they are slightly better off.

Global Synopsis. The evidence on gender differences in labor force participation should be interpreted with caution. There is little evidence of a systematic pattern in labor force participation of poor women in low or middle-income countries. In LAC, poor women appear to participate less in labor

markets than non-poor women. In SSA, evidence from one country suggests that poor women participate more in labor markets than non-poor women. In MENA, there does not appear to be a difference between poor and non-poor women. In EA, poor women do not appear to be at a particular disadvantage compared to poor men in terms of employment. There is no evidence for SA.

#### E. Time Use

Leisure is an important measure of welfare, having a profound impact on people's health and nutrition (Quisumbing et al, 1995). Consumption expenditure typically excludes leisure because it is difficult to both measure and value. Measuring women's time allocation in the household is difficult because they undertake multiple activities including farming, child-care, and cooking simultaneously (Floro, 1995). It is hypothesized that the longer hours worked by women, particularly in poor households, not only reduces their welfare directly by limiting their leisure time but also prevents them from undertaking income generating activities.

While more and more surveys are including modules on time use, there has been relatively little work in this area, particularly in terms of comparisons between poor and non-poor or over the consumption expenditure distribution. For example, Brown and Haddad (1995) review the evidence in 7 SSA countries and find that in all cases women work more hours than men. While some of this work is in the reproductive capacity, for example child-care and domestic duties, a great deal of it is also productive work. The 1997 UNDP Human Development Report also provides evidence that women spend more time in paid and unpaid labor than men do. A more rigorous approach would require comparing hours worked by men and women after controlling for energy exerted.

The differences between hours worked and work intensity (number of tasks undertaken simultaneously) of poor women and non-poor women has not been well explored. Ilahi (1999) looks at time and poverty in Peru. Findings are consistent with the literature, with men and women in rural areas working more than their urban peers; and rural women working more hours per week than rural men. The analysis suggests that women in households at the bottom of the consumption expenditure distribution work longer hours than other women do. By contrast, men's work time does not vary across the

consumption expenditure distribution. Ilahi (1999) concludes, “this seems to indicate that the burden of poverty may be falling on women in the form of high work needs.” The analysis is taken one step further to show that the proportion of time women spend in housework does not differ over the income distribution, while men’s time spent in housework does vary although not in any clear pattern. As consumption increases, the share of women’s time spent in wage work also increases, consistent with patterns found in general for labor force participation.

#### IV. CONCLUSIONS ON GENDER AND POVERTY

The evidence on gender and poverty is highly variable. While women appear to be at a disadvantage over the range of welfare indicators, this disadvantage is not clearly amplified for those below the poverty line or in low-income countries. In all 9 of the studies that directly address women’s health care, poor women have lower access to quality care than do non-poor women. Four studies address differences between girls’ and boys’ health care and 3 of them find that poor girls receive less care than non-poor girls. Only 2 studies address nutrition indicators below the poverty line and both find that poor females are worse off than poor males.

The evidence on education is again highly varied. The worst gender gaps are found in Western Africa, SSA, and MENA. In twenty-three percent (5 of 22) of the studies the gender gap in education is consistent over the welfare distribution. In forty-one percent (9 of 22) of the studies the gender gap in education is amplified in poor households. In the remaining thirty-six percent (8 of 22) of studies there is no gap or it is reversed. In the majority of cases (7 of 11) which present data on labor force participation, females have a lower participation rate than males. Again we conclude that while females are often worse off over a range of welfare indicators, this difference is not necessarily amplified below the poverty line.

#### V. FEMALE-HEADED HOUSEHOLDS

As noted in the introduction the bulk of the literature on gender and consumption expenditure has focused on female-headed households. Jazairy et al. (1992) and Buvinic (1997) argue that female-headed households deserve special attention because they face the triple burden of poverty, discrimination, and

absence of support as heads of household. While female-headed households may be particularly vulnerable to poverty, it is important to realize that on average they represent only about 20 percent of all households.

The concept of headship was originally developed to avoid double counting in household surveys. It is self-reported and usually identifies the oldest adult male in the household as the 'head' (Rosenhouse 1989). This definition has important consequences for understanding the relationship between gender and poverty.<sup>5</sup> First, self-reported headship conceals heterogeneity among female-headed households. For example, suppose there is a large population of poor female widows and a small population of economically active single young women. Reported headship averages these two groups together, with the result that female-headed households appear poor when it is really only widowed females that are poor.

Second, self-reported headship often has little or nothing to do with control of resources or economic support for the household. Therefore it may mask the identification of the unique 'economic' disadvantages faced by females. For example, one may learn more about discrimination by comparing households supported by women with households supported by men than by self-reported headship analysis. The former exposes differentials in education and returns to market hours worked concealed by the latter.

While the practice of defining female headship is questionable, the concept of analyzing households supported by women is probably worthwhile because of the unique set of constraints they face. In particular, a more nuanced approach is necessary because female-headed households are a diverse group in terms of size, age structure, marital status and employment opportunities. One important distinction for poverty analysis is whether the household is *de facto* or *de jure*. In *de facto* female-headed households the husband is not present in the community at the time of the survey, but may still play an active role in supporting the household through remittances. In *de jure* female-headed households there is no adult male. These are widows, divorced women, or unmarried women.

The remainder of this section has two parts. First we summarize earlier studies on poverty and headship. Second we compare these studies with findings from the Poverty Assessments. Our comparison suggests that while female-headed households undoubtedly face certain unique disadvantages, they do not appear to be systematically worse off – in terms of consumption expenditure – than male-headed households.

#### A. Review of Previous Studies

There have been several reviews of the literature on female headship and poverty, including Buvinic and Gupta (1997), Quisumbing, et al. (1995) and Haddad, et al. (1996). Buvinic and Gupta (1997) reviewed 61 studies and found that in 38 of them female-headed households are over-represented among the poor. In 15 studies, only certain groups of female-headed households, such as de jure households, appear to be over-represented among the poor. In 8 studies there was no evidence of higher poverty rates among female-headed households.

While the results of this analysis are suggestive, they are far from conclusive. The authors do not provide enough information to determine how much overlap there is between the different studies. Also, different welfare indicators are used for different countries, further confounding comparisons. Finally, as with the evidence gathered for this review, there is little rigorous statistical testing of findings.

Quisumbing et al. (1995) analyze eleven data sets from developing countries with the objective of determining if there is a higher incidence of poverty among female-headed households. Using both per capita and adult equivalent indicators and a variety of poverty measures they demonstrate that there is little evidence to suggest a statistically significant difference in the level of poverty in male- and female-headed households. They do find that female-headed households are consistently worse off than male-headed households over a range of poverty measures in Ghana (both rural and urban) and rural Bangladesh. They do not, however, provide insights into the process of female-headed household formation in these two countries.

Haddad et al. (1996) reviewed approximately 10 studies of headship in developing countries and found “uneven and unpredictable” evidence that female-headed households have a higher incidence of

poverty than male-headed households. They conclude that both household characteristics and the process of household formation are important determinants of the incidence of poverty among female-headed households.

The evidence on the incidence of poverty among female-headed households in these three studies is inconclusive. While Buvinic and Gupta conclude that female-headed households are worse off than their male counterparts, how they arrived at this conclusion is unclear. Both Quisumbing et al. (1995) and Haddad et al. (1996) find the evidence mixed.

#### B. Review of Poverty Assessments

Latin America and the Caribbean. Buvinic's (1991) review of studies in LAC suggests that female-headed households are more likely to be poor than are male-headed households. In 19 of 22 studies female-headed households appear to have a higher incidence of poverty than male headed households. Menjivar and Trejos's (1992) analysis reveals that in only 2 of 6 Central American countries female-headed households have a higher incidence of poverty.

The Poverty Assessments are generally consistent with these earlier studies (Table 4). The percentage of households with a female-head in this region ranges from 10 percent to 42 percent. In rural Bolivia, urban and rural Brazil, Costa Rica, rural Dominican Republic, rural Honduras, Jamaica, Paraguay, and Trinidad and Tobago, the evidence suggests that the incidence of poverty is higher among female than male-headed households. For Brazil and Honduras, these findings are statistically significant. In Ecuador, Guatemala, Guyana and Nicaragua there is no difference between female-and male-headed households.

In El Salvador, Menjivar and Trejos (1992) find the incidence of poverty to be higher among female-headed households. The El Salvador Poverty Assessment indicates that female-headed households are over-represented among the urban poor but not the rural poor. The Bolivia Poverty Assessment finds that in rural (but not urban) areas female-headed households have a significantly higher incidence of poverty. There are many reasons to expect the evidence to be different for rural and urban areas, including differences in household formation, opportunities and constraints. Separating female-

headed households into urban and rural groups provides additional insights into the nexus of female headship and poverty.

In Colombia, single parent households have a significantly higher incidence of poverty than two parent households, and 84 percent of single parent households have a female head. In the Dominican Republic, Peru, and Chile, the proportion of female-headed households in poverty appears to be decreasing over time (Gammage, 1998).

Using panel data to test whether sex is correlated with vulnerability is complicated and requires considerable care in implementation. In Peru, Glewwe and Hall (1995) test two hypotheses using panel data with observations before and after a macroeconomic shock that took place between 1985 and 1990. The first hypothesis is that female-headed households are more vulnerable to poverty than their male counterparts. The second hypothesis is that households with a higher number of children are more vulnerable to poverty. They test their hypothesis by calculating the percentage change in living standards for each household (a change in the dependent variable) and then regressing this on the characteristic of interest (e.g. female headship and number of children) plus a constant term. They find that while female-headed households are more likely to be poor, they are not more vulnerable than male-headed households. They find a similar result holds when households are defined as majority male versus majority female. However, with children a different story emerges: although the proportion of children is not correlated with poverty, it is strongly correlated with vulnerability. The authors repeat the analysis of vulnerability of female-headed households by adding a vector of variables to control for age, education, and other individual and household characteristics. Of course female headship may be endogenous, so the authors' results should only be interpreted as suggestive. They find that, in 1985, female-headed households were neither worse off nor better off than otherwise identical male-headed households in the same year. In 1990, they appear to be better off than otherwise identical households. After checking the robustness of this result against alternative specifications, including a variable for the proportion of household members that are female, the authors conclude that female-headed households appear to be less vulnerable than

male-headed households in Peru in the late 1980s. This finding is consistent with the assertion in the literature that poverty is more likely to be chronic for women than for men.

