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Poverty and Headship in Post-Apartheid South Africa, 1997-2006

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Poverty and Headship in Post-Apartheid South Africa, 1997-2006

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Abstract

In this paper, I investigate the characteristics and poverty status of female- and male-headed households in South Africa using nationally representative household survey data collected from 1997 to 2006. Over the decade, an increasing proportion of all households were headed by women. The study examines the characteristics of female and male heads, whether these have changed over time and the key features which distinguish male- and female-headed households. I then compare poverty risks both between female- and male-headed households, and among these broad household types.

Key words: female-headed households; poverty; South Africa

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1. Introduction

The difference in poverty rates between male-headed households (MHHs) and female-headed households (FHHs) has been at the core of gendered poverty studies in the international development literature over the past several decades (Medeiros and Costa, 2007; Moghadam, 2005). Despite well established concerns about the use of headship as an analytical category (Baden, 1999; Budlender, 2005; Chant, 2003b; 2006; Moultrie and Timaeus, 2001), a number of studies (summarised in Buvinic and Gupta, 1997; Lampietti and Stalker, 2000), particularly in developing countries, have investigated the economic well-being of female-headed households relative to male-headed households. On the whole, these studies have enforced the widely-held belief that female-headed households, in many contexts, are over-represented among the poor.

In South Africa, recent work (Bhorat and van der Westhuizen, 2008; Posel and Rogan, 2009a; 2009b) has demonstrated that female-headed households are, on average, poorer than male-headed households and that the difference in poverty rates between these broad household types widened during the post-apartheid period. For example, in 1997, approximately 67 per cent of female-headed households were poor compared to only 38 per cent of male-headed households. Over the period, poverty rates fell among both household types, but the decrease was absolutely and relatively larger among male-headed households. The gap in poverty rates therefore widened between male- and female-headed households from 1997 to 2006 (Posel and Rogan, 2009b). Moreover, over this period, the percentage of households that were female-headed increased slightly, but significantly (Bhorat et al., 2006; Posel and Rogan, 2009b).[2]

In this paper, I further investigate the characteristics and poverty status of female- and male-headed households in South Africa using nationally representative household survey data collected from 1997 to 2006. In the first part of the paper, I explore the characteristics of female and male heads of household and whether these have changed over time. I also identify key features which distinguish male- and female-headed households, and I investigate the nature of differences within these broad household groupings. In the second part of the paper, I consider poverty risks among all household types and within both male- and female-headed households.

The remainder of the paper is structured as follows. Section 2 briefly reviews the international literature on female headship and poverty. In section 3 I describe the data sources that I use to explore headship and vulnerability to poverty in South Africa. Section 4 explores the demographic and labour market characteristics of male- and female-headed households. Section 5 then identifies the risks of poverty in a multivariate context and explores the heterogeneity of female- and male-headed households.

[2] The percentage of households that are female-headed, for example, increased from 35.2 per cent in 1997 to 37.5 per cent in 2006 (Posel and Rogan 2009b).

2. Review

A large body of existing work has demonstrated that, on average, there is a relationship between poverty and female headship in many countries. Out of 61 studies investigating the association between poverty and female-headed households in developing countries, 38 found female-headed households to be over-represented among poor households; 15 identified that poverty was associated with certain kinds of female-headed households or that a statistically significant relationship existed with specific types of poverty measures; and only eight reported no association between female headship and poverty (summarised in Buvinic and Gupta, 1997). Similarly, in poverty assessments undertaken by the World Bank (reported in Lampietti and Stalker, 2000), poverty was found to be higher for female-headed households than for male-headed households in 25 of 58 country studies. In a further ten countries, particular types of female-headed households were poorer than male-headed households.

The association between poverty and female headship, however, warrants qualification. Not all female-headed households are equally vulnerable to poverty and the risk of poverty often differs both by context and by a number of other household characteristics. Quisumbing and colleagues (1995), for example, analysed data from 11 countries and observed that, even though poverty measures were higher among female-headed households than among male-headed households in eight of the countries, the incidence of female-headed households below the poverty line varied significantly (even within regions). Moreover, those studies in developing countries that have found no association between female-headed households and poverty have often identified a range of other factors that have stronger associations with poverty than does headship (cf. Appleton, 1996; Medeiros and Costa, 2007). The marital status of the household head, in particular, is cited as being a better predictor of household wellbeing than the gender of the household head in many contexts (Appleton, 1996; Chant, 2007). The key message from this research is that female- and male-headed households are heterogeneous household types and poverty studies which do not disaggregate their findings by sub-groups of male- and female-headed households are likely to mask important differences in vulnerability to poverty within these broad household groupings (Buvinic, 1993; Buvinic and Gupta, 1997; Chant, 2007).

