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The Gender Dimension of Household Poverty: Is Headship Still a Useful Concept?

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ABSTRACT

This article draws upon existing household survey data to compare different measures of the gender determinants of poverty in Costa Rica and El Salvador. Typically, the sex of the household head is used to capture those gender characteristics that may influence the likelihood of that household being poor. Recent household survey data from fourteen Latin American countries reveal, however, that female-headed households are over-represented in little less than a half of all cases. As such, the survey data do not present convincing evidence that the gender of the household head influences the probability of that household being poor. Yet extending the definition of headship to one of ‘female maintenance’ produces very different results. This article argues that female headship is not the correct metric to use to identify those gender factors that may predispose households to poverty. Whether the household is maintained by female income proves to be a better measure of a gender characteristic that influences the probability of that household being poor. This article offers a detailed analysis of the determinants of poverty for Costa Rica and El Salvador that underscores the need for a rigorous gender-disaggregated approach as a means to refine policy and address the need for targeting.

Introduction: The Need for a Gender Analysis

Across cultures and continents women typically have less access to productive resources and assets such as land, credit, foreign exchange, financial, physical and human capital. Women usually work longer hours in both the productive and reproductive sector, have less resources available to

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them, possess fewer opportunities, earn lower wages, face greater time constraints and consume less leisure (Blackden and Morris-Hughes 1993; Moser 1989, Lloyd and Brandon 1991; Moser, Herbert and Makonnen 1993; Joekes et.al. 1988). It might be deceptively easy then; to assert that forming a greater proportion of the economically disadvantaged, households headed by women may be more likely to be poor.

The literature would largely support the statement that women generally have fewer economic opportunities and face more circumscribed access to productive resources such as land, labour physical and financial capital (Agarwal 1994; Bruce and Dwyer 1988). Markets are absent or subject to failure in different ways for men and women (Kabeer 1997; Folbre 1990; Sen 1990). There is evidence to suggest that there are qualitative and quantitative dimensions to the extent of men's and women's poverty which are manifest in their differential labour mobility, remuneration, acquisition of job-specific human capital and in their task allocations and reproductive responsibilities (Funkhouser and Sainz 1997; Moghadam, 1994; Buvinic and Gupta 1997; Rosenhouse 1989).

Despite such apparent consensus about gender inequalities in asset ownership, time and task allocation and labour market remuneration, the debate remains heated and unresolved as to whether female-headed households are disproportionately more likely to be poor (Appleton and Collier 1992; Quisumbing et al 1995; Lorge Rogers 1995; Barros et al 1993; Bruce and Lloyd 1992; Rosenhouse 1989). It is clear that the debate has regional characteristics and that poverty and headship may be more closely associated in some regions and at certain points in time than for others.² It is also clear that any attempt to resolve the quandary requires the use of household surveys with data on variables that capture the employment base of the household, the sector of participation of the household head as well as the gender portfolio of income. A careful and rigorous gender-disaggregated analysis may

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² Buvinic and Gupta (1997) undertook a review of sixty-five household studies of poverty and headship in Africa, Asia and Latin America. Thirty-eight of the studies concluded that female headed households were over-represented among the poor, with the greatest concentration of over-representation occurring in Latin America over the decade of the eighties.

enable us to draw some conclusions about the relative influence of each of these factors on the poverty status of that household.³

A Brief History of Women's Labour Market Participation in Latin America

A critical examination of labour market characteristics, tenure in the labour market, sector of attachment, income and remuneration yields information that underpins the analysis of the gender dimensions of poverty in Latin America. For example, the gender composition of the labour market reveals some important differences in levels of participation and sectoral attachment that has implications for remuneration and the returns to employment for women. (Gonzalez and Watts, 1995; Psachoropoulos and Tzannatos 1992) Table 1 reveals that women are largely concentrated in services and trade with almost seventy per cent of the total female labour force in Latin America employed in services in 1994. By contrast, only forty-three per cent of the total male labour force is found in the service sector. A little over fourteen per cent of the total female labour force are in manufacturing and industry whereas close to twenty per cent of male workers are found in this sector (WISTAT data 1995; World Development Report 1996). The industrial and manufacturing workforce is divided unequally between men and women, with close to two-thirds of the labour force being male (ILO 1995; World Development 1996; WISTAT data 1995).

³ This research explores poverty at the level of the household; linking gender factors to whether or not the household falls below an established per capita income poverty line. The study does not examine whether all members of the household are equally poor or whether the internal division of resources within that household is equitable. The poverty lines chosen were set by agencies within the respective countries and were set at that level which was determined to command a minimum basket of goods deemed necessary for individual survival. In some cases a poverty line of US\$60 purchasing power parity (ppp) was used to allow for greater comparability among the datasets. The research focused on income poverty, as consumption data were less generally available for all the countries included in the sample. Since no systematic attempt was made to compare various measures of poverty, little can be said about the levels of poverty calculated in each country and how these levels might differ applying income, consumption and unmet basic needs methodologies. The studies do, however, provide a consistent series of poverty rates over time for each country, that allow some generalizations to be made about trends in poverty for certain household groups and sectors of the economy in Latin America and the Caribbean.

Table 1. Women in the Labour Force in Latin America
1a: Percentage of Women in the Labour Force, by Sector

	Agriculture		Manufacturing		Services	
	1980	1994	1980	1994	1980	1994
Central America	18.1	17.7	32.9	41.2	48.6	51.9
South America	13.3	18.1	22.9	31.9	31.1	37.5
Latin America and the Caribbean	14.8	16.2	29.3	35.8	44.1	48.1

1b: Percentage of the Total Female Labour Force

	Agriculture		Manufacturing		Services	
	1980	1994	1980	1994	1980	1994
Central America	11.8	4.7	19.0	12.7	21.7	37.6
South America	10.4	10.1	12.7	13.4	27.4	50.6
Latin America and the Caribbean	11.5	9.8	12.5	14.2	53.5	69.5

Source: WISTAT, United Nations Database, 1995; ILO Yearbook of Statistics 1997

A disturbing trend that has yet to be fully documented is the growth in the informal sector and the disproportionate concentration of women in this sector throughout Latin America (Anríquez et al 1997; Moser 1989; United Nations 1993, 1990). Although data on the universe of informal sector activities are notoriously difficult to collect and verify, sub-components of this sector are easier to observe and document. Women comprise an increasing proportion of unpaid family workers. In 1970, the weighted average of women as a per cent of unpaid family workers was thirty-four, by 1990, this had risen to forty-five per cent in Latin America and the Caribbean (WISTAT data 1995). Women are often disproportionately concentrated in the informal sector. In countries where women are a little over one-third of the total labour force, they are over-represented in the informal sector. In Cochabamba, Bolivia, women constituted sixty-five per cent of the informal labour force, and forty-five per cent in Santa Cruz in 1988. In Paraguay in 1990, forty-one per cent of the urban informal sector was women (United Nations, 1993, 1985; Salazar 1992).