Sub-Saharan Africa. Depending on the country, female headed households in SSA make up anywhere from 8 to 45 percent of all households. Ye (1998) analyzed nationally representative household surveys for 19 countries in SSA using two thirds of mean per capita consumption expenditure as a poverty line. Female-headed households have a significantly higher incidence of poverty than male headed households in 7 out of 19 countries. Surprisingly, the reverse (where the incidence of poverty is higher among male than female-headed households) is true in 10 out of 19 countries. After taking into account potential economies of scale in household consumption the incidence of poverty among female-headed households increases slightly. This is expected because, on average, female-headed households are smaller than male headed households.

The Poverty Assessments suggest that in 10 out of 21 countries poverty is higher among female- than male-headed households (Table 4). These include Benin, Djibouti, Ethiopia, Gabon, Madagascar, Malawi, rural Niger, Seychelles, Togo, rural and urban Zambia, and Zimbabwe. The reverse occurs in Cape Verde, Ghana, Guinea, Nigeria, and Tanzania. There do not appear to be any differences in Eritrea, Mauritania, urban Niger, and Côte d'Ivoire.

Why are Ye's (1998) and the Poverty Assessment findings different for Côte d'Ivoire, Ethiopia and Mauritania? One explanation might be in the poverty lines used in the different studies. Ye (1998) uses two-thirds of mean per capita consumption expenditure for all countries. The Côte d'Ivoire Poverty Assessment uses an absolute poverty line and the Ethiopia and Mauritania Assessments use the bottom fifth of the consumption expenditure distribution as the cut-off. Again, this highlights the importance of using an absolute poverty line in order to draw meaningful cross-national comparisons.

In Guinea-Bissau, the Poverty Assessment separated female-headed households into de jure and de facto categories. As would be expected, de jure female-headed households had a slightly higher incidence of poverty than male-headed households and de facto female-headed households had a lower incidence of poverty than both de jure female-and male-headed households. Similarly, in Lesotho de jure



female-headed households appear to have a much higher incidence of poverty than either de facto female- or male-headed households. In Malawi female-headed households receiving remittances have a higher incidence of poverty than do those that do not receive them.

A large number of studies on headship and poverty have been conducted in Ghana. Haddad's (1991) analysis of the Ghana Living Standards Survey found that female-headed households have a higher incidence of being in the lowest food-share quintile than male-headed households. The Poverty Assessment "Ghana: Poverty Past, Present and Future" as well as a study by Brown and Kerr (1997), found a higher incidence of poverty among male than female-headed households. Bhushan and Chao (1996) argue that the Poverty Assessment underestimated the numbers of female-headed households in poverty because it did not take into account economies of scale in household consumption. Canagarajah and Newman (1999) add that the incidence of poverty among female-headed households in rural areas of Ghana is declining faster than for male-headed households.

Middle East and North Africa. There is no evidence from the poverty assessments that female-headed households have a higher incidence of poverty than male-headed households in MENA. Only two of the Poverty Assessments provide information about the percentage of households with a female-head. In Jordan 8 percent and in Yemen 4 percent of households have a female-head. In Jordan and Morocco, female-headed households appear to have a lower incidence of poverty than male-headed households. In Egypt, Datt et al. (1997) found that while female-headed households have a higher incidence of poverty, the results are not statistically significant.

East Asia. In Fiji, Mongolia, and urban Viet Nam there appears to be a higher incidence of poverty among female-headed households (Table 4). In Mongolia the evidence is particularly striking in urban areas, where individuals in female-headed households make up only 20 percent of the total population, but account for almost 60 percent of the poor. In Lao PDR, the Philippines and in rural Viet Nam the incidence of poverty is higher among male-headed households. In Cambodia, the same pattern holds (Prescott and Pradhan, 1997). In Indonesia, Mason and Baptist (1996) find there is no difference.

South Asia. In the South Asia region, only 2 of the 5 Poverty Assessments address female-headed households. India, Nepal and Pakistan do not address female headship. Quisumbing et al. (1995) finds a higher incidence of poverty among female-headed households in Bangladesh. The Poverty Assessment, “Bangladesh: From Counting the Poor to Making the Poor Count” finds that after separating households into rural and urban groups this difference disappears in urban areas and is compounded in rural areas. In Sri Lanka, where 20 percent of all households are female-headed, the depth of poverty appears to have decreased more rapidly among female than male-headed households from 1985 to 1991.

Europe and Central Asia. The Poverty Assessments for this region generally include a thorough discussion of gender issues. In Estonia, Hungary, Kazakhstan and rural Kyrgyz Republic female headed households make up from 20 percent to 40 percent of households. In many of these countries a positive relationship between female-headship and poverty only begins to emerge after examining household composition. In Estonia, Hungary, urban Kyrgyz Republic, Poland, and Russia female-headed households as a group have a slightly higher incidence of poverty than male-headed households do. In Kazakhstan, rural Kyrgyz Republic, Romania, and the Ukraine female-headed households are not more likely to be in poverty.

In Belarus, Hungary, and the Ukraine, there is a higher incidence of poverty among single females than single males. In Albania, the incidence of poverty appears to increase among larger female-headed households. In Estonia, as household size increases female-headed households are more likely to be poor than male-headed households. In Belarus and Hungary the odds of being in poverty increase with more children, especially for single mothers and widows. In Poland, poverty is higher among single mother than single father households. In Russia, single-parent households with children – ninety percent of which are headed by females – are more likely to be poor than households with both parents and children. In Estonia, female-headed households with disabled or unemployed individuals have a higher poverty rate than similar male-headed households.

The evidence concerning pensioners and poverty in ECA is mixed. In Belarus, the majority of single female pensioners are not in poverty. In Russia, female pensioners living alone have a much

higher incidence of poverty than male pensioners. In Hungary, single female pensioners are farther below the poverty line than male pensioners. In Poland, female-heads of household aged 70 or above are over-represented in poverty. While pensioners in Romania are not over-represented among the poor, elderly rural women are the poorest of the pensioner group.

## VI. CONCLUSIONS ON HEADSHIP

The aggregate evidence on headship and poverty is mixed. When indicators and poverty lines are drawn in a consistent manner across different data sets, such as Quisumbing et al. (1995) and Ye (1998), the evidence suggests that female-headed households are worse off than male-headed households in only a limited number of countries.

The review of Poverty Assessments suggests that in 43 percent (25 of 58) of the countries reviewed the incidence of poverty is higher among female than male-headed households. In another 17 percent (10 of 58) of countries this disadvantage only applies for certain categories of female headed households, such as de jure households. In twenty-six percent (15 of 58) of countries there does not appear to be a difference in the incidence of female-and male-headed households in poverty. Interestingly, in 14 percent (8 of 58) of countries there appear to be less female-than male-headed households in poverty. Grouping the evidence by low and middle income economies (Figure 1) further reveals that while female headed households appear to be worse off in a higher percentage of countries, this pattern does not appear to be correlated with income.

While there is evidence that in some countries female-headed households have a higher incidence of poverty than male-headed households, it is impossible to generalize. What does emerge from the Poverty Assessments is the importance of examining different types of female-headed households separately – de jure and de facto, rural and urban, and with and without children. We conclude that, because they are not a homogenous group, female-headed households should not be targeted as a group by public policy. A more nuanced analysis, which can identify important sub-groups of this population such as de jure female-headed households, is recommended.

There is mounting concern that the number of female-headed households in developing countries is increasing. Bruce et al. (1995) compare data on de jure headed households in twenty-four countries at two points in time and find that in 17 of the countries the proportion of female-headed households in the population has increased. The process of female-headed household formation, which appears to differ by region, deserves special attention. In SSA teenage pregnancy and male migration in search of employment appears to be the primary causes. In LAC teenage pregnancies, informal unions and female migration are identified. In SA, widowhood, divorce and desertion appear to be the origin (Baden and Milward 1995; Buvinic and Gupta 1997).

## VII. EPILOGUE

That this review does not produce conclusive evidence of the feminization of poverty may not be surprising to many readers. After all, for consistency's sake the review was restricted to a narrow set of studies that define poverty in terms of consumption expenditure. As noted at the beginning of this paper, consumption expenditure measures the command an individual has over goods and services that are inputs into their welfare. There may be two problems with this definition of welfare for gender and poverty analysis. First, poverty is an inherently subjective concept that may be viewed quite differently by men and women. Second, there are a number of unique characteristics to women's welfare such as access to social capital, reproductive rights, violence and cultural factors that simply can not be taken into account by the consumption expenditure metric.

Gender differences in socially prescribed roles, needs, and opportunities may well lead to very different notions of welfare and in particular of what it means to be poor. There is growing support in the literature of fundamental differences in gender perceptions of poverty. A Participatory Poverty Assessment in Zambia found that when women described poor people, they emphasized the importance of basic needs, income and safety nets. In response to the same question, men focused on assets, basic needs and money (World Bank 1994o). In Ghana a Participatory Poverty Assessment revealed similar findings. In the Northern communities women ranked food security as most important and men identified material assets as criteria for well being (Norton et al. 1995). The pattern emerges again in a Participatory

Poverty Assessment for Tanzania – women rank food shortage, water and health as the three most important problems, while men rank transportation, farming and drunkenness. In terms of wealth, in Tanzania women and men differed in their definitions of ‘very rich.’ Women said someone with 80 cows would be ‘very rich,’ while men thought a person should have 3000 cows before being classified as ‘very rich’ (Narayan, 1997).