Several explanations have been put forward as to why female-headed households are more likely to be vulnerable to poverty than male-headed households. The development literature describes female-headed households as facing a ‘triple burden’ which includes: the head being a single earner; the earner being female and therefore facing labour market disadvantages; and time constraints due to commitments of managing the household and earning income (Buvinic and Gupta, 1997; Fuwa, 2000a: 128). In addition, work in a number of different settings has suggested that female-household heads face higher poverty risks because they are more likely to support dependents than their male counterparts, especially in developing country contexts (Moghadam, 2005).

In South Africa, several studies have demonstrated that female-headed households are relatively disadvantaged in terms of income (Budlender, 1997; Posel, 2001) and assets (Dungumaro, 2008), or are over-represented among the poor (Bhorat and van der

Westhuizen, 2008; Leibbrandt and Woolard, 2001; Posel and Rogan, 2009b; Ray, 2000). The characteristics of female-headed households which may make them more vulnerable to poverty, however, have received somewhat less attention.

In an earlier study, Posel (2001) used the 1993 Project for Statistics on Living Standards and Development (PSLSD) data, and found that female-headed households were more likely to be concentrated in the lower earnings brackets both because they contain fewer employed members and because of discrepancies between male and female earnings. The study did not, however, explore the association between headship and poverty. A more recent study by Dungumaro (2008) demonstrated that female-headed households in South Africa tend to be larger, more likely to have heads without employment, and have less access to basic services.

In this paper, I extend the research on female-headed households in post-apartheid South Africa both by investigating differences in the characteristics and economic wellbeing of female and male heads and the households in which they live, and by exploring heterogeneity in income poverty risks *within* the broad categories of male- and female-headed households.

3. Data and methods

The study makes use of data collected in the 1997 and 1999 October Household Surveys (OHSs) and the 2004 and 2006 rounds of the General Household Surveys (GHSs). The OHSs and the GHSs are selected because they consistently capture information on the receipt of both earned income and social grant income. I can therefore use these data to generate comparable measures of earned and social grant income over a ten-year period. In the OHSs and the GHSs (and almost all household surveys and censuses conducted in South Africa), the head of the household is the person identified as such by the household member who participates in the interview. A cursory examination of headship in these data suggests that headship is often associated with economic support in the household. In the OHSs and the GHSs, between 73 per cent and 82 per cent of self-identified household heads (in households that reported some level of income) earned or received the highest level of income in the household.[3]

In estimating poverty rates among male- and female-headed households I follow Hoogeveen and Özler (2005) in selecting R322 per capita monthly household income (in 2000 prices) as a plausible lower-bound poverty threshold for South African households. This poverty threshold allows for comparability with a number of other recent poverty studies (cf. Ardington et al., 2006; Bhorat and van der Westhuizen, 2008; Hoogeveen and Özler, 2005; Leibbrandt et al., 2006) as well as with earlier

[3] It is important to note, however, that the household head must meet the residency requirement set out in the instructions to the enumerators at the beginning of each questionnaire. So if, for example, the person identified as the head of the household did not stay in the household *for at least four nights on average per week during the last four weeks*, then no information on that individual is captured in the household roster. In such a case an individual in the household that meets the residency criteria and is identified as the 'acting head' is assigned headship status. From an analysis point of view, it is not possible to identify which household heads are actual heads or 'acting heads'. It is therefore also not possible to distinguish between households in which the head is resident or absent from the household.

work on gender, poverty and headship (Posel and Rogan, 2009a; 2009b). Poverty estimates are based on measures of income from the OHSs and GHSs that include both earned and social grant income. Where households do not report either earned or social grant income, I augment the income measure with household expenditure data.[4]

4. The characteristics of male- and female-headed households

In this section, I first describe differences in the average characteristics of male- and female-headed households. I consider particularly those characteristics which could account for why female-headed households are, on average, more at risk of poverty than male-headed households in South Africa. These characteristics include: the membership composition of households, access to earned income (and earned income from male employment in particular), and the marital and employment status of the household head (see Buvinic and Gupta, 1997; Fuwa, 2000b).