Women are also increasing as a percentage of own-account workers, a fact that could represent their shift into micro-enterprise and petty trading. In 1970, sixteen per cent of own-account

workers in Latin America were women, a figure that rose to almost twenty-nine per cent by 1990 (WISTAT 1995). The scale of the productive activities in which women are engaged as own-account workers is often substantially less capital intensive, and the revenues generated are lower and more erratic than those of their male counterparts (Francke 1992; Sainz 1991; Moser 1989). Women are also increasing as a proportion of the unemployed, suggesting that they are experiencing economic dislocation as a result of adjustment. By 1990 a weighted average of 5.1 per cent of women were unemployed as compared to 4.6 per cent of men.⁴

Given that men and women are distributed unequally throughout the labour market in Latin America, we might assume that the returns to employment are also unequal for men and women. Such differentials certainly do exist. Table 2 gives the income differences by sex for selected levels of education. While the observed differentials are decreasing overall, a clear pattern emerges where women receive between fifty and seventy-five per cent of male income. There is a widely held belief that the persistent male-female earnings differentials are a function of women's lower levels of education and/or experience. Since statistical data generally refute this belief, as women in equivalent occupations and sectors often have higher levels of education than men, other explanations must be sought. A variety of theories exist that cast doubt on market-clearing analyses of the labour market, many of which would support the notion of a sex-segmented labour market (Arriagada 1994; Cox Edwards and Edwards 1991; Psacharopoulos and Tzannatos 1992; United Nations 1993). Substantial evidence also exists to support the view that skill differentials in Latin America have widened, and not decreased, in response to liberalization and the lifting of trade and tariff barriers. In Argentina, Chile, Colombia, Costa Rica and Uruguay the wage gap has widened between skilled and unskilled labour (Wood 1997). Since female labour is considered to be largely unskilled, the failure for the earnings gap between men and women to close may be attributable to a growing skills differential as factor and product markets become more open and the relative returns to low skilled labour diminish. What is observable from Table 2, is that no substantial premium on acquiring thirteen or more years of education exists. In five out of the twelve cases for which we have observations on both educational

⁴ Unemployment rates for women in Latin America and the Caribbean are consistently higher than those for men. It is interesting to note that in those economies where the participation rates for women are higher, so too are the unemployment rates. In Barbados, Jamaica and Panama where participation rates for women are between fifty and

cohorts, remuneration is actually lower for that group with thirteen or more years of education. In only two of the twelve cases do those acquiring more than thirteen years of education receive a premium of greater than five per cent in terms of the ratio of average female to male wages.

Table 2. Ratio of Female to Male Income from Employment for Selected Levels of Education Between 1980 and 1990 ^a

Country	<u>Total</u>		<u>0-3 years education</u>		<u>13 or more years education</u>	
	1980	1990	1980	1990	1980	1990
Argentina	63.5	68.8	--	--	--	--
Bolivia	--	57.4	--	58.4	--	46.0
Brazil	46.3	56.0	41.0	45.8	38.8	50.7
Colombia	56.1	66.7	51.0	58.8	55.0	60.4
Costa Rica	80.6	71.0	48.2	51.3	86.4	64.2
Chile	--	59.2	--	67.7	--	41.9
Guatemala	--	65.8	--	45.4	--	64.2
Honduras	--	57.9	--	49.9	--	51.5
Mexico	--	68.2	--	63.8	--	61.2
Panama	--	77.0	--	46.1	--	68.4
Paraguay	--	56.7	--	64.0	--	47.1
Uruguay	53.9	44.3	46.6	50.1	44.0	37.3
Venezuela	67.8	72.7	56.3	64.0	71.1	68.0

Source: ECLAC, Social Development Division and Division of Statistics and Economics Projection, on the basis of special tabulations of household surveys for the respective countries (Arriagada 1994).

^a Average female income as a percentage of average male income for urban population aged 15 or more.

Where the labour market demonstrates varying degrees of segmentation by sex and relative wages between men and women exhibit persistent differentials, we may assume that the economic contributions to households made by men and women also differ.⁵ In this case, it may be that we are able to identify gender characteristics that also affect total household income and the probability of that household and the individuals within it being poor.

sixty-three per cent of the eligible workforce, unemployment rates are in the order of twenty per cent (UNIDO 1994, Moghadam 1994).

⁵ Indeed, evidence from analysis of Guatemalan, El Salvadoran and Mexican labor markets suggests that labor market segmentation may be more acute for women than for men (Funkhouser 1997; Guerra 1997; Catanzarite and Strober 1993).

The Gender Profile of Poverty in Latin America

The traditional approach to explore the gender dimensions of poverty is to use headship as a gender characteristic that might be correlated with a higher incidence of poverty in a particular household (Barros, Fox and Mendonça 1993; Buvinic and Gupta 1997; Appleton 1996; Kennedy and Peters 1992). The assumption is where women are constrained by both their reproductive and productive responsibilities, where labour markets demonstrate a high degree of segmentation by sex, and where relative wages are lower for women and capital markets incomplete, that these factors may conspire to limit women's ability to generate income. Under such circumstances, households that are headed by women, may demonstrate a greater predisposition to poverty than households that are headed by men. While there may be problems in attributing the household's predisposition to poverty to characteristics of a single individual, or household head, this metric has been used consistently to analyze those gender characteristics that may be strongly associated with lower total household and per capita income, as well as differences in household investment and consumption.

Table 3 demonstrates that in the majority of countries in Latin America and the Caribbean, poverty has decreased over the period that spans the late eighties to the mid nineties. It is only in Argentina, Ecuador, Jamaica, Mexico, Nicaragua and Peru that we register an increase in the headcount of the poor and a widening of the poverty gap over the period under consideration.⁶ There are some interesting differences in the gender decompositions of poverty using *de jure* headship as a means of attributing gender factors that may predispose both households and individuals to poverty.⁷

⁶ The headcount P0 gives the proportion of people whose income (or consumption) is less than the poverty line z , $P0=q/n$. The poverty gap P1 reflects the mean income or consumption gap of all poor households q . $P1 = \sum_{i=1}^q (1 - y_i / z) / n$. The Foster Greer Thornbecke measure, P2, is a direct generalization of the poverty gap and yields a poverty measure that is sensitive to distribution among the poor.

$P2 = \sum_{i=1}^q (1 - y_i / z)^2 / n$. For further discussion of the properties of these indices, see Ravallion 1992 and Mejia and Vos 1997.

⁷ The literature identifies different categories of female-headed households: *de jure*, where the households themselves typically declare or nominate a single head at interview; and *de facto*, where 'headship' is attributed on the basis of economic contributions to the household or the absence of male income earners. While these

In Bolivia, Colombia, Costa Rica, El Salvador, and Paraguay *de jure* female-headed households are increasing as a proportion of the poor, while the poverty headcount using national per capita income poverty lines registers a decline in the overall proportion of poor. This would imply that while poverty is decreasing, male-headed households are being lifted out of poverty more rapidly than female-headed households. In Argentina, Ecuador, Jamaica, Mexico and Nicaragua where poverty is increasing, *de jure* female-headed households are also increasing as a proportion of the poor. This result is borne out for Mexico using both income and consumption measures of poverty (Lustig and Székely 1997; Jacome, Larrea and Vos 1997). It is noteworthy, however, that this increase in the proportion of female-headed households among the poor is by less than ten per cent in all cases.

In the two countries where the proportion of the poor in the total population and the proportion of *de jure* female-headed households among the poor are decreasing, the income and employment effects dominate the transfer effects of remittances, pensions, and other state benefits. The majority of the reduction in poverty and in the proportion of female-headed households among the poor has been achieved by increasing female labour force participation rates and decreasing the wage gap in the formal economy. Both Chile and the Dominican Republic register an increase in participation rates for female heads of household from sixty-four to sixty-nine per cent and forty to forty-six per cent respectively (Anríquez and Buvinic 1997; Aristy and Dauhajre 1997; FLACSO 1993). Although participation rates for women who are not heads of household remain lower than for household heads, they have shown a distinct increase in Chile and the Dominican Republic, rising from thirty-seven to forty-one per cent and from twenty-eight to thirty per cent respectively (Anríquez and Buvinic 1997; Aristy and Dauhajre 1997; FLACSO 1993).

definitions may be nuanced for particular surveys and particular circumstances, the definitions remain broadly similar.