There are also important dimensions to poverty that are unique to women, such as access social capital, reproductive rights, violence and cultural factors. Kabeer (1994) discusses the different opportunities and constraints faced by women. In particular men, through social capital networks, often have access to a much wider range of resources. Mayoux (1995) suggests that for many women equal access to resources and equal treatment in both legislation and the provision of services are preconditions for their participation in projects. It is well documented that in many regions of the world women have a difficult time gaining access to public forums, even when ‘community’ participation is actively encouraged (Graham, 1996; Guijt, 1998). Generally when authors write about women’s exclusion from participatory dialogues, poor women are not a separate category. Graham (1996) reviewed several demand-based programs and concludes that when women’s or community organizations are formed, “the poorest women, for reasons ranging from fear to cultural barriers to the opportunity cost of their time, are often not the most likely to join.” The classification of ‘poor’ in this study is unclear, but the implication is that lower income equates to harder access to participatory forums.

While the quantitative evidence on the feminization of poverty may not be clear, there is little doubt that women are at a systematic disadvantage over a wide range of welfare indicators. This, coupled with evidence that suggests there are larger social benefits to investing in female health and education, provides some justification for targeting public sector investment in these areas towards women.

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**Table 1. Health Care and Poverty**

Country	Economy <sup>b</sup>	Poverty Line	Health Dimension	Effect <sup>a</sup>
Bolivia	Middle	Absolute	Access to health care during pregnancy	↑
Costa Rica	Middle	Absolute	Access to and quality of health care during pregnancy	↑
Costa Rica	Middle	Absolute	Fertility rates	↑
Djibouti	Middle	Absolute	Access to health care during pregnancy	↑
Egypt	Middle	Absolute	Child immunizations	↑
Guyana	Low	Absolute	Fertility rates	↑
Haiti	Low	Not specified	Maternal mortality	↑
Jamaica	Middle	Absolute	Maternal mortality	↑
Mongolia	Low	Relative	Access to and quality of health care during pregnancy	↑
Mongolia	Low	Absolute	Fertility rates	↑
Morocco	Middle	Relative	Access to and quality of health care during pregnancy	↑
Morocco	Middle	Relative	Children receiving post-natal health consultation	↓
Morocco	Middle	Relative	Child immunizations	↑
Nicaragua	Low	Absolute	Access to health care during pregnancy	↑
Pakistan	Low	Relative	Fertility rates	↑
Pakistan	Low	Relative	Quality of health care for daughters vs. sons	↑
Paraguay	Middle	Absolute	Low birth weights	↑
Paraguay	Middle	Absolute	Access to health care during pregnancy	↑
Paraguay (capital city)	Middle	Absolute	Fertility rates	0
Paraguay (outside capital)	Middle	Absolute	Fertility rates	↑
Viet Nam	Low	Relative	Fertility rates	↑
Viet Nam	Low	Relative	Low birthweights	↑

a↑ indicates that poor females are worse off than non-poor females sex specific health issues. For non-sex specific issues, it indicates that poor females are worse off than poor males, and that this gender gap is larger than it is above the poverty line. 0 indicates that there is no difference between either poor and non-poor females, or between poor females and poor males. ↓ indicates that poor females are better off than poor males and that this gender gap is larger than it is above the poverty line.

B low income economies are those with GNP per capita of \$765 or less in 1995. Middle income \$766-\$9,385.

**Table 2. Education and Poverty**

Country	Economy	Poverty Line	Education Dimension	Effect <sup>a</sup>
Algeria	Middle	Absolute	Primary school enrollment	--
Algeria	Middle	Absolute	Secondary school enrollment	↑
Bolivia	Middle	Relative	School attendance	↑
Côte d'Ivoire	Low	Relative	Primary school enrollment	↑
Djibouti	Middle	Relative	Literacy	--
Djibouti	Middle	Relative	Average years of education	--
Egypt	Middle	Absolute	Average years of schooling	--
India	Low	Relative	Primary school enrollment	↑
Kenya	Low	Relative	Primary school enrollment	0
Kenya	Low	Relative	Secondary school enrollment	--
Lao PDR	Low	Relative	Literacy	↑
Lao PDR	Low	Relative	Primary and lower secondary school enrollment	↑
Lesotho	Low	Absolute	School enrollment	-- (in favor of females)
Madagascar	Low	Absolute	Primary school enrollment	0
Malawi	Low	Relative	Primary school enrollment	↑
Malawi	Low	Relative	Secondary school enrollment	--
Mauritania Rural	Low	Relative	Primary school enrollment	↑
Mauritania Urban	Low	Relative	Primary school enrollment	-- (in favor of females)
Mongolia	Low	Relative	Amount of education	-- (in favor of females)
Morocco	Middle	Relative	Primary school enrollment	↕
Nicaragua Rural	Low	Absolute	Mean years of schooling	↕
Nicaragua Urban	Low	Absolute	Illiteracy	↑
Niger	Low	Relative	School enrollment	--
Pakistan	Low	Absolute	Primary school enrollment	↑
Pakistan	Low	Relative	Literacy	0
Rwanda	Low	Relative	School enrollment	0
Sri Lanka	Low	Relative	School enrollment	0
Tanzania	Low	Relative	Secondary school enrollment	0
Yemen	Low	Absolute	Literacy rates	--
Zambia	Low	Absolute	No education	↑

<sup>a</sup> ↑ indicates that poor females are worse off than poor males, and that this gender gap is larger than it is above the poverty line. 0 indicates that there is no difference between females and males below the poverty line. -- indicates that the difference between poor males and poor females is no more extreme than between non-poor males and non-poor females. ↓ indicates that poor females are better off than poor males and that this gender gap is larger below the poverty line than above it.

B low income economies are those with GNP per capita of \$765 or less in 1995. Middle income \$766-\$9,385.

**Table 3. Labor Force Participation and Poor Women**

Country	Economy	Poverty Line	Labor Force Dimension	Effect <sup>a</sup>
Argentina	Middle	Relative	Participation rate – among poor	↓
Bolivia	Middle	Relative	Participation rate – among women	↑
Colombia	Middle	Relative	Participation rate – among women and among poor	↑
Costa Rica	Middle	Absolute	Participation rate - among women	↑
Côte d'Ivoire	Low	Absolute	Participation rate - among women	↓
Egypt	Middle	Absolute	Participation rate- among women	0
El Salvador	Middle	Absolute	Participation rate - among women	↑
Guatemala	Middle	Absolute	Participation rate – among women	↑
Morocco	Middle	Absolute	Unemployment - among women and among poor	↑
Morocco	Middle	Relative	Earnings - among women	0
Nicaragua	Low	Absolute	Participation rate - among women	↑
Nicaragua	Low	Absolute	Participation rate - among poor	0
Paraguay	Middle	Absolute	Unemployment rate - among women	0
Trinidad and Tobago	Middle	Relative	Mean percent who have never worked – between women	0
Yemen	Low	Absolute	Participation rate - among women	0

a↑ indicates that poor females are worse off than poor males, and that this gender gap is larger than it is above the poverty line. Also indicates that poor females are worse off than non-poor females. 0 indicates that there is no difference between females and males below the poverty line. -- indicates that the difference between poor males and poor females is no more extreme than between non-poor males and non-poor females. ↓ indicates that poor females are better off than poor males and that this gender gap is larger below the poverty line than it is above.

B low income economies are those with GNP per capita of \$765 or less in 1995. Middle income \$766-\$9,385.



**Table 4. Female-Headed Households and Poverty**

Country	Year	Economy	Percent female headed households	Poverty line	Are female-headed households over represented among the poor?
Albania	Rural – 1994 Urban - 1996	Low	n/a	Absolute and relative	Yes
Algeria	1995	Middle	n/a	Absolute	No
Argentina	1993	Middle	15%	n/a	n/a
Bangladesh	1995-96	Low	n/a	Absolute	Rural – Yes Urban – No
Belarus	1995	Middle	n/a	Absolute	Mixed
Benin	1979	Low	20%	Absolute	Yes
Bolivia	1992	Middle	14.4%	Absolute	Rural – yes Urban – no*
Brazil	1990	Middle	20.5%	Absolute	Yes*
Cape Verde	1988-89	Middle	41%	Relative	Opposite
Colombia	1992	Middle	18%	Absolute	Mixed
Costa Rica	1992	Middle	n/a	Absolute	Yes
Côte d'Ivoire	1995	Low	15%	Absolute	No
Djibouti	1996	Middle	19.7%	Absolute	Yes
Dominican Republic	1992	Middle	22%	Absolute	Yes
Ecuador	1994	Middle	Rural – 10% Urban – 16-17%	Absolute	No
El Salvador	1992	Middle	n/a	Absolute	Rural – no Urban – yes
Eritrea	1993-94	Low	45%	Absolute	No
Estonia	1995	Middle	35%	Absolute	Yes
Ethiopia	1994-96	Low	17%	Relative	Yes
Fiji	1993	Middle	n/a	Unclear	Yes
Gabon	1993	Middle	27%	Relative	Yes
Ghana	1992	Low	31.4%	Relative	No
Guatemala	1989	Middle	16.0%	Absolute	No
Guinea	1994	Low	n/a	Absolute	Opposite
Guinea-Bissau	1991	Low	n/a	Relative	No
Guyana	1993	Low	28.2%	Relative	No
Honduras	1992	Low	21%	Absolute	Yes
Hungary	1992-94	Middle	23.0%	Relative	Yes
Jamaica	1991	Middle	42%	Absolute	Yes*
Jordan	1992	Middle	8.3%	Absolute	Opposite
Kazakhstan	1996	Middle	40%	Relative	Opposite

\*Significant relationship; determined with either difference of means test or regression model. B low income economies are those with GNP per capita of \$765 or less in 1995. Middle income \$766-\$9,385.