4.1 Demographic characteristics of male- and female-headed households

The average female-headed household differs from the average male-headed household in both household size and household composition. Female-headed households tend to be larger than male-headed households. Furthermore, and as Table 1 demonstrates, the ratio of non-working age household members to working age household members is far higher in female-headed households (1.23 in 1997) than in male-headed households (.71 in 1997). Moreover, although household size decreased over the period, the difference in these demographic dependency ratios widened, with working age adults in female-headed households residing with twice as many non-working age household members (compared with male-headed households) by 2006.

Much of the work on female headship in developing countries (cf. Dungumaro, 2008; Kossoudji and Mueller, 1983) has suggested that the main disadvantage faced by female-headed households is the greater prevalence of 'incomplete households' or 'missing males'.[5] Certainly differences in marital rates between female and male heads, detailed in Table 1, help account for why demographic dependency ratios are higher, and have become relatively more so, in female-headed households in South Africa. Whereas the majority of male heads are married or cohabiting with a partner, this is the case for less than a third of female heads. Furthermore, although marriage or cohabitation rates declined significantly among both male and female heads, the fall was relatively larger among women. From 1997 to 2006, the percentage of male heads that were married or co-habiting[6] decreased from 83.9 per cent to 70.5 per cent (a 16.1 per cent fall) whereas among female heads it declined from 30.8 per cent to

[4] For a fuller discussion of the measure of income derived from the OHSs and GHSs, see Posel and Rogan (2009a).

[5] This work often carries the assumption that these missing men are potential primary breadwinners and that, as a result, female-headed households are predisposed to poverty since they are less likely to have a source of male income.

[6] Married and co-habiting adults were combined into the same marital category in order to derive a comparable variable for marital status across the OHSs and GHSs.

22.5 per cent (a relative fall of 26.97 per cent).[7] Among married heads, female heads were also far less likely than male heads to report that their spouse was resident in the household. Therefore in addition to the demographic dependency ratio being significantly higher in female-headed households, the ratio of female to male working age adults is also significantly larger.

Table 1 Selected demographic characteristics of FHHs and MHHs, 1997 and 2006

	OHS 1997		GHS 2006	
	MHHs	**FHHs**	**MHHs**	**FHHs**
Household size	4.39	4.71	3.39	4.09
	(.020)	(.028)	(.025)	(.032)
Household composition				
# working age adults	2.61	2.35	2.19	2.12
	(.012)	(.016)	(.015)	(.018)
# of male working age adults	1.39	.78	1.30	.69
	(.007)	(.010)	(.009)	(.012)
# of female working age adults	1.22	1.56	.88	1.43
	(.008)	(.011)	(.010)	(.012)
# of pensionable adults	.25	.35	.20	.31
	(.004)	(.005)	(.006)	(.007)
# of children <16	1.53	2.01	1.00	1.67
	(.013)	(.018)	(.015)	(.021)
Demographic dependency ratio	.71	1.23	.51	1.06
	(.006)	(.013)	(.008)	(.015)
Marital status of the head				
Never married	11.52	23.13	23.62	37.35
	(.267)	(.430)	(.519)	(.651)
Married/co-habiting	83.92	30.81	70.45	22.50
	(.302)	(.450)	(.556)	(.552)
Divorced/separated	2.04	10.07	2.57	8.73
	(.117)	(.318)	(.217)	(.426)
Widowed	2.52	35.99	3.86	32.22
	(.115)	(.468)	(.207)	(.592)
Spouse of the head is resident	93.70	17.59	88.57	25.67
	(.219)	(.689)	(.483)	(1.49)

Source: Own calculations from the 1997 OHS and the 2006 GHS
Notes: The data are weighted.
Standard errors in brackets.

Table 2 further considers the membership composition of households and demonstrates that a large and increasing percentage of female-headed households included resident female working age adults, but no resident working age males (an increase from 43.6 to 47.6 percent between 1997 and 2006). Moreover, in each of the years under review, a far greater percentage of female-headed households included no

[7] The decline in marital rates among both male and female heads is explained particularly by a significant increase in the percentage of heads who have never married, rather than by increases in divorce or death of a partner.

working age adults at all. In 1997, for example, 6.9 per cent of female-headed households had no working age adults, compared to 3.5 per cent of male-headed households. In these households, all resident adults would be of pensionable age.