Table 3. Distribution of Changes in Poverty and the Proportion of Female-headed Households Among the Poor

Country	Female-headed Households Increasing as a Proportion of the Poor	Female-headed Households Remaining a Constant Proportion of the Poor	Female-headed Households Decreasing as a Proportion of the Poor
Poverty Increasing	Argentina (1980-1996) Ecuador (1975-1995) ² Jamaica (1989-1995) ¹ Mexico (1984-1994) ⁴ Nicaragua (1985-1993)		Peru (1985-1994) ³
Poverty Decreasing	Bolivia (1990-1994) ² Colombia (1988-1995) Costa Rica (1991-1996) El Salvador (1991-1996) Paraguay (1983-1995)	Brazil (1976-1995)	Chile (1987-1994) Dominican Republic (1986-1992)

¹The headcount P0 registers a decrease in poverty from 1989 to 1994, however there is a significant increase in poverty in 1995.

²Data for urban areas only.

³Poverty estimates based on per capita food consumption expenditures.

⁴Holds for both unadjusted and adjusted income as well as unadjusted consumption.

Table 4 provides an overview of the composition of the poor in the last year of analysis for each country. The data reveal that *de jure* female-headed households are over-represented among the poor in six out of the fourteen country studies. In Brazil, Costa Rica, Ecuador, El Salvador, Jamaica, and Paraguay there are more *de jure* female-headed households among the poor than in the total population. Since total household income is also lower for these households than for their *de jure* male-headed counterparts we might also claim that female-headed households are poorer using an income definition of poverty. Certainly the poverty gap measures are larger for *de jure* (and *de facto*) female-headed households in Chile, Costa Rica, the Dominican Republic, Ecuador, and Jamaica. This claim must be moderated, however, if we consider consumption estimates of the poverty gap (Kennedy and Peters 1992; Buvinic and Gupta 1997; Thomas 1991). Female-headed households are under-represented among the poor in Argentina, Bolivia, Chile, Colombia, the Dominican Republic, Mexico, Nicaragua and Peru. In Chile and the Dominican Republic poverty is decreasing and so too are the number of female-headed households in poverty. While in Peru, even as poverty is increasing the proportion of female-headed households among the poor is decreasing and these households remain under-represented within the ranks of the poor.

Table 4. Distribution of Changes in Poverty and the Representation of Female-headed Households Among the Poor

Country	Female-headed Households Over-represented among the poor in last year	Female-headed Households Exactly Represented among the poor in last year	Female-headed Households Under-represented among the poor in last year
Poverty Increasing	Jamaica (1995) ¹ Ecuador (1995) ²		Argentina (1996) Mexico (1994) Peru (1994) ³ Nicaragua (1993)
Poverty Decreasing	Brazil (1995) Costa Rica (1996) El Salvador (1996) Paraguay (1995)		Bolivia (1994) ² Chile (1994) Colombia (1995) Dominican Republic (1992)

¹The headcount P0 registers a decrease in poverty from 1989 to 1994, however there is a significant increase in poverty in 1995.

²Data for urban areas only.

³Poverty estimates based on per capita food consumption expenditures.

Expanding the Definition of Headship: From *de jure* to *de facto*

Headship is an attribute that is usually assigned by the respondent or the enumerator when the survey is undertaken in the field (Barros, Fox and Mendonça 1993; Rosenhouse 1989). As such, the definition responds to cultural expectations about decision-making authority or the ownership of assets, and is filtered through societal norms and dictates that shape the role of men and women as economic actors, providers, caregivers and nurturers. If the definition of headship is not one that is inherited from the field, it may be applied subsequently in the coding process and is usually derived from either income generation and/or asset ownership or title to certain productive resources. Where women are constrained in the labour market by their reproductive responsibilities or where the returns to female labour are consistently lower than those that accrue to male labour, we may assume that the categorization of headship that arises from an economic definition may disproportionately favour the classification of a male-headed household.

The latter definition of economic headship provides another means of partitioning survey data into those gender characteristics that may influence the probability of a household being poor

(Rosenhouse 1989; Geldstein and Delpino 1994). *De facto* headship uses the sex of the principal income earner to determine whether a household is *de facto* female or male-headed. This allows for a slightly richer analysis of gender and poverty than the *de jure* headship definition permits. Anríquez and Buvinic use this definition of headship to explore the gender dimensions of poverty in Chile between 1987 and 1994 (Anríquez and Buvinic 1997). They use labour income to determine the economic head of household and to avoid the pitfall of other factor-income being attributed to a household member that is not generated by that individual. In this way income from transfer and interest payments, rent, remittances and other capital flows that may be erroneously attributed to a single individual within a household do not muddy the definition of an economic head of household. Buvinic and Anríquez also define joint or multiple economic heads where two individuals generate equal amounts of labour income, or where no adult members are receiving labour income.

In exploring the evolution of poverty and inequality in Chile between 1987 and 1997 the authors note that the incidence of individual poverty in female-headed households has decreased over time using the *de facto* definition of economic headship. In 1987, there were proportionally more female-headed households in poverty than male-headed households in both metropolitan Santiago and the rest of the country. By 1994, however, fewer female-headed households were below the poverty line than male-headed households. Table 5 shows that although poverty is less widespread among residents of female-headed households their poverty is more intense than that of the population living in male-headed households, as the poverty gap is slightly larger for *de facto* female-headed than for *de facto* male-headed households: in 1994, P1 was 0.103 for female-headed households and 0.094 for male-headed households.

Table 5. Poverty by Gender of the de Facto Household Head in Chile 1987-1992

Head Count Ratio [FGT (P0)]								
Region	Female-headed Households				Male-headed Households			
	<u>1987</u>	<u>1990</u>	<u>1992</u>	<u>1994</u>	<u>1987</u>	<u>1990</u>	<u>1992</u>	<u>1994</u>
I	0.467	0.327	0.298	0.264	0.411	0.277	0.244	0.209
II	0.478	0.390	0.375	0.297	0.363	0.324	0.291	0.242
III	0.425	0.396	0.330	0.409	0.426	0.330	0.294	0.325
IV	0.442	0.478	0.406	0.342	0.517	0.456	0.376	0.324
V	0.418	0.478	0.301	0.288	0.408	0.411	0.345	0.258
VI	0.446	0.458	0.295	0.310	0.462	0.396	0.308	0.338
VII	0.433	0.386	0.331	0.390	0.468	0.439	0.409	0.408
VIII	0.575	0.513	0.442	0.334	0.564	0.467	0.439	0.409
IX	0.580	0.367	0.351	0.250	0.597	0.459	0.405	0.355
X	0.505	0.407	0.359	0.315	0.532	0.392	0.333	0.323
XI	0.275	0.367	0.481	0.357	0.277	0.297	0.266	0.267
XII	0.283	0.341	0.217	0.199	0.197	0.279	0.240	0.141
Metropolitan Region	0.417	0.281	0.231	0.195	0.369	0.339	0.266	0.206
Country	0.453	0.374	0.305	0.263	0.442	0.385	0.326	0.282

Poverty Gap Index [FGT (P1)]								
Region	Female-headed Households				Male-headed Households			
	<u>1987</u>	<u>1990</u>	<u>1992</u>	<u>1994</u>	<u>1987</u>	<u>1990</u>	<u>1992</u>	<u>1994</u>
I	0.214	0.143	0.116	0.081	0.145	0.087	0.077	0.065
II	0.198	0.192	0.122	0.108	0.136	0.105	0.091	0.070
III	0.184	0.140	0.129	0.165	0.148	0.110	0.093	0.106
IV	0.180	0.188	0.144	0.126	0.192	0.174	0.131	0.111
V	0.166	0.202	0.106	0.101	0.155	0.156	0.114	0.084
VI	0.193	0.215	0.090	0.113	0.168	0.145	0.096	0.109
VII	0.183	0.140	0.127	0.162	0.172	0.166	0.142	0.146
VIII	0.302	0.218	0.196	0.136	0.238	0.179	0.162	0.153
IX	0.272	0.166	0.131	0.091	0.265	0.190	0.139	0.128
X	0.232	0.166	0.146	0.124	0.217	0.144	0.115	0.103
XI	0.096	0.152	0.197	0.152	0.084	0.097	0.071	0.083
XII	0.079	0.129	0.060	0.079	0.065	0.100	0.073	0.032
Metropolitan Region	0.172	0.116	0.082	0.080	0.137	0.118	0.085	0.064
Country	0.197	0.157	0.115	0.103	0.172	0.109	0.109	0.094