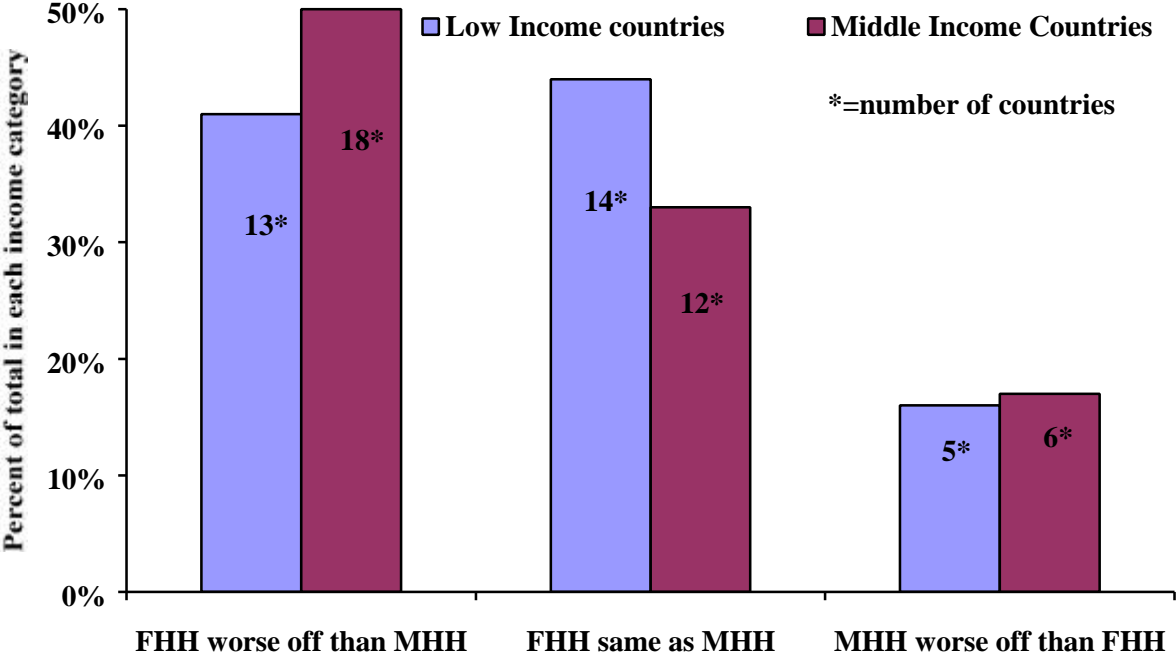
**Table 4. Female-Headed Households and Poverty (Continued)**

Country	Year	Economy	Percent female headed households	Poverty line	Are female-headed households over represented among the poor?
Kenya	1992	Low	Rural – about 1/3 <sup>rd</sup>	n/a	n/a
Kyrgyz Republic	1993	Middle	Urban – 19%	Absolute	Rural – opposite Urban – Yes
Lao PDR	1992-93	Low	5%	Absolute	Opposite
Lesotho	1993	Low	24.81%	Relative	<i>De facto</i> – opposite <i>De jure</i> – yes*
Madagascar	1993-94	Low	19.0%	Absolute	Yes
Malawi	1992	Low	25%	Relative	Yes
Mauritania	1989-90	Low	28.7%	Relative	No
Mongolia	1995	Low	18.4%	Absolute	Yes
Morocco	1990-91	Middle	n/a	Absolute	Opposite
Nicaragua	1993	Low	28.5%	Absolute	No
Niger	1992-93	Low	8.1%	Relative	Rural – yes* Urban – no*
Nigeria	1992	Low	10%	Relative	Opposite
Paraguay	1990	Middle	15.8%	Absolute	Yes
Philippines	1991	Middle	n/a	Absolute	Opposite*
Poland	1993	Middle	n/a	Absolute	Yes
Romania	1994	Middle	n/a	Absolute	Yes
Russia	1992-93	Middle	n/a	Absolute	Yes*
Rwanda	1996	Low	34%	n/a	n/a
Seychelles	1984	Middle	n/a	Absolute	Yes
Sri Lanka	1990-91	Low	20%	Absolute	No
Tanzania	1993	Low	12.2%	Relative	Opposite
Tanzania (Zanzibar)	1993	Low	17.9%	Unclear	Urban – opposite Rural – yes
Thailand	1992	Middle	n/a	Unclear	No
Togo	1987-89	Low	n/a	Absolute	Yes
Trinidad and Tobago	1992	Middle	27%	Relative	Yes
Tunisia	1990	Middle	n/a	Absolute	No
Ukraine	1995	Middle	n/a	Absolute	Mixed
Viet Nam	1992-93	Low	23%	Absolute	No
Yemen	1992	Low	4%	Absolute	No
Zambia	1991	Low	20%	Absolute	Yes
Zimbabwe	1990-91	Low	33%	Absolute	Yes

\*Significant relationship; determined with either difference of means test or regression model.

B low income economies are those with GNP per capita of \$765 or less in 1995. Middle income \$766-\$9,385.

Figure 1. Female Headed Household and Poverty by Income Group



**Appendix Table 1: Health Care and Poor Women in Latin America and the Caribbean (detailed)**

<i>Country</i>	<i>Year</i>	<i>Poverty Line<sup>a</sup></i>	<i>Health Indicators</i>
Bolivia	1992	Income; consumption based – basic food and non-food basket	<ul style="list-style-type: none"> <li>• Women in extremely poor families tend to have twice as many children as the non-poor.</li> <li>• More than 40% of the poor have babies delivered at home, while more non-poor women deliver in private clinics (World Bank 1996b).</li> </ul>
Costa Rica	1992	Income; consumption based – basic needs; per capita	<ul style="list-style-type: none"> <li>• Among the structurally poor, pregnant women have low attendance at medical control centers. When they attend they are more likely to see only a nurse and not a medical doctor when compared to non-poor women.</li> <li>• Structurally poor women have higher fertility rates (World Bank 1997b).</li> </ul>
Guyana	1993	Consumption based – basic food and non-food basket; per capita	Fertility rates highest for the poorest (World Bank 1994d).
Haiti	1995	Not specified.	Maternal mortality is high among the poor, although no comparison numbers are presented (World Bank 1998c).
Jamaica	1991	Consumption based; per capita	The implication of this study is that poor women in rural areas disproportionately risk maternal death, although this is surmised rather than gathered through quantitative data (World Bank 1994g).
Nicaragua	1993	Expenditure; consumption based - minimum caloric requirements; per capita	Poor women get inadequate access to prenatal and birth care. 23% of extremely poor women in rural areas give birth without the assistance of any health care personnel (World Bank 1995n).
Paraguay	1990	Consumption based - basic goods and services; per capita	<ul style="list-style-type: none"> <li>• While there are no fertility differences among the very poor, poor and non-poor in the capital, differences persist outside.</li> <li>• Low birth weight deficiencies increase with poverty level, but more so in capital city than in the rest of the country.</li> <li>• In the capital, very poor women are more likely to give birth at home than all women (32% vs. 14%). In surrounding regions, these numbers are 75% and 54%, respectively (World Bank 1994j).</li> </ul>

<sup>a</sup>Information concerning poverty lines is presented in the following order: income or expenditure based; consumption level if applicable; per capita or per adult equivalent metric. In some cases not all the information is available.

**Appendix Table 2: Health Care and Poor Women in Sub-Saharan Africa (detailed)**

<i>Country</i>	<i>Year</i>	<i>Poverty Line</i>	<i>Health Indicators</i>
Djibouti	1996	Consumption based – basket of food and non-food necessities; per adult equivalent	The non-poor are more likely to use a hospital, while the poor and very poor are more likely to give birth at home with a traditional birth attendant (World Bank 1997c).

**Appendix Table 3: Health Care and Poor Women in the Middle East and North Africa (detailed)**

<i>Country</i>	<i>Year</i>	<i>Poverty Line</i>	<i>Health Indicators</i>
Egypt	1997	Consumption based – food and non-food basket; per capita	There is a large poor-nonpoor gap in child immunizations. This differential is slightly higher for girls than boys aged 1-5 (Datt, Jolliffe, and Sharma 1997).
Morocco	1990-91	Consumption quintile	<ul style="list-style-type: none"><li>• As expenditure group rises, more women in both urban and rural areas get pre-natal visits.</li><li>• As expenditure group rises, fewer at-home births occur in both urban and rural areas.</li><li>• Lowest expenditure groups are more likely to get traditional midwife than midwife or doctor at birth in both urban and rural areas.</li><li>• In the lowest expenditure group, more female children received a post-natal health consultation under the age of 2 than boys. This gender gap wavers across quintiles (sometimes in favor of boys and sometimes in favor of girls), and is almost gone by the top quintile.</li><li>• Boys in the lowest quintile have a slightly higher vaccination rate for measles than girls. This gender gap disappears in higher quintiles (World Bank 1994h).</li></ul>

**Appendix Table 4: Health Care and Poor Women in East Asia (detailed)**

<i>Country</i>	<i>Year</i>	<i>Poverty Line</i>	<i>Health Indicators</i>
Mongolia	1995	Health care during pregnancy: consumption quintile; per capita  Fertility rates: consumption based – basic food and non-food basket; per capita	<ul style="list-style-type: none"><li>• The percentage of women having modern assistance at births is lower in the lowest quintile than in the highest quintile for both urban and rural areas. Similarly, the number of women receiving no help is highest in the lowest quintile for both urban and rural areas.</li><li>• Very poor and poor women have higher fertility rates than the best-off women. However this differential is not apparent when comparing poor women with women who are only marginally above the poverty line (World Bank 1996i).</li></ul>
Viet Nam	1992-93	Consumption quintile; per capita	<ul style="list-style-type: none"><li>• In the lowest quintile, women average 4.9 children compared to 1.8 children in the upper quintile.</li><li>• Babies with low birthweights (less than 2.5Kg) are approximately 7% among the lowest quintile and less than 4% in the highest quintile (World Bank 1995s).</li></ul>

**Appendix Table 5: Health Care and Poor Women in South Asia (detailed)**

<i>Country</i>	<i>Year</i>	<i>Poverty Line</i>	<i>Health Indicators</i>
Pakistan	1993-94	Consumption quintile; per capita	While fertility is high for both poor and non-poor women, married women aged 35 and older in the lowest quintile have had an average of 2 more children than women in the highest quintile (World Bank 1995k).
Pakistan	1986	Income less than 500 rupees annually; per capita	The probability of a low-income household taking a son to a doctor (vs. self-care or lower quality providers) is .054 higher than the probability of taking a daughter to a doctor. This compares to a .02 difference in the probability of boys and girls seeing a doctor in the highest income group. Similarly poor girls are more likely to receive self-care (probability is .015 higher) than poor boys. This difference declines to .003 in the highest income group (Alderman and Gertler 1997).