At the same time, female-headed households were considerably more likely than male-headed households to include both young children (younger than 11), and older children (ages 11 to16). Furthermore, although the percentage of households with resident children fell among both male and female-headed households, the fall was larger among households headed by men. By 2006, approximately 60 per cent and 43.7 per cent of female-headed households included young and older children respectively, compared to 41.3 per cent and 26.4 per cent of male-headed households. Over the period, therefore, a growing share of female-headed households had no resident males of working age and relative to male-headed households, households headed by women took on increasing responsibilities for the care of children.

Table 2 Household composition of female- and male-headed households, 1997-2006

Percentage of female-headed households with:	**OHS 1997**	**OHS 1999**	**GHS 2004**	**GHS 2006**
No working age adults	6.92	7.26	4.82	6.61
	(.279)	(.330)	(.239)	(.337)
Female adults (no male adults)	43.60	47.06	46.95	47.62
	(.492)	(.573)	(.630)	(.667)
Male adults (no female adults)	4.59	5.07	5.16	5.38
	(.184)	(.247)	(.245)	(.289)
No working age males	50.52	54.32	51.77	54.23
	(.494)	(.567)	(.626)	(.661)
Children under 11	62.94	56.09	61.75	59.92
	(.490)	(.573)	(.591)	(.650)
Children age 11-16	50.70	45.92	44.87	43.66
	(.495)	(.567)	(.617)	(.651)
Percentage of male-headed households with:				
No working age adults	3.53	3.89	3.69	4.39
	(.152)	(.183)	(.218)	(.241)
Female adults (no male adults)	2.59	2.74	2.29	2.54
	(.112)	(.145)	(.134)	(.149)
Male adults (no female adults)	15.31	25.84	32.39	32.37
	(.299)	(.396)	(.511)	(.576)
No working age males	6.12	6.63	5.98	6.93
	(.186)	(.229)	(.252)	(.280)
Children under 11	54.11	45.47	42.57	41.28
	(.413)	(.447)	(.522)	(.580)
Children age 11-16	39.08	31.86	27.67	26.41
	(.397)	(.410)	(.432)	(.485)

Source: Own calculations from the 1997 and 1999 OHSs and the 2004 and 2006 GHSs
Note: The data are weighted.
Standard errors in brackets.
Categories are not mutually exclusive therefore columns do not add up to 100 per cent

In terms of the kinship links between household members, Table 3 demonstrates that a household type which includes a membership composition resembling a 'nuclear family' (i.e. two parents and their offspring) is very rare among female-headed households. In contrast, this is the modal type of household among male-headed households; although the percentage declined quite considerably from 49.6 per cent of male-headed household in 1997 to 37.2 per cent in 2006 (This is a likely result of the decrease in marital rates over the period). The second set of data rows in Table 3 show that the majority of female-headed households include children but no spouse of the female head, although this living arrangement only accounted for approximately four per cent of male-headed households over the period

Table 3 Presence of spouses and children in households, by household type, 1997-2006

	OHS 1997	OHS 1999	GHS 2004	GHS 2006
	Spouse and children are present			
All households	33.63	27.69	25.38	24.90
	(.305)	(.317)	(.360)	(.393)
Male-headed	49.59	41.35	38.83	37.24
	(.412)	(.441)	(.515)	(.570)
Female-headed	4.20	3.36	2.59	4.35
	(.199)	(.198)	(.196)	(.308)
	Spouse not present but children present			
All households	23.58	21.59	24.32	23.30
	(.251)	(.280)	(.346)	(.355)
Male-headed	4.52	4.11	3.74	4.05
	(.159)	(.174)	(.182)	(.207)
Female-headed	58.74	57.73	59.16	55.57
	(.495)	(.574)	(.602)	(.662)
	No spouse and no children			
All households	22.58	31.78	34.15	34.72
	(.269)	(.333)	(.386)	(.431)
Male-headed	15.90	26.45	32.99	33.60
	(.305)	(.399)	(.512)	(.579)
Female-headed	34.88	41.26	36.13	36.67
	(.486)	(.570)	(.578)	(.630)

Source: Own calculations from the 1997 OHS and the 2006 GHS

Notes: The data are weighted.
Standard errors in brackets.

In sum, the data presented in this section demonstrate that, relative to male-headed households, female-headed households include relatively fewer working-age adults (and male working-age adults in particular), and they are far more likely than male-headed households to include children. These characteristics in turn place greater pressure on the income earned or received both by female working-age adults and by female pensioners in households headed by women.