Source: Anríquez and Buvinic 1997

The principal factor lifting female-headed households out of poverty in Chile has been the increased absorption of women into the labour force. The employment effect is clearly demonstrated in the country-wide increase in labour force participation for female household heads from sixty-four per cent in 1990 to sixty-nine per cent in 1994, and for women as a group, from thirty-seven per cent to forty-one per cent. The per capita income of female-headed households has grown more than that of male-headed households over the same period. In fact, the eleven per cent gap between average per capita household income for male and female-headed households not only decreased, but female-headed households surpassed male-headed households in per capita income terms in 1994 by four per cent.⁸

Towards an Alternative Definition: Female Maintenance

It may be, however, that a conventional analysis of headship does not serve our purpose if we wish to explore the gender dimension of household measures of poverty and inequality (Gammage 1997; Jackson 1996; Quisumbing, Haddad and Peña 1995). Headship is a concept that attempts to locate the coincidence of income generation and decision-making authority in one individual. Yet, households are an aggregate of individuals who might act collusively or competitively over a range of different decisions. The preferences of one individual may prevail in certain circumstances and not in others, across certain spheres of decision-making and not across others (Hoddinot, Alderman and Haddad 1997; Haddad 1992; Becker 1981). The bargaining process has particular implications for the use and allocation of household resources, labour, investment and consumption decisions. The bargains that are struck may have a profound effect upon individual probabilities of being poor, exiting poverty and indeed upon the intergenerational transmission of poverty (Chiappori 1997; Buvinic and Gupta 1997; Thomas 1991; Sen 1990).

The debate about headship and poverty is not one that attempts to correctly decompose decision-making structures and bargaining outcomes, but alternatively, one that attempts to partition households on the basis of certain characteristics that predispose those households to

⁸ This result is driven largely by changes in the receipt of both factor and non factor income in the upper quintile of the income distribution where there is the greatest concentration of both *de jure* and *de facto* female-headed households.

poverty (Buvinic and Gupta 1997; Jackson 1996; Varley 1996; Quisumbing, Haddad and Peña 1995). Rather than identifying a single household head of one gender or another, the ultimate goal is one of validating that such a characteristic might be correlated with lower total household income, a smaller portfolio of assets and higher economic and demographic dependency. The economic definition of headship can be extended to one of ‘maintenance’ using an income portfolio definition to categorize female-maintained and male-maintained households (Lloyd and Brandon 1991; Lorge Rogers 1995). Using a strict numerical definition of maintenance, female-maintained households are defined as those where more than fifty per cent of total household income is generated by or attributed to women.⁹ This definition facilitates an analysis of the gender portfolio of household income and can be used in subsequent decompositions of the determinants of poverty and of the particular characteristics that lead certain households to concentrate in the lower deciles of the income distribution.

The income portfolio approach was used to explore the gender determinants of poverty and inequality in El Salvador and Costa Rica (Gammage 1997). Tables 6 and 7 reveal some interesting similarities and differences between the two countries. In both cases, the percentage of households that are female-maintained exceeds the percentage that is *de jure* female-headed. This difference is quite pronounced for Costa Rica where twenty-five per cent of households were defined to be female-headed and forty-one per cent to be female-maintained in 1996. In general, per capita household income is less for female-headed and maintained households than it is for their male-headed and male-maintained counterparts. In El Salvador this difference lessens when we compare the female and male-maintained households with female and male-headed households. In Costa Rica, the opposite is true. Female-maintained households are poorer than female-headed households and the difference in per capita income is greater between male and female-maintained households than between male and female-headed households. Economic and demographic dependency ratios are consistently lower for both female-headed and female-maintained households than for male-headed and male-maintained households in both Costa Rica and El Salvador. In both countries, the dependency ratios have decreased over the period

⁹ This differs from other definitions of female-maintenance in that all income from all household members is considered, it is possible therefore, that a household may be female maintained with income from several women, or merely one.

reflecting that the number of dependents has decreased while the number of employed adults has increased.¹⁰

Table 6. Comparison of De Jure Headship and De Facto Maintenance for Costa Rica

Costa Rica¹ (1991 Colones)² Year	De Jure Female-headed		De Jure Male-headed		Female-maintained		Male-maintained	
	1991	1996	1991	1996	1991	1996	1991	1996
Per cent of Households	24	25	76	75	44	41	56	59
Average Per Capita Income	8,803.80	11,615.79	10,456.71	14,075.47	6,742.52	9,703.24	12,780.08	16,068.01
Economic Dependency Ratio	1.64	1.29	2.32	1.93	1.97	1.45	2.26	1.91
Demographic Dependency Ratio	0.68	0.60	0.68	0.57	0.71	0.62	0.66	0.56

Source: Household Survey data, Ministry of Planning, Costa Rica

¹ Urban areas only

² Real 1991 colones the consumer price index: 1996 CPI=126.25 , 1991 = 57.45 (1995=100)

¹⁰ In El Salvador some of the decrease in the economic dependency ratios for both female-headed and female-maintained households is also due to outmigration in addition to increased labor force participation (Gammage 1997, Montes 1989).

Table 7. Comparison of De jure Headship and De Facto Maintenance for El Salvador

El Salvador¹ (1989 Colones)² Year	De Jure Female-headed		De Jure Male-headed		Female-maintained		Male-maintained	
	1989	1995	1989	1995	1989	1995	1989	1995
Per cent of Households	31	31	69	69	36	37	64	63
Average Per Capita Income	308.04	451.05	369.41	473.72	331.03	455.86	361.89	473.06
Economic Dependency Ratio	1.58	0.87	1.91	1.53	1.55	1.00	1.95	1.51
Demographic Dependency Ratio	0.88	0.69	0.74	0.68	0.88	0.73	0.73	0.65

Source: Household Survey data, Ministry of Planning, El Salvador

¹ Urban areas only

² Real 1989 colones deflated by the consumer price index: 1995 CPI= 135.94, 1989 = 65.92 (1992=100)

The demographic and economic dependency ratios in female-maintained and female-headed households are indicative of the constraints these households face in generating income and in being absorbed into the labour market. Although economic dependency ratios are lower for female-headed and female-maintained households the demographic dependency ratios are often higher than those for their male-maintained and male-headed counterparts. Female-maintained households often face significant household labour constraints that may limit their productivity and their ability to enter the labour market. In particular, female-maintained households in rural areas have fewer adults over the age of fifteen, and higher demographic dependency ratios. This would indicate that there is little labour fungibility and that fewer adult labourers can be brought into temporary economic activity or be assigned to undertake time intensive tasks. Women under the age of twenty-five often face demographic constraints that limit their labour market participation or confine them to part-time or temporary work in the service and informal sectors (Gammage 1997). Caring for a number of children under the age of five significantly changes work preferences and the ability to enter the labour market.¹¹ Such

¹¹ Participation rates for women aged fifteen to twenty-four in Latin America and the Caribbean are consistently lower than those for women aged between twenty-five and forty-nine (CEPAL 1995). Labor force participation rates are also consistently lower for women aged between fifteen and twenty-four in countries where total fertility

reproductive burdens also alter the opportunity set available to these women. Unless child-care is available, or friends and relatives can be drawn upon to care for young children, many young women with children may have to rely on intermittent, temporary and often insecure employment in the informal sector.