**Appendix Table 6: Nutrition and Poor Women (detailed)**

<i>Country</i>	<i>Year</i>	<i>Poverty Line</i>	<i>Nutrition Indicators</i>
India	n/a	Income	Gender bias in food allocation in favor of sons is more apparent in upper income groups than lower income groups (Warrier 1992 in Srinivasan 1999).
Viet Nam	1992-93	Expenditure quintile	The gender gap in BMI is largest in the lowest quintile (Desai 1995).

**Appendix Table 7: Education and Poor Women in Latin America and the Caribbean (detailed)**

<i>Country</i>	<i>Year</i>	<i>Poverty Line</i>	<i>Education Indicators</i>
Bolivia	1992	Income; lowest consumption quintile	<ul style="list-style-type: none"><li>• In rural areas, girls aged 6-11 receive less education than their male peers. This gender gap is not evidenced in the higher quintiles.</li><li>• In urban areas, poor indigenous females are the most disadvantaged group in terms of school attendance (World Bank 1996b).</li></ul>
Nicaragua	1993	Expenditure; consumption based – minimum caloric requirements; per capita	While the report does not conduct significance tests, it does not appear that there is a stark difference between illiteracy and mean years of schooling for men and women aged 10 years and up. In urban areas, female poor have slightly higher illiteracy rates than male poor. But for rural areas, females have a slightly higher mean years of schooling, which is consistent with evidence for non-poor males and females (World Bank 1995n).

**Appendix Table 8: Education and Poor Women in Sub-Saharan Africa (detailed)**

<i>Country</i>	<i>Year</i>	<i>Poverty Line</i>	<i>Education Indicators</i>
Côte d'Ivoire	1995	Consumption quintile; per capita	The gender gap for net primary school enrollment is larger in the lowest quintile (38% for boys, 30% for girls) than nationwide (51% total, 48% for girls) (World Bank 1997e).
Djibouti	1996	Consumption quintile; per adult equivalent	While there is a large gender gap across quintiles for both literacy and average years of education, it does not appear to be any larger in the lowest quintiles (World Bank 1997c).
Kenya	1992	Consumption decile; per capita	There is no evidence of statistically significant differences. In the bottom decile, primary school net enrollment for boys is 62%, and 63% for girls. The secondary school net enrollment is 3.3 for boys and 0.7 for girls. This follows a nationwide trend for fewer girls to go on secondary school (World Bank 1995g).
Lesotho	1993	Consumption based - less than half the mean consumption level; per adult equivalent.	Across all income groups, boys have lower school enrollment than girls. There does not appear to be a difference for poor and ultra-poor households (World Bank 1995j).
Madagascar	1993-94	Consumption based -- basket of food and non-food necessities.	Boys and girls primary enrollment rates are about equal below the poverty line (World Bank 1996g).
Malawi	1992	Consumption quintile	In 1990/91, the gross enrollment rates in standards I-IV (as percentage of 6-9 year old population) were lower for girls. It appears that the gender gap lessens as the consumption quintile increases. The gross enrollment rates for standards V-VII (as percentage of 10-13 year old population), shows girls enrolled less than boys, but it does not appear that the gender gap is heightened by consumption quintile (World Bank 1996h).
Mauritania	1989-90	Consumption quintile; per capita	In urban areas, net enrollment rates in primary school appear to favor girls. In rural areas, boys have higher enrollment rates than girls in both the lowest two and the highest quintile, but not in the middle quintiles (World Bank 1994i).
Niger	1992-93	Consumption decile	In both rural and urban areas, females have lower enrollment rates (report doesn't state level of enrollment), but this is not amplified in the lowest decile (World Bank 1996j).
Rwanda	1992	Expenditure; 40 <sup>th</sup> percentile of households	Little difference in enrollment rates between girls and boys (World Bank 1998f).

**Appendix Table 8 Continued**

<i>Country</i>	<i>Year</i>	<i>Poverty Line</i>	<i>Education Indicators</i>
Tanzania	1993	Consumption quintile; per capita	Both girls and boys had 2% enrollment rate in secondary school (World Bank 1996n).
Togo	1987-89	Unclear	Girls from poor rural families are often sent to work in urban households. This work is often beyond their physical capabilities and they are paid little, if at all (World Bank 1996p).
Zambia	1991	Consumption based -- basket of food and non-food necessities; per adult equivalent.	For the population aged 7 and above, in rural areas in the core poverty group, 36.2% of males had no education, compared to 49.8% of the females. This is a higher gap than in the non-poor population. A similar gender gap is seen in urban areas (20.8% of males and 29.5% of females in the core poor group had no education) (World Bank 1994o).

**Appendix Table 9 : Education and Poor Women in the Middle East and North Africa (detailed)**

<i>Country</i>	<i>Year</i>	<i>Poverty Line</i>	<i>Education Indicators</i>
Algeria	1995	Consumption based – food and non-food basket; per capita	<ul style="list-style-type: none"><li>• At the primary school level, there is not a large gender gap. However at the secondary school level (under both a food and the general poverty line), the gender gap is larger in favor of boys among the poor population.</li><li>• Primary school enrollments below a food poverty line in urban areas: poor girls 97% vs. 95% (non-poor girls). Poor boys 93% vs. 95% (non-poor boys). Below general poverty line: poor girls 95% vs. 96%. Poor boys: 96% vs. 95%.</li><li>• In rural areas, similar trends are seen.</li><li>• Secondary school enrollments below food poverty line in urban areas: poor girls 76% vs. 83%, poor boys 81% vs. 81%. Below general poverty line: poor girls 76% vs. 84%, poor boys 78% vs. 81%. In rural areas below food poverty line: poor girls 50% vs. 60%, boys 69% vs. 70%. Below general poverty line: poor girls 51% vs. 61%. Poor boys 66% vs. 71% (World Bank 1999).</li></ul>
Egypt	1997	Consumption based – basic food and non-food basket; per capita	There is a gender gap for both poor and nonpoor females for average years of schooling for individuals 15 years of age and older. It does not appear to be larger for nonpoor females (Datt, Jolliffe, and Sharma 1997).
Morocco	1990-91	Consumption decile	The gender gap in the percentage of children aged 6-12 enrolled in primary school is much largest for the lowest decile than for the highest decile. This is biased in favor of boys. The difference is particularly stark in rural areas, where 59.83% of boys in the lowest decile are enrolled, compared to only 9.93% of girls (World Bank 1994h).
Yemen	1992	Expenditure; consumption based – basket of food and non-food necessities.	While poor and nonpoor women have low literacy rates, there is not much difference between literacy rates for poor and nonpoor women especially in the 6-18 age range (World Bank 1996m).

**Appendix Table 10: Education and Poor Women in East Asia (detailed)**

<i>Country</i>	<i>Year</i>	<i>Poverty Line</i>	<i>Education Indicators</i>
Lao PDR	1992-93	Income; lowest quintile; per capita	<ul style="list-style-type: none"><li>• The male-female disparity in literacy is 32% in the lowest quintile, compared to 11% in the top quintile.</li><li>• There is a gender gap in primary and lower secondary enrollment in the lowest quintile (51% of males, 37% of females are enrolled in primary school, 7% of males, 2% of females are enrolled in lower secondary school). This gender gap is slightly reversed in the upper quintile (World Bank 1995i).</li></ul>
Mongolia	1995	Consumption quintile; per capita	Boys in each quintile have less education than girls; the gender gap does not correlate with income (World Bank 1996i).

**Appendix Table 11: Education and Poor Women in South Asia (detailed)**

<i>Country</i>	<i>Year</i>	<i>Poverty Line</i>	<i>Education Indicators</i>
India	1993-94	Consumption quintile	<ul style="list-style-type: none"><li>• The authors suggest that “where poverty is deepest, female literacy is exceptionally low (11).” There is a marked gender gap in primary school enrollment rates for children aged 5-9 at the lowest quintile that lessens as consumption quintile increases. The enrollment rate for boys is 42.6%, compared to 31.6. In the highest quintile, boys’ enrollment rate is 69.9, compared to 65.2. This gender gap in the lowest quintiles is high in favor of boys in all states except Kerala and Mizoram (World Bank 1998e).</li><li>• This differs slightly from results in another study which suggest that the gender gap is only an issue in rural areas, and it remains large in all consumption quintiles, although is largest in the lowest quintile [Haque, 1998 #212 cited in (World Bank 1998e)]</li></ul>
Pakistan	1993-94	<ul style="list-style-type: none"><li>• Primary school enrollment: consumption based – basic-needs basket of goods and services; per capita</li><li>• Literacy: Consumption quintile; per capita</li></ul>	<ul style="list-style-type: none"><li>• The difference in primary school enrollment for poor and non-poor girls is larger than for poor and non-poor boys. This implies that poor girls “are the most educationally disadvantaged of all children (World Bank 1995k, ii).”</li><li>• Both men and women in poverty have low literacy rates compared to their counterparts in higher quintiles (World Bank 1995k).</li></ul>
Sri Lanka	1990-91	Consumption quintile; per capita	There are similar rates for boys and girls across quintiles (World Bank 1995p).