4.2 Labour market characteristics of male- and female-headed households

The international literature suggests that a higher level of poverty among female-headed households is largely associated with fewer household members with employment (Chant, 2003a; Elmelech and Lu, 2004; Kossoudji and Mueller, 1983), less access to male earnings (Chant, 2003a; Moghadam, 2005), and with the employment status of the household head (Chant, 2003a).

Table 4 documents selected economic characteristics by the gender of the household head and considers some of the factors that may contribute to the greater vulnerability to poverty among households headed by females. Perhaps most importantly, the table demonstrates that, in female-headed households, a greater number of non-workers are supported by workers.[8] In 1997, each employed member resided with an average of 1.53 household members without employment in female-headed households. By 2006, this ratio had increased by 52.9 per cent to 2.34. Among male-headed households the ratio of workers to non-workers also increased, but only by 31.9 per cent (from 1.19 to 1.57) over the period.

Table 4 Selected economic characteristics of female- and male-headed households, 1997 and 2006

	OHS 1997		GHS 2006	
	MHHs	**FHHs**	**MHHs**	**FHHs**
Non-workers/workers	1.19	1.53	1.57	2.34
	(.012)	(.023)	(.023)	(.042)
Household income earners				
No employed members	23.39	55.28	24.17	48.98
	(.334)	(.495)	(.490)	(.665)
One employed member	45.23	32.32	48.06	39.38
	(.411)	(.472)	(.595)	(.660)
> One employed member	31.38	12.40	27.77	11.64
	(.391)	(.336)	(.535)	(.447)
Number of employed (household)	1.16	.61	1.10	.66
	(.007)	(.008)	(.010)	(.011)
# Employed males	.80	.17	.80	.16
	(.005)	(.004)	(.007)	(.006)
# Employed females	.37	.44	.30	.50
	(.005)	(.006)	(.006)	(.008)
Average monthly income per employed household member (2000 prices)	2957.56	1880.76	2890.17	1768.83
	(49.45)	(66.59)	(85.34)	(61.00)

Source: Own calculations from the 1997 OHS and the 2006 GHS
Notes: The data are weighted.
Standard errors in brackets.

Despite this dramatic change in the ratio of non-workers to workers among female-headed households, the difference in the average number of workers per household between male- and female-headed households actually narrowed over the period

[8] The ratio compares employed household members to those without employment. This latter category includes both the broadly unemployed and the economically inactive.

under review. While the average number of employed members per household was consistently higher in male-headed households compared with female-headed households, it increased from .61 to .66 among female-headed households, but decreased marginally from 1.16 to 1.10 among male-headed households. The change among female-headed households is explained by the increase in the number of employed female household members (the average number of male household members with employment actually decreased slightly).[9] The aggregate gain in sources of earned income in female-headed households, therefore, has been predominantly in the form of income earned by female resident members.

Although the percentage of female-headed households which included employed members increased over the period, Table 4 illustrates that the average income of employed members remained significantly lower in these households than in male-headed households. Moreover, female-headed households are still far more likely than male-headed households to be workerless households. By 2006, almost half of all female-headed households included no adults with employment compared to a little under a quarter of all male-headed households.

Table 5 looks specifically at the employment status of the household head. Female heads are more likely than male heads to be unemployed but not searching for work, or to be economically inactive, reflecting a larger share of pensioners among female heads than among male heads. Consequently, although an increasing percentage of female heads reported having employment over the period, they remained considerably less likely than male heads to be employed (38 per cent of female heads compared to 68 percent of male heads in 2006).[10]

[9] The decline in the average number of employed members in male-headed households (from .37 to .30 between 1997 and 2006) was due almost entirely to a decrease in the number of employed females in these households (the average number of employed males was the same in 1997 and 2006).

[10] Access to education among household heads also varies significantly among male- and female-headed households (not shown in table). In both 1997 and 2006, female heads were significantly more likely to have had no schooling (21.5 per cent vs. 10.7 per cent among male heads in 2006) and significantly less likely to have attained either secondary or tertiary education.

Table 5 Percentage of households by the employment status of the head, 1997 and 2006

	1997	2006
	Male-headed households	
Non-searching unemployed	4.89	3.38
	(.170)	(.193)
Searching unemployed	5.72	7.92
	(.191)	(.328)
Inactive	22.54	20.83
	(.325)	(.447)
Employed	66.96	67.97
	(.376)	(.537)
	Female-headed households	
Non-searching unemployed	9.84	8.61
	(.291)	(.348)
Searching unemployed	6.57	9.67
	(.248)	(.395)
Inactive	53.87	43.77
	(.496)	(.658)
Employed	29.97	38.35
	(.472)	(.674)

Source: Own calculations from the 1997 OHS and the 2006 GHS
Notes: The data are weighted.
Standard errors in brackets.