The numbers of female-headed and female-maintained households vary by income group and by poverty status or income threshold. Table 8 shows the proportion of female-headed and female-maintained households by different measures of poverty. It is interesting to note that the concentration of female-maintained households among the poor and extremely poor increases above their representation in the total sample. This would imply that female-maintained households are over-represented in the population of poor households in the sample. Furthermore, the proportion of female-maintained households among the poor and extremely poor appears to be rising in both urban and rural areas, although the increment is more dramatic in rural areas.

The comparison of female-headed and female-maintained households yields broadly similar results in urban El Salvador where both female-headed and female-maintained households are decreasing as a proportion of the urban poor. Female-maintained households, however, are increasing as a proportion of the extreme poor in urban areas of El Salvador whereas female-headed households are not. Among the rural poor there is a marked difference between the trends of female-headed households and female-maintained households. In Costa Rica, female-headed households appear to be increasing slightly as a proportion of the urban poor and extreme poor, while female-maintained households remain a constant proportion of the poor and extreme poor. Among the rural poor and extreme poor the concentration of female-headed households is increasing, while that of female-maintained households is decreasing. Female-maintained households are, however, over-represented among the poor and extremely poor in both Costa Rica and El Salvador.

rates remain high or have not experienced a continual drop since the mid '80s, as well as in rural areas where fertility rates are comparatively higher than in urban locations (World Bank 1997).

Table 8. Proportion of Female-headed and Female-maintained Households Among the Poor and Extremely Poor¹²

El Salvador	<u>1989</u>		<u>1993</u>		<u>1995</u>	
	Female-headed	Female-maintained	Female-headed	Female-maintained	Female-headed	Female-maintained
Urban						
All Urban Households	0.31	0.36	0.31	0.39	0.31	0.37
Poor (US\$60 ppp)	0.32	0.37	0.32	0.40	0.31	0.38
Poor: Basket of Goods	0.34	0.39	0.32	0.40	0.31	0.38
Extremely Poor: Basket of Goods	0.36	0.43	0.34	0.47	0.35	0.48
Rural						
All Rural Households			0.23	0.30	0.23	0.40
Poor (US\$60 ppp)			0.21	0.29	0.21	0.41
Poor: Basket of Goods			0.20	0.30	0.21	0.43
Extremely Poor: Basket of Goods			0.20	0.33	0.17	0.53

Source: Multiple Purpose Household Survey, Ministry of Planning, 1989, 1993, 1995

Table 8. continued...

Costa Rica	<u>1991</u>		<u>1996</u>	
	Female-headed	Female-maintained	Female-headed	Female-maintained
Urban				
All Urban Households	0.24	0.45	0.25	0.41
Poor (US\$60 ppp)	0.29	0.77	0.32	0.82
Poor: Basket of Goods	0.30	0.75	0.31	0.75
Extremely Poor: Basket of Goods	0.30	0.89	0.31	0.89
Rural				
All Rural Households	0.15	0.29	0.17	0.27
Poor (US\$60 ppp)	0.18	0.46	0.21	0.47
Poor: Basket of Goods	0.19	0.53	0.22	0.51
Extremely Poor: Basket of Goods	0.19	0.74	0.24	0.73

Source: Multiple Purpose Household Survey, Ministry of Planning, 1991, 1996

Table 8 reveals that female-maintained households are disproportionately represented among the poor and extremely poor in both urban and rural areas in Costa Rica and El Salvador. This finding may, however, be sensitive to where, and at what level the poverty lines are drawn. In order to verify that these households are unambiguously worse-off, we would need to apply a

¹² These conclusions are based on estimates of poverty using the Psacharopoulos poverty lines in Mejia and Vos 1997 and differ from those applied in each of the respective country studies.

stochastic dominance test.¹³ Stochastic dominance tests reveal that the cumulative distribution functions for income per capita in female-maintained households lie strictly above those for male-maintained households up to a poverty maximum in both Costa Rica and El Salvador. This means that poverty is indeed unambiguously greater in female-maintained than in male-maintained households. This can be seen graphically in Figure 1. The cumulative distribution of income per capita in female maintained households lies strictly above that for male maintained households in Costa Rica in 1996 at all income ranges. In El Salvador, however, the cumulative income distributions intersect at levels above 750 colones per person per month. Since the upper bound on poverty set by the Ministry of Economy is 631 colones per month, we can conclude that female-maintained households are strictly worse-off than their male-maintained counterparts in 1995.

To motivate this over-representation of female-maintained households among the poor, the economic and demographic characteristics of female-maintained households that might be correlates of poverty need to be explored. This definition of female maintenance using the gender portfolio of income captures households whose income base may be shifting from male to female earners for the following reasons:

- (i) male income earners have become unemployed, retired, disabled, or their source of primary employment is no longer available to them;
- (ii) male (and female) income earners have out-migrated and the household is more likely to be in receipt of domestic or foreign remittances;
- (iii) there are no (few) male income earners and the household has always been sustained by female income.

¹³ Stochastic dominance tests allow us to rank the income or consumption distributions continuously in order to determine which distribution is strictly better for a given subgroup: it lies anywhere above and nowhere below the distribution for the other subgroup or subgroups. The first-order stochastic dominance condition holds that a cumulative distribution function (cdf) $F_1(x)$ dominates cdf $F_2(x)$ when for *all* monotone nondecreasing functions $\alpha(x)$:

Female-maintained households from categories (i) and (iii) are likely to be the poorest and it may be that it is these households which are increasingly being represented among the poor and extremely poor. Households from category (ii) may be lifted out of poverty by their receipt of remittances and may demonstrate a greater propensity to invest in human capital formation. While households from categories (i) and (ii) may demonstrate different propensities to be poor and to invest in physical, financial and human capital, they may share similar probabilities of exiting poverty. It is category (iii), therefore, that is most likely to be poor and to remain poor.

It is clear from the analysis of headship and maintenance in Costa Rica and El Salvador that headship is not sufficient as a proxy for those gender characteristics that are likely to predispose households to poverty. One reason for this may be that headship is a noisy indicator of gender attributes that summarize such a predisposition to poverty: some households that are female-headed are not female-maintained and other households that are male-headed are not male-maintained. In El Salvador in 1995, fifty-three per cent of female-maintained households were also female-headed and in Costa Rica in 1996, only forty-eight per cent of female-maintained households were also female-headed. This means that a substantial portion of female-maintained households in El Salvador and Costa Rica are also male-headed and vice-versa. Tables 9 and 10 present the number of female-headed households that are male maintained and vice versa for both Costa Rica and El Salvador for the periods under study. In 1995, twenty-eight per cent of all female-headed households were male-maintained and forty-seven per cent of all male-headed households were female-maintained in El Salvador. In 1996 in Costa Rica, twenty-three per cent of all female-headed households were male-maintained and twenty-two per cent of all male-headed households were female maintained. It may be that headship fails to act as a sufficient filter for the underlying determinants of poverty and that it is for this reason that the debate about headship and poverty remains heated and inconclusive.

$\int \mathbf{a}(x)dF_1(x) \geq \int \mathbf{a}(x)dF_2(x)$, where the integral is taken over all x . See Deaton 1997.