**Appendix Table 12: Labor Force Participation and Poor Women in Latin America and The Caribbean (detailed)**

<i>Country</i>	<i>Year</i>	<i>Poverty Line</i>	<i>Labor Force Indicators</i>
Argentina	1993	Income; consumption based quintile	The overall employment rate in the quintile is 22%, but it is 28% for women (World Bank 1995a).
Bolivia	1992	Income; consumption based quintile; per capita	Among females, participation rates are higher in the higher consumption quintiles (World Bank 1996b).
Columbia	1992	Consumption decile	<ul style="list-style-type: none"> <li>• For both men and women participation declines in the lower deciles. This trend is more pronounced for women.</li> <li>• Women in the first decile work four hours fewer per week than the average woman (World Bank 1994b).</li> </ul>
Costa Rica	1992	Income; consumption based – basic needs; per capita	Participation is significantly lower for poor women than for non-poor women (World Bank 1997b).
El Salvador	1992	Income; consumption based – two basic food baskets; per capita	<ul style="list-style-type: none"> <li>• Structural and descendent poor women in both urban and rural areas have lower labor force participation rates than their non poor counterparts. This same trend is not evident with men.</li> <li>• Unemployment rates for men and women increase with poverty, and it's difficult to determine whether there is a gender gap (World Bank 1994c).</li> </ul>
Guatemala	1989	Income; consumption based – basket of goods and services.	While men's participation is high in all income categories, women in poverty participate less than non-poor women (World Bank 1995f).
Nicaragua	1993	Expenditure; consumption based – minimum caloric requirements; per capita	<ul style="list-style-type: none"> <li>• Lower among the poor than among the non-poor.</li> <li>• Unemployment rates are high for poor women in urban areas, but this same trend holds for men (World Bank 1995n).</li> </ul>
Paraguay	1990	Consumption based – basic goods and services; per capita	No evidence that women's unemployment rate is different across poverty categories (World Bank 1994j).
Trinidad and Tobago	1992	Consumption quintile; per capita	No evidence that the 'mean percent who have never worked' among women differs in the lowest four quintiles; although more women in the highest quintile had worked than in all the other quintiles (World Bank 1995r).



**Appendix Table 13: Labor Force Participation and Poor Women in the Middle East and Africa (detailed)**

<i>Country</i>	<i>Year</i>	<i>Poverty Line</i>	<i>Labor Force Indicators</i>
Côte d'Ivoire	1995	Consumption based – food and non-food basket; per capita	The overall participation rate for all women is 63%, and for men it's 78%. But among poor women, participation rates approach those of men (World Bank 1997e).
Egypt	1997	Consumption based– basic food and non-food basket; per capita	There is not a large difference for labor force participation rates between poor and non-poor females (Datt, Jolliffe, and Sharma 1997).
Morocco	1990-91	<ul style="list-style-type: none"> <li>• Unemployment: consumption based – basic food and non-food basket.</li> <li>• Earnings: consumption decile</li> </ul>	<ul style="list-style-type: none"> <li>• Women in the poorest households experience the highest rates of unemployment in urban areas.</li> <li>• Earnings for women are low in all deciles; there is no noticeably larger gender gap in the lowest decile (World Bank 1994h).</li> </ul>
Yemen	1992	Expenditure; consumption based – basket of food and non-food necessities	Not much difference between poor and nonpoor females (World Bank 1996m).

**Appendix Table 14: Female-Headed Households and Poverty in Latin America and the Caribbean (detailed)**

<i>Country</i>	<i>Year</i>	<i>Poverty Line</i>	<i>Evidence</i>
Bolivia	1992	Income; consumption based – basic food and non-food basket	There is a stark difference between rural and urban areas. In rural areas, the authors found that individuals in female-headed households have a higher incidence of both poverty and extreme poverty (unclear whether statistically significant). While in urban households, individuals in female-headed households are significantly less likely to be in both poverty and extreme poverty. This finding is robust among all poverty lines and indices (World Bank 1996b).
Brazil	1990	Consumption based – food basket; per capita	The authors conducted a multivariate analysis predicting whether or not a household is in poverty. They found that for both rural and urban areas, female-headed households are in more poverty than male. Importantly, they controlled for several correlated factors including household size. The authors conducted a sensitivity analysis to determine if female-headed households remained poorer as the poverty line increased; the findings indicate that as poverty line increases, female headship becomes a less important determinant of poverty (World Bank 1995b).
Columbia	1992	Consumption based – food basket	While a crosstabulation of female headship and poverty for both urban and rural areas did not present any significant correlation (in urban areas, female-headed households were 27.0% of the poor and 23.0% of the non-poor, and in rural areas they were 18.0% of both categories), the authors took the analysis one step further. They looked at different types of households and found that those households with children experienced much higher rates of poverty. Finally, they examined single parent households, and found that they have a significantly higher incidence of poverty than two parent households. Eighty-four percent of single parent households are female-headed households. Additionally, the authors conducted a probit model, and found that female headship increases the probability of being poor (World Bank 1994b).
Costa Rica	1992	Income; consumption based – basic needs; per capita	Female-headed households have a slight probability of being poorer (World Bank 1997b).

**Appendix Table 14 Continued**

<i>Country</i>	<i>Year</i>	<i>Poverty Line</i>	<i>Evidence</i>
Dominican Republic	1992	Consumption based – food and non-food basket; per capita	Via crosstabulation, they conclude that female-headed households more likely to be in poverty and extreme poverty, especially in rural areas. There is not evidence of statistical tests. There is evidence that over time, the incidence of poverty among female-headed households is decreasing. For urban areas in 1986, 15.4% of female-headed households were poor (9.8% of MHHs), compared to 10.7% (8.5%) in 1992. In rural areas in 1986, 32.7% of FHHs were poor (18.8), compared to 24.4% (23.6%) in 1992 (World Bank 1995c).
Ecuador	1994	Expenditure; consumption based – food and non-food basket; per capita	Due to the tendency of very poor female household heads to move in with relatives, there is not a higher incidence of poverty among female household heads. Although 60% of widows are in poverty (World Bank 1996c).
El Salvador	1992	Income; consumption based – two basic food baskets; per capita	Female-headed households make up a larger share of poor households in urban areas, but not in rural areas. 39.2% of female-headed households in urban areas are in poverty, vs. 27.9% not poor. The difference in rural areas is 22.6 in poverty, vs. 23.4% not in poverty. There are no statistical tests to back up this evidence (World Bank 1994c).
Guatemala	1989	Consumption based – food and non-food basket	A simple bivariate analysis suggests that female-headed households are not necessarily more likely to be poor. Transfers account for approximately 17% of total income for female-headed households, and may be a determining factors keeping households from poverty (World Bank 1995f).
Guyana	1993	Consumption quintile; per capita	There is not a developed analysis here, but the authors write that levels of poverty are similar among male headed households and female-headed households. 28.2% of the households in both the first and the last quintile are female-headed (World Bank 1994d).
Honduras	1992	Income; consumption based – food basket; per capita	The authors suggest that rural households headed by women constitute a prominent group among the poor. It is difficult to judge this from their numbers, however, as they do not present data on the numbers of all rural households in poverty for comparison. There are also no significance tests (World Bank 1994f).

**Appendix Table 14 Continued**

<i>Country</i>	<i>Year</i>	<i>Poverty Line</i>	<i>Evidence</i>
Jamaica	1991	Consumption based; per capita	The authors find a weak relationship between headship and level of consumption, but they don't present these numbers. In a multivariate regression, they find a 1.4% increase in the probability of being poor for female-headed households (World Bank 1994g).
Nicaragua	1993	Expenditure; consumption based – minimum caloric requirements; per capita	There is no evidence that female-headed households are at a greater risk of poverty (World Bank 1995n).
Paraguay	1990	<ul style="list-style-type: none"> <li>• Poor: consumption based – food and non-food basket; per capita</li> <li>• Very poor: food basket; per capita</li> </ul>	The authors present data which suggests that female headship is associated with poverty, but they perform no significance tests, and the difference is not large in magnitude. FHHs make up 15.8% of all households, and are 17.3% of both the poor and the very poor categories (World Bank 1994j).
Trinidad and Tobago	1992	Consumption quintile; per capita	Levels of poverty are higher for female-headed households. Again there are no significance tests of the difference, but the data presented indicate large differences. FHHs make up 27% of all households, and comprise 36% of the poorest quintile (World Bank 1995r).

**Appendix Table 15: Female-Headed Households and Poverty in Sub-Saharan Africa (detailed)**

<i>Country</i>	<i>Year</i>	<i>Poverty Line</i>	<i>Evidence</i>
Benin	1979	Income; consumption based – food and non-food basket; per capita	The authors suggest that female-headed households are the most vulnerable group, but there are no numbers to support this (World Bank 1994a).
Cape Verde	1988-89	<ul style="list-style-type: none"><li>• Poor: two-thirds the average expenditure; per capita</li><li>• Ultra poor: twice the annual wage of an unskilled worker in high labor intensity public works project</li></ul>	Of the 41% of the households that have female heads, 32% are poor compared to 29% of male headed households, and 17% are ultra poor compared to 12% of male headed households. The authors do not conduct significance tests (World Bank 1994k).
CÔTE D'IVOIRE	1995	Consumption based – food and non-food basket; per capita	The authors do not present data, but state that there is not a major difference in the poverty status of male and female-headed households (World Bank 1997e).
DJIBOUTI	1996	Consumption based – food and non-food basket; per adult equivalent	While the authors conducted a probit model, and suggest that female-headed households are more likely to be poor, they failed to note that this coefficient had an insignificant slope. The numbers presented in crosstabulation form suggest that female-headed households are overrepresented in the poorest quintiles (World Bank 1997c).
ERITREA	1993-94	Consumption based – food and non-food basket	While 45% of households are headed by women, there is no difference in terms of poverty (World Bank 1996d).
ETHIOPIA	1994-96	Consumption quintile; per capita	Crosstabulations suggest that female-headed households are overrepresented in the poorest quintile (17% overall and 25% in lowest quintile) (World Bank 1998b).
GABON	1993	Consumption quartile	The authors find that female-headed households in urban areas are more likely to be poor, but do not present the numbers that support this claim (World Bank 1997f).
GHANA	1992	Expenditure; two-thirds of mean; per capita	Female-headed households have a lower incidence of poverty than male headed households. They note that they did not distinguish between <i>de jure</i> and <i>de facto</i> headship, which could be critical given the flow of remittances (World Bank 1995e).
GUINEA	1994	Consumption based – food and non-food basket	Female-headed households are better off than male headed households (World Bank 1997d).