Earnings from employment, however, explain only part of the story and income from social grants, in particular, is more important, and increasingly so, among female-headed households. This is illustrated in Table 6 which documents both that a larger percentage of female-headed households than male-headed households received social grant income, and that this percentage has increased considerably over the period. Not surprisingly, female-headed households received, on average, twice as many child support grants than households headed by a male. Female-headed households also reported a significantly greater number of old age pensions in both 1997 and 2006. By 2006, female headed households received roughly twice the total number of social grants, compared with male-headed households (1.18 compared to .61).

The table shows also that remittances were far more important to female-headed households compared with male-headed households. In 1997[11] roughly 29 per cent of female-headed households received some form of remittances from an individual that did not reside in the household. In the same year, only 6.1 per cent of male-headed households received remittances.[12]

[11] In the OHSs and the GHSs, only the 1997 OHS captures reliable information on the receipt of remittances.
[12] Data on receipt of remittances is limited in the GHSs because the questionnaire only asks if remittances are the main source of household income.

Table 6 Social grant receipt among male- and female-headed households, 1997 and 2006

	OHS 1997		GHS 2006	
	MHHs	**FHHs**	**MHHs**	**FHHs**
Number of grants received				
Child support grant	---	---	.35	.79
			(.009)	(.015)
Social old age pension	.20	.31	.17	.26
	(.004)	(.005)	(.005)	(.006)
Disability	.04	.02	.07	.10
	(.002)	(.002)	(.003)	(.005)
Foster Care Grant	.002	.002	.008	.02
	(.001)	(.001)	(.001)	(.002)
Total number of grants received (by the household)	.25	.37	.61	1.18
	(.004)	(.005)	(.011)	(.018)
Percentage that receive remittances	6.07	28.98		
	(.172)	(.431)	---	---

Source: Own calculations from the 1997 OHS and the 2006 GHS
Notes: The data are weighted.
Standard errors in brackets

On the whole, this section has demonstrated that female-headed households, on average, relative to male-headed households, are likely to be disadvantaged in the labour market. Female-headed households experienced an overall increase in the number of employed members (due to an increase in the number of employed female household members), but a decline in the number of resident employed males in the household. Despite an overall increase in the average number of employed individuals in female-headed households, the ratio of non-workers to workers increased. That is, in female-headed households, employed members are still, on average, residing with an increasing number of non-working (unemployed and inactive) household members. Moreover, the percentage of female-headed households with no employed males has increased slightly over the period while the percentage of female-headed households supported solely by the work efforts of employed females (and social grants) has increased considerably. Finally, this section has demonstrated that social grant income has become an increasingly important income source, particularly for female-headed households.

5. Estimating poverty in female- and male-headed households

The previous section identified a number of differences between female- and male-headed households that would be expected to contribute to the higher poverty risks faced by female-headed households. In this section, I estimate poverty risks in a multivariate context. In particular, I explore whether, controlling for differences in the composition of the household and in the marital and employment status of the household head, female-headed households are still more likely than male-headed households to be poor. I also investigate differences in the risk of poverty among female-headed households, and among male-headed households.

To estimate the likelihood that an individual lives in a poor household I use a logit regression model, in which the natural logarithm of the odds ratio of being poor is estimated as:

$$Y_i = \ln\left(\frac{P_i}{1-P_i}\right) = a_i F_i + b_i Z_i + u_i$$

Y_i equals 1 if the individual i lives in a household in which average per capita household income is below the poverty line of R322 (in 2000 prices); F_i = 1 if the individual lives in a female-headed household (and 0 if in a male-headed household); Z_i captures other observable characteristics of the household in which the individual lives and u_i is the error term. The explanatory variables include household size, the proportion of household members who are children, the proportion who are of pensionable age, and the marital status (1 if married/cohabiting and 0 otherwise) and employment status (1 if employed, 0 otherwise) of the head. The regression controls also for population group, whether the individual lives in a metropolitan area, and for the province of residence.[13]

Table 7 presents the results from the logit estimations for living in a poor household using data from the 2006 GHS. The sample includes all individuals living in households in which a head of household is identified.[14] In the simple regression reported in the first column (I), the variable identifying whether the individual lives in a female- or a male-headed household is the only explanatory variable. The estimated coefficient for female headship indicates the significantly larger poverty risk associated with living in a female-headed household (the coefficient is both positive and significant), not controlling for other household characteristics. In the second regression (II), a number of characteristics of both the household and the head of the household are included. The estimation demonstrates that, controlling for a number of factors, individuals in larger households are significantly more likely to be poor. The membership composition of households, however, is also a significant predictor of poverty status. For example, as the ratio of children to total household size increases, the likelihood of poverty increases significantly. In contrast, households that include relatively more pensioners are significantly less likely to experience poverty. This finding underscores the likely importance of the social old age pension in reducing the extent of poverty.