Table 9. The Non-Exclusivity of Female Headship and Maintenance in El Salvador, 1989-1995

Percentages

	Female-Headed		Male Headed		Row Totals in Parentheses	
	1989	1995	1989	1995	1989	1995
Female-Maintained	82 (69)	72 (53)	16 (31)	25 (47)	(100)	(100)
Male-Maintained	18 (8)	28 (12)	84 (92)	75 (88)	(100)	(100)
Column Total	100	100	100	100		

Source: Multiple Purpose Household Survey data, 1989, 1993, 1995

Table10. The Non-Exclusivity of Female Headship and Maintenance in Costa Rica, 1991-1996

Percentages

	Female-Headed		Male Headed		Row Totals in Parentheses	
	1991	1996	1991	1996	1991	1996
Female-Maintained	78 (41)	77 (48)	27 (59)	22 (52)	(100)	(100)
Male-Maintained	22 (7)	23 (7)	73 (93)	78 (93)	(100)	(100)
Column Total	100	100	100	100		

Source: Multiple Purpose Household Survey data, 1991, 1996

A multivariate analysis of the determinants of poverty and extreme poverty provides particular insights into the application of the different definitions of female-headed and female-maintained households. The following logistic model of the determinants of poverty were estimated for both Costa Rica and El Salvador:

$$P_h = f(d_h, y_h, \mathbf{y}_h, u_h, L_{hh}, E_{hh}, C)$$

Where:

- P_h - (0, 1) $P_h = 1$ if the household is poor, or extremely poor
- d_h - The number of economic dependents
- y_h - The number of income earners
- \mathbf{y}_h - (0, 1) $\mathbf{y} = 1$ if the household is *de jure* female-headed or *de facto* female-maintained
- u_h - The number of male unemployed
- L_{hh} - (0, 1) $L_{hh} = 1$ if the household head is in the labour force

- E_{hh} - The education of the household head
- C_h - (0, 1) $C_h = 1$ if the household is located in a former conflictive zone (El Salvador only)

Tables 11-14 give the regression results for the determinants of poverty using the Basic Food Basket approach for El Salvador and Costa Rica. The results demonstrate that both headship and maintenance influence the probability of a household being poor, with maintenance having a greater influence on the likelihood of a household being extremely poor in El Salvador and both poor and extremely poor in Costa Rica.

In El Salvador in 1989, the *de jure* definition of female headship was a stronger determinant of urban poverty than was female maintenance. Table 11 reveals that being a female-headed household in urban areas increased the probability of that household being poor by almost twelve percentage points controlling for other factors in the regression. In both 1989 and 1995, however, maintenance is a stronger determinant of extreme urban poverty. Comparing the specifications for poverty and extreme poverty in urban areas between 1989 and 1995 also reveals that the importance of female maintenance increases over time as a determinant of extreme poverty. By 1995, female-maintained households in urban areas are more likely to be poor and extremely poor than their female-headed counterparts. It is interesting to note that the sign of the coefficient of *de jure* headship in rural areas is negative but insignificant, implying that *de jure* female-headed households are less likely to be extremely poor (Table 10). Conversely, whether a household is female-maintained, is a strong positive determinant of both poverty and extreme poverty in rural areas. In Costa Rica whether a household is female-maintained has a strong influence on the probability of that household being poor and extremely poor in rural and urban areas. Female-maintained households are more likely to be among the urban poor with the marginal effect registering a large probability increment of more than thirty percentage points in 1991 and 1996.

The results presented in tables 11 and 12 provide further evidence that the income portfolio approach captures the complexity of household employment and incomes strategies, particularly among households in extreme poverty. Poor households employ multiple strategies to

overcome income shortfalls and to respond to economic necessity. An explanatory variable that reflects the portfolio of income and the sex of income earners appears to provide a more robust indicator of the gender characteristics that predispose a household to poverty.

The different specifications for El Salvador and Costa Rica provide evidence of other factors that influence the probability of a household being poor or extremely poor. These factors relate to, or are mediated by the prevailing macro-economic conditions. The number of economic dependents, the labour market participation of household members, and the receipt of remittances are household characteristics that demonstrate the degree of inclusion or exclusion from the local economy. The net effect upon the probability of a household being poor or whether the household head declares primary employment in the agricultural sector may cast light on dualism between modern and traditional sectors. The influence that the level of education of the household head exerts over the probability of a household being poor may also motivate a role for public policy in the provision of education opportunities.

In El Salvador the importance of remittances for mitigating poverty is salient. In all specifications for urban poverty and extreme poverty in 1989 remittances have a strong negative impact on the likelihood of a household being poor or extremely poor. By 1995, however, the impact of remittances has diminished, being only slightly negative for poor urban households and neither negative nor significant for extremely poor urban households. In the case of rural households, however, remittances have a strong positive impact on the likelihood of being extremely poor. This may reveal more about the push factors that drive migration than the poverty mitigating properties of remittances. Since only two per cent of the rural poor in El Salvador are in receipt of remittances it is very likely that what we are observing is the impact of poverty on out-migration and that the variable is endogenous. This analysis lends further weight to the hypothesis that remittances lift households out of poverty and therefore out of our sample.

The change in the relative weight of the coefficients also indicates some general tendencies in the Salvadoran economy. Whether the primary economic activity of the *de jure* household head is in agriculture decreases in importance as a determinant of poverty and extreme poverty in

urban areas over the period 1989 to 1995. The percentage of households whose heads declare that their primary economic activity is agriculture in rural areas is extremely low compared with that of urban areas. It is likely, therefore, that this variable is proxying land ownership and that the landless, although they may be seasonal agricultural labourers, are less likely to declare that this is their primary economic activity.¹⁴

In El Salvador the impact of macroeconomic reform and stabilization may be somewhat eclipsed by the end of civil war in 1992 and the large flows of aid and remittances that have entered the economy since the mid 80s (Acevedo, Barry and Rosa 1995; Boyce 1995, CEPAL 1993; Segovia 1997; Wood and Segovia 1995). The conflict variable captures whether the household is located in a former conflictive department of El Salvador. The size of the coefficient on this variable decreases for estimates of the determinants of urban poverty between 1989 and 1995. This would support the belief that a combination of repressed demand, often referred to as the 'peace dividend', and Keynesian stimuli generated by targeted disbursements under the Reconstruction Plan (PRN) may be operating in the urban areas of former conflictive zones to lift households out of poverty. Although rural data for 1989 are lacking, a comparison of rural and urban regressions for poverty and extreme poverty in 1995 reveal that the coefficient on the conflict variable increases for both the extreme rural and urban poverty. This may imply that the extreme poor are falling through the security net provided by the PRN and the Social Investment Fund (FIS) in the former conflictive zones. An analysis of the poverty profiles for the departments indicates that female-maintained households comprise the majority of the extremely poor in urban areas of Morazán, San Vicente and Cabañas. Indeed, in Morazán seventy-seven per cent of the extreme urban poor are households that are female-maintained. In rural areas of Chalatenango and Cabañas over sixty per cent of households in extreme poverty are female-maintained in 1995 (Gammage 1997).

The regressions for Costa Rica also strongly support the conclusion that female maintenance is a better indicator of a predisposition to poverty than is *de jure* headship. In all cases, for both rural

¹⁴ It is possible that a number of landless laborers who engage in agricultural activities have been categorised as working in construction and services in rural areas, largely because they perform multiple tasks and seek any available employment opportunities.

and urban specifications of poverty and extreme poverty, the coefficient on the *de facto* maintenance variable exceeds that for *de jure* headship. A puzzling result, however, is that almost none of the headship or maintenance variables are significant for extreme urban poverty in 1996. Indeed, the intersection of headship and maintenance depresses the likelihood of a household being extremely poor, controlling for all other factors (Table 10). The signs and magnitudes of the headship and maintenance variables, however, remain constant across all specifications. An F test of the significance of the headship and maintenance terms rejects the hypothesis that the coefficients are both zero at the five per cent level.

The coefficient on whether the *de jure* household head declares his or her primary economic activity to be in agriculture increases the likelihood of that household being poor in rural areas in Costa Rica in 1991 and 1996, although the size of the coefficient decreases over this period. This may reflect the beginnings of the reactivation of traditional domestic agriculture, which had lagged significantly behind the modern agricultural sector in terms of sectoral growth over the decade of the 80s. Sauma and Garnier report that fifty per cent of poor households' *de jure* heads were employed in agriculture in 1987, this figure falls to forty-seven per cent by 1996 (Sauma and Garnier 1997).