**Appendix Table 15 Continued**

<i>Country</i>	<i>Year</i>	<i>Poverty Line</i>	<i>Evidence</i>
GUINEA-BISSAU	1991	Core poor: Expenditure; 1/3 of the mean; per capita	The analysis broke female-headed households into <i>de jure</i> and <i>de facto</i> categories. While <i>de facto</i> households were underrepresented among the poor, <i>de jure</i> households were overrepresented among the core poor, but not significantly (World Bank 1994m).
LESOTHO	1993	<ul style="list-style-type: none"> <li>• Poor: consumption based – less than half the mean consumption level; per adult equivalent</li> <li>• Ultra-poor: consumption based – less than 25% of the mean consumption level; per adult equivalent</li> </ul>	<ul style="list-style-type: none"> <li>• The findings from Lesotho are particularly interesting, and suggest the importance of disaggregating type of female headship. They look at incidence, depth and severity of poverty, and find the following:</li> <li>• “By all three poverty measures, members of households <i>de facto</i> headed by women (when the male head of household is absent) are far better off than households <i>de jure</i> headed by women or those headed by men. The incidence of poverty among households <i>de facto</i> headed by women is about half that of the population generally, and the depth and severity of poverty are equally low. At the other extreme, households <i>de jure</i> headed by women are disproportionately worse off: about 59 percent of them are poor, 35 percent are ultra-poor, and the depth and severity of their poverty are significantly worse than national averages. Poverty measures for households headed by men are only marginally better than measures for households <i>de jure</i> headed by women (World Bank 1995j, 25).”</li> <li>• These findings stress the important of remittances from the South African mines. The authors conducted a logit regression, and got similar results – female-headed households were less likely to be poor, although the coefficient was insignificant at 90% (World Bank 1995j).</li> </ul>
MADAGASCAR	1993-94	<ul style="list-style-type: none"> <li>• Consumption based – basket of food and non-food</li> <li>• Extreme poverty: consumption based – food basket</li> </ul>	Female-headed households have a slightly higher rate of extreme poverty than male headed households. The composition of the extreme poverty class: 19.6% female-headed households, 80.4% MHHs. Poverty: 18.2% FHHs, 81.8% FHH. Non-poor; 18.4% FHHs and 81.6% MHHs. There are no significance test results presented (World Bank 1996g).

**Appendix Table 15 Continued**

<i>Country</i>	<i>Year</i>	<i>Poverty Line</i>	<i>Evidence</i>
MALAWI	1992	Expenditure; below the 40 <sup>th</sup> percentile	<ul style="list-style-type: none"><li>• Female-headed households have a higher likelihood of being poverty. The chance of male headed households being among the poorest households is 1 in 3; it's 1 in 2 for FHHs. FHHs constitute 30% of all rural smallholder households, but 42% of the rural poverty gap. Both the poverty gap and poverty severity indices show that rural poverty is deeper in FHHs.</li><li>• Households with a divorced or widowed woman at the head are more likely to be poor than married or single women. The majority of households headed by an older woman are poor.</li><li>• Female-headed households receiving remittances are poorer than those that do not receive remittances. 69% of those receiving fall below 40% cutoff, while only 48% of those not receiving fall below this level.</li><li>• After controlling for several factors in a regression model, found that FHHs have incomes about 79% that of identical MHHs (World Bank 1996h).</li></ul>
MAURITANIA	1989-90	Consumption quintile; per capita	The gender of the household head is not significantly associated with poverty except perhaps in the lowest quintile – female-headed households are 28.7% of the population, and 32.7% of the lowest quintile. Poor FHHs are associated with high dependency rates (World Bank 1994i).
NIGER	1992-93	<ul style="list-style-type: none"><li>• Urban: US\$275</li><li>• Rural: 2/3rds this level</li></ul>	<ul style="list-style-type: none"><li>• Using a probit regression for rural and urban groups separately, found that gender of household head in urban areas is not related to poverty. In rural areas, FHHs are poorer.</li><li>• A crosstabulation shows lower headcount index for female-headed households (.55) than for male headed households (.64) (World Bank 1996j).</li></ul>

**Appendix Table 15 Continued**

<i>Country</i>	<i>Year</i>	<i>Poverty Line</i>	<i>Evidence</i>
NIGERIA	1992	Expenditure; 2/3 <sup>rd</sup> s of mean; per capita	<ul style="list-style-type: none"><li>• Female-headed households make up 10 percent of all households, but only 5% of those in poverty in rural areas, and 8% in urban areas.</li><li>• “The probability that a female-headed household is in poverty varies depending on rural and urban location, and whether the female role is de jure or de facto. Female-headed households are 9 percent of rural households, but contribute only 5.4 percent of all poor in rural areas of these, de jure female-headed households are 7.3 percent of all rural households yet contribute only 3.8 percent to the rural poor. Among male headed households in rural areas, both the depth and severity of poverty is greatest in polygamous households affecting a large number of women; such households make up 27 percent of all rural households yet contribute 37 percent of the rural poor. The poverty status of households in urban areas follows a similar pattern – with one exception, the depth and severity of poverty in single male headed households exceeds that of all other households, being almost three to five times greater than in female-headed households (World Bank 1996k, 34).” (PA)</li></ul>
SEYCHELLES	1984	Consumption based – basic food and non-food basket	Some characteristics of poor households are: 1) female-headed households where the head of household participates in the Full Employment Scheme. 2) households headed by a school drop-out; these are usually women who leave school because of pregnancy or early marriage (World Bank 1994n).
TANZANIA	1993	Absolute income line; per capita	<ul style="list-style-type: none"><li>• Female-headed households have higher mean expenditure levels than male headed households in rural areas.</li><li>• In Zanzibar, the expenditure per adult equivalent of female-headed households is higher than for MHHs in urban areas, and lower in rural areas (World Bank 1996n).</li></ul>
TOGO	1987-89	Income; consumption based – food and non-food basket; per capita	In most regions, female-headed households are more likely to be poor than male headed households. The PA suggests that as FHHs tend to be smaller, they do not benefit from economies of scale (World Bank 1996p).



**Appendix Table 15 Continued**

<i>Country</i>	<i>Year</i>	<i>Poverty Line</i>	<i>Evidence</i>
ZAMBIA	1991	<ul style="list-style-type: none"><li>• Poor: consumption based – food and non-food basket; per adult equivalent</li><li>• Core poor: consumption based – food basket; per adult equivalent</li></ul>	In rural areas, female headship is a good predictor of poverty. 79.33% of FHHs are in core poverty, compared to 71.07% of MHHs. A further 10.03% of FHHs are poor, and 13.13% of MHHs are poor. Only 10.64% of FHHs are non-poor and 15.8% of MHHs are non-poor. Regression analysis shows that a high dependency ratio is actually a better indicator of poverty than headship alone. In urban areas, female headship also appears to be an indicator of poverty. Out of 15% of all female-headed households in urban areas, 30.24% are core poor, 13.94% are poor (World Bank 1994o).
ZIMBABWE	1990-91	Consumption based – food and non-food basket; per capita	There is a slight correlation between female headship and poverty. FHHs make up 33% of all households, but only head 31% of non-poor households (World Bank 1995t).

**Appendix Table 16: Female-Headed Households and Poverty in the Middle East and North Africa (detailed)**

<i>Country</i>	<i>Year</i>	<i>Poverty Line</i>	<i>Evidence</i>
Algeria	1995	Consumption based – food and non-food basket; per capita	Female-headed households are uncommon, and there is little difference in the incidence of poverty between them and male headed households (World Bank 1999).
Jordan	1992	Expenditure; consumption based; per capita	8.3% of households are headed by women, but they make up only 5.8% of the lowest decile and 6.3% of the lowest quintile (World Bank 1994e).
Morocco	1990-91	Consumption based – food and non-food basket	There is no evidence that female-headed households are poorer. In fact, there is evidence that greater levels of poverty exist among male headed households (World Bank 1994h).
Tunisia	1990	Expenditure; consumption based	There is no indication that gender of household head is a significant determinant of poverty (World Bank 1995o).
Yemen	1992	Expenditure; consumption based – basket of food and non-food necessities	There are low overall rates of female-headed households (4%). The percent in poverty is 3% (World Bank 1996m).

**Appendix Table 17: Female-Headed Households and Poverty in East Asia (detailed)**

<i>Country</i>	<i>Year</i>	<i>Poverty Line</i>	<i>Evidence</i>
Fiji	1993	Unclear	Report states that “acute poverty appears to be higher among female-headed households (World Bank 1995d, 55)” although no evidence is given.
Lao PDR	1992-93	Consumption based – basic food and non-food basket; per capita	Incidence and depth of poverty is lower for female-headed households. There are very few female-headed households in the sample, and a majority of them are widows over 55 years of age. The report suggests that they may have extended families attached (World Bank 1995i).
Mongolia	1995	Consumption based – basic food and non-food basket; per capita	<ul style="list-style-type: none"><li>• Female-headed households have a higher incidence of poverty. While female-headed households make up about 20% of the total population, in urban areas they consist of 40.6% of the very poor, and 26.7% of the poor. In rural areas, they are 27.8 % of the very poor and 15.4% of the non-poor. Overall, nearly 60% of individuals in female-headed households are in poverty compared to a 31% of individuals in poverty rates.</li><li>• The report suggests potential reasons for this difference in the poverty rates. These include that female-headed households have fewer employed members but equal numbers of children as male headed households. They also tend to own fewer herding animals per capital and they are less educated. Many female household heads tend to be older (World Bank 1996i).</li></ul>
Philippines	1991	Consumption based – food and non-food basket; per capita	Incidence and severity of poverty is significantly lower for female-headed households (World Bank 1995i).
Thailand	1992	Per capita	Proportion of households headed by males and females is approximately equal (World Bank 1996o).
Viet Nam	1992-93	Consumption based – food and non-food basket; per capita	Female-headed households are less likely to be poor than male headed households, although in urban areas the poverty rate is slightly higher for female-headed households. The poverty gap and poverty severity are both less for female-headed households. The poverty gap for female-headed households is 13.1 (compared to 15.7 for male headed households). Poverty severity is 5.3 for FHHs, and 6.4 for MHHs. Similar trends exist under the lower poverty line (food only) (World Bank 1995s).