As identified in the literature, the individual characteristics of the head of the household also matter for household poverty risks. In particular, the employment status of the head is identified as the largest protector against poverty in the

[13] It is important to note that poverty estimates are based on a per capita measure of household income rather than on a per adult equivalent measure. This is because I wanted to avoid the influence of household composition on the left-hand-side variable since household composition (e.g. proportion of household members that are children) is included as a right-hand-side variable. In the estimations presented in Table 7, household composition is expressed as shares of total household size (i.e. proportion of household residents that are children or elderly). These variables could also have expressed as numbers (e.g. the number of household residents of a pensionable age). I tested both options and found the remaining coefficients in the model to be robust to the format of the household composition variables.

[14] The number of households (about 117/28,002) that report more than one head of household in the 2006 GHS is very small.

estimation. As would be expected, individuals living in households in which the head is employed are significantly less likely to be poor. Older household heads are also significantly more likely to preside over non-poor households. As the age of the household head increases, the likelihood of poverty decreases significantly.[15] However, even after controlling for the size of the household, selected characteristics of the head and the membership composition of the household, the association between female headship and poverty status remains. Once these explanatory variables are included in the second regression, the estimated coefficient on living in a female-headed household does decline considerably (to less than half its size in the first regression), but it remains positive and significant.

While the first two regressions in Table 7 demonstrate that, over and above the effects of the other explanatory variables, individuals living in female-headed households are still more vulnerable to poverty, the estimations have not controlled for the employment status of household members (other than the head) or the gender composition of employed members.[16] In the third and fourth columns of Table 7, the number of employed males in the household is added as an explanatory variable and estimations are run separately for individuals living in female- and in male-headed households. Running these regressions separately, the heterogeneity within both male- and female- headed households can be further explored.

Comparing the estimations between female- and male-headed households (III and IV) highlights several key differences in poverty risks both between and within these broad household types. Among individuals living in female-headed households, the strongest predictors of being poor are living in a household in which the head is African and in households with a higher proportion of children. In contrast, poverty risks for individuals living in female-headed households decrease significantly with the number of employed males resident in the household and with the employment status of the head. The risks of poverty are slightly different in male-headed households. Among individuals living in this household type, poverty risks also increase as the proportion of children in the household rise, however, the strength of the coefficient is not as strong as for individuals living in female-headed households. Similarly, the coefficient on the race of the household also demonstrates that African households headed by a male face a higher risk of poverty but, once again, the strength of the coefficient is weaker suggesting that African households with a female head are particularly vulnerable to poverty.

[15] This finding again points to the possible impact of the social old age pension in reducing the risk of poverty.

[16] The number of employed household members (and employed males in particular) is highly correlated with female headship and was therefore not included in the first two regressions. Among all female-headed households, for example, 78.9 per cent have no employed household members (apart from the head) and 86.7 have no employed males. In contrast, only 66 per cent of male-headed households have no other employed household members and 29.2 per cent have no employed males.

Table 7 Correlates of poverty among all households and within female- and male-headed households, 2006