Table 11. The Comparison of Female Headship and Maintenance as a Determinant of Urban Poverty

Independent Variable	Probability of Being Among the Urban Poor			Probability of Being Among the Urban Extreme Poor ²		
	Logit Coefficient	Variable Mean ¹	Marginal Effect (Per cent)	Logit Coefficient	Variable Mean ¹	Marginal Effect (Per cent)
El Salvador						
1989						
mean of dependent variable		52.09			20.88	
female-headed household	0.462 **	34.47	11.53	0.251 **	35.57	4.16
female-maintained household	0.341 **	38.57	8.51	0.455 **	42.79	7.55
female-headed and female-maintained	0.360 **	27.97	8.99	0.618 **	29.81	10.25
1995						
mean of dependent variable		45.31			17.34	
female-headed household	0.238 **	31.22	5.89	0.462 **	35.19	6.52
female-maintained household	0.331 **	38.20	8.19	0.738 **	48.40	10.41
female-headed and female-maintained	0.042	23.63	--	0.821 **	29.17	11.58
Costa Rica						
1991						
mean of dependent variable		34.45			24.10	
female-headed household	0.674 **	29.72	15.12	0.149	30.32	--
female-maintained household	1.638 **	75.39	36.76	1.102 **	88.86	20.10
female-headed and female-maintained	1.268 **	27.44	28.45	-0.426	28.60	--
1996						
mean of dependent variable		26.58			17.86	
female-headed household	0.577 **	31.19	11.37	0.277	30.98	--
female-maintained household	1.540 **	74.55	30.35	0.306	89.11	--
female-headed and female-maintained	1.322 **	28.49	26.06	-1.206 *	29.37	-17.80

¹ Variable means for shares are expressed in per cent terms

² conditional weighted logits

Table 12. The Comparison of Female Headship and Maintenance as a Determinant of Rural Poverty

Independent Variable	Probability of Being Among the Rural Poor			Probability of Being Among the Rural Extreme Poor ²		
	Logit Coefficient	Variable Mean	Marginal Effect (Per cent)	Logit Coefficient	Variable Mean	Marginal Effect (Per cent)
El Salvador						
1989						
mean of dependent variable	n/a	n/a	n/a	n/a	n/a	n/a
female-headed household	n/a	n/a	n/a	n/a	n/a	n/a
female-maintained household	n/a	n/a	n/a	n/a	n/a	n/a
female-headed and female-maintained	n/a	n/a	n/a	n/a	n/a	n/a
1995						
mean of dependent variable		66.09			16.33	
female-headed household	-0.026	20.55	--	-0.212	17.41	--
female-maintained household	0.428 **	42.65	9.60	0.799 **	52.95	10.74
female-headed and female-maintained	0.498 **	14.55	11.18	0.824 **	13.98	11.07
Costa Rica						
1991						
mean of dependent variable		36.26			22.54	
female-headed household	0.700 **	18.71	16.13	0.088	18.97	--
female-maintained household	1.496 **	53.07	34.47	1.449 **	73.51	25.66
female-headed and female-maintained	1.171 **	15.55	26.98	0.744 *	17.32	13.18
1996						
mean of dependent variable		28.67			16.71	
female-headed household	0.393 **	21.85	8.09	0.234	24.07	--
female-maintained household	1.297 **	51.19	26.71	1.505 **	72.84	21.24
female-headed and female-maintained	1.220 **	18.89	25.12	0.748 *	22.37	10.55

¹ variable means for shares expressed in per cent terms

² conditional weighted logits

Table 13. The Determinants of Poverty in El Salvador

EL SALVADOR						
Selected Independent Variable ³	Probability of Being Among the Urban Poor			Probability of Being Among the Urban Extreme Poor ²		
	Logit Coefficient	Variable Mean ¹	Marginal Effect (Per cent)	Logit Coefficient	Variable Mean ¹	Marginal Effect (Per cent)
1989						
number of income earners	-0.759 **	1.63	-18.94	-0.739 **	1.51	-12.26
number of dependents	0.817 **	3.68	20.39	0.439 **	4.29	7.28
female-maintained household	0.341 **	38.57	8.51	0.455 **	42.79	7.55
number of males unemployed	0.458 **	0.12	11.43	0.259 *	16.03	4.30
receipt of remittances	-1.720 **	9.00	-42.93	-1.622 **	6.24	26.91
primary activity of the household head is agriculture	0.852 **	12.91	21.27	1.298 **	20.46	21.53
household head is in the labour force	-0.664 **	73.33	-16.57	-0.690 **	67.45	-11.45
household is in a conflictive zone	0.485 **	17.48	12.11	0.441 **	24.30	7.32
Chi square (k)	3060 (15)			864 (15)		
N	5775			3204		
1995						
number of income earners	-0.267 **	1.86	-6.60	-0.626 **	1.46	-8.83
number of dependents	0.674 **	2.96	16.68	0.391 **	3.54	5.52
female-maintained household	0.331 **	38.20	8.19	0.738 **	48.40	10.41
number of males unemployed	0.607 **	9.90	15.02	0.412 **	13.12	5.81
receipt of remittances	-0.359 *	5.94	-8.89	0.068	2.27	--
primary activity of the household head is agriculture	0.240 *	10.88	5.94	-0.040	8.81	--
household head is in the labour force	0.156	79.42	--	-0.248	75.85	--
household is in a conflictive zone	0.257 *	15.52	6.36	0.334 *	21.86	4.71
Chi square (k)	2219 (15)			674 (15)		
N	4955			2413		
Probability of Being Among the Rural Poor						
Probability of Being Among the Rural Extreme Poor ²						
1989						
number of income earners	n/a	n/a	n/a	n/a	n/a	n/a
number of dependents	n/a	n/a	n/a	n/a	n/a	n/a
female-maintained household	n/a	n/a	n/a	n/a	n/a	n/a
number of males unemployed	n/a	n/a	n/a	n/a	n/a	n/a
receipt of remittances	n/a	n/a	n/a	n/a	n/a	n/a
primary activity of the household head is agriculture	n/a	n/a	n/a	n/a	n/a	n/a
household head is in the labour force	n/a	n/a	n/a	n/a	n/a	n/a
household is in a conflictive zone	n/a	n/a	n/a	n/a	n/a	n/a
1995						
number of income earners	-0.401 **	1.48	-9.00	-0.938 **	1.10	-12.61

EL SALVADOR Selected Independent Variable ³	Probability of Being Among the Urban Poor			Probability of Being Among the Urban Extreme Poor ²		
	Logit Coefficient	Variable Mean ¹	Marginal Effect (Per cent)	Logit Coefficient	Variable Mean ¹	Marginal Effect (Per cent)
number of dependents	0.707 **	4.00	15.87	0.425 **	4.58	5.71
female-maintained household	0.428 **	42.65	9.60	0.779 **	52.95	10.47
number of males unemployed	0.387 #	6.15	8.68	0.650 **	7.03	8.74
receipt of remittances	-0.132	4.00	--	3.005 **	2.11	40.39
primary activity of the household head is agriculture	-0.351	2.90	--	-0.327	1.91	--
household head is in the labour force	-0.128	82.74	--	-0.156	84.11	--
household is in a conflictive zone	0.393 **	28.32	8.82	0.411 **	32.55	5.52
Chi square (k)	1815 (13)			872 (13)		
N	3527			2374		

Conclusions and Policy Recommendations

The comparison of the poverty profiles for the different countries casts lights upon the gender factors that might influence poverty in Latin America and the Caribbean. Although Chile and the Dominican Republic clearly represent two of the few success stories where both overall poverty and the numbers of female-headed households in poverty have been reduced, there remain some concerns about the extent and severity of poverty among female-headed households that deserve further mention. The Foster Greer Thornbecke measure of the severity of poverty P2, which provides a weighted sum of poverty gaps as a proportion of the poverty line (where the weights are the proportionate poverty gaps for each household) would indicate that poverty is more severe for female-headed than male-headed households in both countries even though the gap may be closing in the Dominican Republic. Furthermore, in Chile for the majority of regions in 1987 and 1994, demographic dependency ratios are higher for female-headed than male-headed households. This would imply that these households may require highly targeted and focused measures to increase the levels of economic participation of adult members and to improve the terms and conditions of their employment (Appleton and Collier 1992; Buvinic and Gupta 1997). It is interesting to note that female household heads in the labour force in Chile are at least as well educated if not marginally better educated than their male counterparts, with an average of 10.18 years of education as compared to 9.88 for male household heads. Since persistent wage differentials exist between men and women in the labour force in Latin America who have the same level of education, it would seem that education alone is not the sole policy instrument required to raise wages and improve the returns to female labour (Arriagada 1994).