**Appendix Table 18: Female-Headed Households and Poverty in South Asia (detailed)**

<i>Country</i>	<i>Year</i>	<i>Poverty Line</i>	<i>Evidence</i>
Bangladesh	1995-96	Consumption based – food and non-food basket; per capita	Female-headed households are more likely to be poor in rural areas than male headed households – 45% vs. 39%. In urban areas, the headcount ratios are virtually the same for FHHs and MHHs (World Bank 1998a).
Sri Lanka	1990-91	Consumption based – food and non-food basket; per capita	The incidence of poverty is not statistically significantly different for MHHs and FHHs. However, in 1985-86, the poverty gap and squared poverty gap indices were significantly higher for FHHs. In 1990-91 this difference did not exist (World Bank 1995p).

**Appendix Table 19: Female-Headed Households and Poverty in Europe and Central Asia (detailed)**

<i>Country</i>	<i>Year</i>	<i>Poverty Line</i>	<i>Evidence</i>
Albania	Rural-1994 Urban-1996	<ul style="list-style-type: none"> <li>• Absolute: Current exchange rate equivalent of US\$1 per capita</li> <li>• Relative: 50% of mean expenditure; per capita</li> </ul>	<p>While the poorest group in poverty are households with an unemployed head who is typically male, extended households are more likely to be poor if they are headed by a woman in urban areas. They comprise less than 10% of all households, but have poverty incidence double that of male headed extended households and have a higher poverty gap. Using the absolute poverty line, 68.8% of FHHs are in poverty, compared to 33.0% of men. The poverty gap is similar using this poverty line (33.0% for MHHs, and 32.1% for FHHs). Using the relative poverty line, 28.1% of FHHs are in poverty compared to 17.1% of MHHs. The poverty gap for FHHs is 41.8% and for MHHs is 34.7%. The female heads of extended families are likely to be poorly educated (World Bank 1997a).</p>
Belarus	1995	Consumption based – food and non-food basket; per capita	<p>Single person households headed by a women are more likely to be poor than those headed by men – 36% vs. 27%. The odds of poverty increase with more children, especially for single mothers and widows. The majority of single female pensioners (68%) are not in poverty (World Bank 1996a).</p>
Estonia	1995	Consumption base – less than the minimum pension; per adult expenditure	<ul style="list-style-type: none"> <li>• 9.2% of individuals living in female-headed households are in poverty compared to 8.8% in male headed households.</li> <li>• When household composition is held constant, female-headed households have higher headcount ratios.</li> <li>• Within households with disabled or unemployed individuals, female-headed households have a higher poverty rate than male headed households (15.4% vs. 9.0%).</li> <li>• Household size is important. Female-headed households with 3 individuals have 11.5% headcount ratio, compared to 6.7% for male headed households. Female-headed households with 5 or more individuals have 9.1% headcount ratio, compared to 12.0% for male headed households (World Bank 1996e).</li> </ul>

**Appendix Table 19 Continued**

<i>Country</i>	<i>Year</i>	<i>Poverty Line</i>	<i>Evidence</i>
Hungary	1992-94	<ul style="list-style-type: none"><li>• Very poor: minimum pension</li><li>• Shallow poverty: 2/3<sup>rd</sup>s of mean household expenditures</li></ul>	<ul style="list-style-type: none"><li>• While poverty is slightly higher for all pensioners, it is shallow for males and deep for females. For one-person households, 34.7% of female households fall below the shallow poverty line, compared to only 22.6% of males. A number of these households are widowed pensioners living alone.</li><li>• For single adults with children, poverty is deeper among female-headed households.</li><li>• For all households, the headcount for female-headed households is 30.8% below the shallow poverty line, and 6.5% below the deep line. Compare this to 23.7% and 3.8%, respectively, for male headed households (World Bank 1996f).</li></ul>
Kazakhstan	1996	Consumption quintile; per capita	<ul style="list-style-type: none"><li>• There is no correlation between female-headed households and poverty. While female-headed households make up 40% of the total population, they are only 30% of the lowest quintile.</li><li>• Female-headed households tend to be smaller, have lower dependency rates, and have older heads (World Bank 1998d).</li></ul>
Kyrgyz Republic	1993	<ul style="list-style-type: none"><li>• Poor: Consumption based – food and non-food basket; per capita</li><li>• Very poor: Food basket; per capita</li></ul>	<p>“After allowing for all other correlates of poverty, nationally households headed by females do not have a significantly higher predicted probability of being very poor. In urban areas alone, however, the severity of poverty and the proportion of households headed by a woman are correlated: over a third of all ‘very poor’ urban households are headed by females, whereas 19 percent of all urban households being [sic] headed by females. The reverse is true in rural areas, where very poor households are less likely to be headed by females (World Bank 1995h, 9).”</p>

**Appendix Table 19 Continued**

<i>Country</i>	<i>Year</i>	<i>Poverty Line</i>	<i>Evidence</i>
Poland	1993	Minimum pension; per adult equivalent	<ul style="list-style-type: none"><li>• The numbers of female-headed households falling below the poverty line is 1.3 percentage points higher than MHHs (15.3% for FHHs and 14.0% for MHHs). The poverty gap is slightly more severe for FHHs (13.8% vs. 12.9% for MHHs).</li><li>• Female-headed households, on average, are smaller, have lower dependency ratios, relatively fewer children and more elderly.</li><li>• For all household sizes, female-headed households have a higher headcount, but poverty is not deeper. Households with size 1-2: 6.1% of FHHs in poverty, 3.8% of MHHs. Households with size 3-4: 13.1% of FHHs in poverty, 8.9% of MHHs. Households with size 5 or more: 32.0% of FHHs in poverty, 25.8% of MHHs.</li><li>• Age of household head is important. In households with heads aged 70 and above, female-headed households are overrepresented in poverty. In households with heads between the ages of 30 and 39, female headship is associated with a 3 percentage points higher incidence of poverty.</li><li>• Female-headed households whose head has low educational achievement have high poverty rates compared to comparable male headed households.</li><li>• Poverty among single mother households is higher than for single father households – 16.4% vs. 9.7% (World Bank 1994).</li></ul>

**Appendix Table 19 Continued**

<i>Country</i>	<i>Year</i>	<i>Poverty Line</i>	<i>Evidence</i>
Romania	1994	Consumption based – food and non-food basket; per capita	<ul style="list-style-type: none"><li>• Elderly rural women are the poorest of the pensioners, but they are better off than the poor who do not receive pensions. In urban areas, 11% of female-headed pensioner households are in poverty, compared to 9.6% of male headed pensioner households. In rural areas, these numbers are 22.0% and 18.3%, respectively.</li><li>• The headcount index for female-headed households is 23.88%, compared to 21.14 for male headed households. Poverty is slightly deeper for female-headed households: poverty gap is 25.84% for FHHs and 25.50 for MHHs. The probability of being in poverty for a female-headed household is higher in rural areas.</li><li>• Female-headed households tend to be widows, smaller in size (with small proportion of members in productive ages), and the head tends to be older and less educated than a male head (World Bank 1997g).</li></ul>
Russia	1992-93	Consumption based – food and non-food basket	<ul style="list-style-type: none"><li>• Among pensioners, females living alone are more likely to be poor than males.</li><li>• Single-parent households with children are more likely to be poor than other households with children – over 90% of these households have a female head.</li><li>• A probit regression model suggests a 5.4 % increase in the probability of poverty for female-headed households (World Bank 1995m).</li></ul>
Ukraine	1995	Consumption based – food and non-food basket; per capita	“Households headed by women, excluding pensioners living alone, have a poverty headcount index of 29 percent, and account for 33 percent of all households. Single female-headed households are a small subset of this group (only 5 percent of all households); their poverty headcount index is 41 percent (World Bank 1996l, 19).”



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<sup>1</sup> Many authors (Baden and Milward 1995; Lockwood and Whitehead 1998) have critiqued the poverty assessments and their treatment of gender. In general, we agree with this assessment as many poverty assessments either do not address gender issues, or merely present tables of numbers with no discussion. Several assessments, however, do a thorough job of assessing and attempting to explain gender differentials, and they should not be disregarded out of hand.

<sup>2</sup> In the electronic database search, we searched under 'gender and poverty,' 'education and poverty,' 'education and gender,' etc. and read on-line abstracts. If there was no evidence that the authors drew a poverty line, or disaggregated their results by gender in the abstract, we did not locate the article or book. Our search was biased towards looking for relatively recent material (no older than the late 1980s).

<sup>3</sup> The studies under review in Miller (1997) used broad group classifications to determine a household's poverty level; property-owners vs. landless, literate vs. non-literate groups.

<sup>4</sup> Of course these results must be interpreted with caution because there may be a systematic sampling bias associated with measurement of adults of different sexes. Alderman (1997) notes that this can happen if the wealthier (as well as healthier) adults are more likely to hold jobs that prevent them from being present when the enumerator visits the respondent's home.

<sup>5</sup> Among others, Buvinic and Gupta (1997) and Varley (1996) discuss several problems inherent in defining and measuring female-headed households.