	All households (I)	All households (II)	Female-headed househols (III)	Male-headed households (IV)
Female-headed	1.292*** (0.0199)	0.506*** (0.0318)	---	---
Household size	---	0.174*** (0.00613)	0.295*** (0.0116)	0.303*** (0.00896)
Age of the head	---	-0.00925*** (0.00118)	-0.0113*** (0.00190)	-0.00441** (0.00164)
Ratio of children	---	2.050*** (0.0600)	1.369*** (0.0933)	1.005*** (0.0874)
Ratio of pensioners	---	-0.947*** (0.126)	-1.252*** (0.250)	-1.289*** (0.144)
Head is married	---	0.000894 (0.0322)	0.117* (0.0531)	-0.174*** (0.0455)
Head is employed	---	-1.902*** (0.0266)	-1.773*** (0.0439)	-0.879*** (0.0588)
Metropolitan	---	-0.576*** (0.0315)	-0.564*** (0.0543)	-0.581*** (0.0405)
African	---	1.709*** (0.0726)	2.064*** (0.223)	1.491*** (0.0752)
Indian	---	0.101 (0.121)	0.0584 (0.304)	0.256* (0.128)
Coloured	---	0.837*** (0.0821)	1.216*** (0.231)	0.772*** (0.0862)
Number of employed males	---	---	-1.867*** (0.0466)	-1.318*** (0.0535)
_cons	-0.266*** (0.0122)	-1.013*** (0.0961)	-0.683** (0.251)	-1.184*** (0.113)
Unweighted sample size	104730	104601	48054	56541
pseudo R-sq	.0582	.3154	.3234	.3147
Prob > F	0.00	0.00	0.00	0.00

Source: Own calculations from the 2006 GHS

Notes: The data are weighted. Standard errors in parentheses. *** Significant at the 99.9 percent confidence level. ** Significant at the 99 percent confidence level. * Significant at the 95 percent confidence level. The dependent variable is poverty. The omitted categories are: head is not married, head is not employed, and head is white. The models also include a set of provincial dummy controls that are not displayed in the table.

Among individuals living in male-headed households, the number of employed males and the proportion of household members that are pensioners are the strongest protectors against poverty.[17] Households with employed heads are also significantly less likely to be poor, but the coefficient for the employment status of the head is considerably stronger among individuals living in female-headed households. Perhaps the key difference in the risk of poverty between male- and female-headed households, however, is in the marital status of the household head. Female heads that are married are significantly more likely to preside over poor households compared with heads that are not married. Among male-headed households, the opposite appears to be true. In these households, the risk of poverty is lower when the head of the household is married (as is the case for the vast majority of male heads).

This section has therefore shown that households with a female head are still more likely to be poor than male-headed households even after controlling for household size and composition and for the employment status of the household head. The data also show that, within these broad household types, the risk of poverty differs significantly. Individuals living in female-headed households are significantly more likely to be poor when the household has a higher proportion of children, the head is not employed and there are no resident males with employment. Similarly, individuals living in male-headed households also face higher risks of poverty when the head is not employed, there are no employed males in the household and when there are children resident in the household. These poverty risks, however, are not as strongly associated with vulnerability to poverty, compared with female-headed households.

6. Conclusion

This paper has examined some of the characteristics that may make female-headed households, on average, more likely to be poor than male-headed households in post-apartheid South Africa. The data have shown, for example, that female-headed households tend to be larger and contain an increasingly smaller number of working-age adults (and working-age males in particular). Female-headed households also contain a larger number of children and elderly (i.e. of a pensionable age) household members compared with male-headed households. Not surprisingly, a significantly larger proportion of female household heads support children without a male partner or spouse resident in the households.

The paper has also demonstrated that female-headed households, on average, are disadvantaged in the labour market relative to male-headed households. Female-headed households contain fewer employed members overall and a smaller (and decreasing) number of employed males. In fact, the vast majority (between 85.7 per cent and 87.2 per cent during the period under review) of female-headed households do not have an employed male resident in the household. As a result, the ratio of household members without employment to employed members increased by relatively more among female-headed households (relative to male-headed

[17] The coefficients on the remaining explanatory variables are robust to the inclusion of the number of other employed male household members (apart from the head) among individuals living in male-headed households.

households) between 1997 and 2006. Against this backdrop, it is not surprising that income from social grants became increasingly important, particularly in households headed by a female, over the period.

Even though female-headed households saw an increase in the average number of employed household members between 1997 and 2006, this change was predominantly in the form of increasing access to employment among females residing in female-headed households. Tellingly, average monthly earnings among employed individuals residing in female-headed households were consistently and significantly lower than for employed individuals in male-headed households. Using the gender of the household head to identify households that are more vulnerable to poverty therefore highlights the implications of gendered differences in earnings within the context of changing household formations in South Africa.

Finally, although the gender of the household head is a potentially useful category for identifying households that are more vulnerable to poverty, it is nevertheless a relatively blunt instrument and should not be used without qualification. Female- and male-headed households are not homogenous groupings and in the last section of this paper I showed that, in particular, some types of female-headed households are significantly more vulnerable to poverty than others. An individual living in a household headed by an African female in which there are children present, or the head is not employed, or in which there are no employed males faces particularly high risks of poverty.

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