The case studies reveal that *de jure* female-headed households are only over-represented among the poor in six out of the fourteen countries studied in this volume. In Bolivia, Colombia, Costa Rica, El Salvador and Paraguay where the overall trend is toward poverty reduction, it might be that female-headed households are lagging behind male-headed households in experiencing the per capita income improvements from growth and the expansion of higher-return employment opportunities. In Argentina and Mexico, where poverty is increasing, the number of

female-headed households among the poor is less than the overall number of such households in the total population. The poor in Argentina and Mexico are largely in male-headed households in rural areas, whose principal income earners are in the informal sector or who have become unemployed. It is possible that employing a maintenance definition of headship, we may discover that many of these households are currently female-maintained. Certainly, the evidence of economic dislocation and dualism would reinforce that these households operate on the margins of the economy and have little opportunity to transform their productive activities and increase their earnings potential. It is clear from the individual country case studies, that policymakers should pay careful attention to the composition of the poor to identify characteristics that may predispose a household to poverty and incorporate such characteristics in the design of programs to address poverty, target transfers and improve the terms and conditions of employment for adult household members.

The expanded economic definition of *de facto* female maintenance provides both a policy tool and a methodological precedent for departing from a simple headship analysis of the household determinants of poverty. The income portfolio approach defines male and female-maintained households independent of whether they are *de jure* male or female-headed and highlights the complexity of income generation in each household. The characteristics of a single household head are not imposed upon that household as a sufficient descriptor of that household's predisposition to poverty. Policymakers may usefully employ the maintenance criterion to capture the gender dimensions of poverty and inequality and in order to motivate policies and programs to mitigate poverty, improve the terms and conditions of employment and ultimately raise household incomes. The unique macroeconomic, structural and social conditions that influence the probability of a household being female-maintained should inform these policies and programs. The policy recommendations are very different in the case where the majority of poor households are female-maintained because male income earners have lost employment or because household members have out-migrated and the household is in receipt of remittances. The potential to harness income flows, channel any available surplus and promote savings and investment are very different in each of these cases.

The data from El Salvador and Costa Rica underscore that female maintenance is a better criterion for identifying the gender characteristics that predispose households to poverty. The analysis shows that female-maintained households are more likely to be extremely poor than their male-maintained counterparts and are over-represented in the lowest income deciles in both countries. In absolute terms, forty-eight per cent of those households in extreme poverty in urban and fifty-three per cent in rural areas of El Salvador were female-maintained in 1995. In Costa Rica in 1996, eighty-nine per cent of the extreme poor in urban areas and seventy-three per cent in rural areas were female-maintained. Remittances are particularly important for female-maintained households in El Salvador and may lift many of these households out of poverty.¹⁵ The sustainability of the income stream depends acutely on the residency status of remitting individuals in the host countries as well as their duration of residency. As legal residents form their own households in the host country and illegal residents return, it may be expected that the receipt of remittances will dwindle (Funkhouser 1997; Tcha 1996; Montes 1989). As remittances decline, many female-maintained households may fall below the poverty line. Given the vagaries of immigration policy in many of the host countries, wage arbitrage may not prove to be a consistently reliable strategy to alleviate poverty and capture foreign exchange. Despite the obvious labour and demographic constraints that female-headed and female-maintained households demonstrate, different endowments of cash reserves, dollar remittances, asset holdings, physical and financial capital may present opportunities for targeting service delivery and transforming the income portfolio of these households. Certainly in El Salvador, where a greater proportion of female-headed and female-maintained households are in receipt of remittances the possibility exists to provide formal sector banking facilities and to channel these cash flows into productive investments (Gammage 1997; Velado 1992; Montes 1989).

¹⁵ Remittances may cushion many households against poverty in Latin America and the Caribbean. Remittances in 1992 in the Dominican Republic and Jamaica were approximately US\$345 million and US\$248 million, accounting for almost sixty-one per cent and twenty-four per cent of exports respectively (World Bank 1997). In Mexico, remittances totalled US\$3,705 million in 1994, approximately five per cent of total exports (FOB), with their distributional impact being disproportionately concentrated in a few states (de la Garza et al 1997). Although no estimates of the importance of these transfers for poor and extremely poor households appear in the case studies, it may be assumed that these transfers disproportionately accrue to both female-maintained and female-headed households in both countries.

The correlates of female maintenance may also cast light on those factors that cause households to become female-maintained. Households in El Salvador and Costa Rica are more likely to be female-maintained if males are unemployed or underemployed, or if the household head is over sixty-five years of age. The unemployment of males in a household increases the likelihood of that household being female-maintained by approximately thirteen percentage points in both El Salvador and Costa Rica (Gammage 1997). In El Salvador whether the household is located in a former conflictive zone and whether it is in receipt of remittances increases the likelihood of its being female-maintained by seven percentage points. This reveals that the collapse of economic opportunity for men may be felt more acutely in areas affected by the civil war, and that the only viable household response may be out-migration. In Costa Rica the receipt of state transfers also increases the probability of a household being female-maintained, whereas in El Salvador a household is less likely to be female-maintained if it is in receipt of state transfers. The fact that these variables influence the probability of a household being female-maintained indicate that the same forces that contribute to the economic dislocation of primary income earners also increase the probability of a household being female-maintained.

Since the majority of extremely poor households in Costa Rica and El Salvador are female-maintained, often sustained by more than one income, it may be necessary to target women's productive activities providing a combination of training, financial and non-financial services to these households. Where female-maintained households are a transitional feature of male unemployment and economic dislocation, attention also should be paid to regions where male unemployment and underemployment have increased dramatically during the adjustment period. Targeting the unemployed may prove to be an effective strategy to reduce temporary shortfalls in household income and to ensure that transfers reach those female-maintained households most likely to fall into transitional poverty. The transformation of rural employment may prove the key to resolving income disparities between the rural and urban areas and between male-maintained and female-maintained households. Unless physical infrastructure is laid down in rural areas, communications are improved, and educational opportunities upgraded, the failure to

expand rural employment opportunities and upgrade human capital may consign El Salvador and Costa Rica to low return, low productivity and low income growth in rural areas.

Policy should be driven by a careful analysis of the determinants of poverty, incorporating gender factors, sectoral attachment and human capital variables. Careful consideration should also be paid to economic and demographic dependency as an indicator of vulnerability to poverty and an inability to respond to incentives. In poor households where there has been a consistent attrition of income earners and where demographic dependency ratios are also high, individuals are often unable to upgrade human capital or to switch into higher return productive activities. A thorough and rigorous analysis of the determinants of poverty highlights those characteristics that unite the poor and draws attention to the need to intervene in markets or provide institutional support for individuals and households. Such an analysis should include a gender component as many of the constraints that limit the transition to higher return activities have a specific and well-documented gender dimension.

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