

Slowing union formation and rapid household formation in South Africa

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Abstract

In South Africa, average household size shrank by almost a full person between the 1996 and 2011 censuses as households were formed at about twice the rate that the population grew. Economic conditions in post-apartheid South Africa have been challenging; characterised by high rates of unemployment, continued poverty, and extreme income inequality. The question of why South Africans would form more and smaller households under these conditions is a provoking one. The econometric literature on South Africa has focused on the labour market channel, but in this paper we specifically incorporate marriage. South African marital rates have been declining persistently for decades, whilst co-habitation and divorce remain rare. We model household formation in South Africa using a reweighted stacked series of annual cross-sectional household surveys between 1995 and 2011 and include an interaction between marital and labour market status. Borrowing from labour economics, we then apply an Oaxaca-Blinder decomposition to our model. An acceleration in the rate at which never-married people are forming households emerges as a key result. We suggest that high rates of male unemployment have destabilised the marriage market, thereby interrupting traditional household gender specialisation and resulting in structural change in how people form households.

Theme: economic demography

Keywords: households and families; gender; marriage

1 Long Abstract: Introduction

South Africans have consistently formed households more quickly than the population has grown over the post-apartheid period. Between the first census of the post-apartheid period in 1996, and the latest in 2011, the number of households increased by 62% compared to a 28% increase in population size (own calculations). Many scholars have noted the resulting decline in average household size and considered the implications for the wide range of social outcomes connected to households and their composition (Posel & Hall forthcoming, Rogan 2013, Steyn 1995). However, fewer have tried to understand what might be driving this process of household proliferation, itself. A handful of econometric studies exist for South Africa on the topic of household formation or composition (Klasen & Woolard 2009, Ebrahim et al. 2013, Keller 2004). All of these studies have focused on the role of labour market income for forming a new household due to the primacy of this channel for South Africa in particular. Structural unemployment is a defining feature of the post-apartheid labour market, and the State supplies no form of meaningful unemployment support. Since 1995, the unemployment rate has increased persistently over time, reaching a respective narrow and expanded rate of 25 and 36.5% by the end of our period of study in 2011 (StatsSA 2011). The econometric literature agrees that the unemployed tend to remain attached to their existing household, drawing on the household as a private safety security net (Klasen & Woolard 2009, Ebrahim et al. 2013, Keller 2004). If this is the main finding from this literature and unemployment has increased over time, how then might we explain rapid household proliferation in South Africa?

A concurrent trend over the post-apartheid period has been consistent decline in rates of marriage (Garenne 2016). Marriage is a main driver of household formation in economic literature, along with income and aging (Ermisch 1981, 1999). Marriage is especially important to women’s livelihood strategies owing to historical female disadvantage in the labour market and their specialisation in household production (Lundberg 2001). High male unemployment in South Africa then has direct implications for marriage markets (Posel & Casale 2013), which in turn connect to household formation. This latter link, however, has not been closely studied for South Africa where the labour market income channel would appear more urgent. Marital status has been omitted in econometric studies of household formation in South Africa in order to not bias coefficients on labour market status, which has usually been the main variable of interest (Klasen & Woolard 2009, Ebrahim et al. 2013, Keller 2004). In this paper, we aim to fill this gap by incorporating marital status into a model of household formation and decomposing this model over time. Our main finding, robust to various specifications, is that acceleration in the rate at which never-married people are forming households is an important driver of rapid household proliferation in South Africa. Being both employed and never-married is a key combination, in particular, for women to head their own households and for the climbing share of men who live alone.

2 Describing household formation in data

To study household formation, we use a stacked series of nationally-representative cross-sectional household surveys collected by Statistics South Africa between 1995 and 2011 on an (almost) annual basis. These data comprise the October Household Surveys (1995-1999) and the General Household Surveys (2002-2011) and we call our stacked version the OHS-GHS series (StatsSA 2010-2013, 2011-2018). These surveys are not designed to be used as time-series so much work had to first be put into harmonising the data and attending

to the data quality. We recalibrated the survey weights in previous work (Thornton & Wittenberg 2018) since the weights released with the data cannot be relied upon to accurately measure household change as their calibration procedure is at odds with the survey sampling practise. Reweighting the data has allowed us to extract more accurate trends in household counts than previously possible using South African household survey data.

The definition of a household in our data counts respondents as members of a household if they slept in that dwelling on average at least four nights a week in the four weeks preceding enumeration. Although this definition misses labour migrants - a key constituency in the South African labour market - the advantage is that it precludes any double-counting of people or households (Posel 2003). Ultimately, we study household heads. Households are asked to self-identify one household head meaning the number of heads in the country tallies with the number of households. Household headship is a contested concept; many local and international scholars have questioned its usefulness and meaning (Budlender 2003, Presser 1998). However, qualitative and quantitative evidence exists for South Africa that this definition of a household head is strongly correlated with final household decision-making power, and that household members can easily identify heads without asking for clarification of what the concept means (Posel 2001, Rogan 2016). We use the head of the household as a proxy for the person most likely to have formed the household at some point in time.

Table 1 uses the OHS-GHS series adjusted with our updated weight to report the number of households in bold and the headship rate in parentheses. The headship rate is the share of household heads in the adult population. People heading single-person households are a sub-set of heads who are of special interest given the global expansion of solo-living in recent decades (Snell 2017). In this case, the rate of single-person household headship in parenthesis is the rate at which adults live alone in the adult population. Headship and living alone both increased over time, but in gendered ways: the more extensive change for women was in heading their own households (an increase of 8 percentage points), whilst this was living alone for men (an increase of 7 percentage points). Our research question then becomes about understanding the expansion of the headship rate over time in a context of high unemployment and declining rates of marriage.

Table 1: Counts and shares of household heads and single-person households, 1995 and 2011

millions (share)	Household Heads			Single-person Households		
	1995	2011	Change	1995	2011	Change
Men	5.81 (0.47)	8.45 (0.49)	2.64 (0.02)	1.01 (0.08)	2.64 (0.15)	1.63 (0.07)
Women	3.29 (0.24)	5.95 (0.32)	2.66 (0.08)	0.57 (0.04)	1.34 (0.07)	0.77 (0.03)
Total	9.1 (0.35)	14.39 (0.4)	5.29 (0.05)	1.58 (0.06)	3.98 (0.11)	2.4 (0.05)

Notes: own calculations using the OHS-GHS series weighted using the Best CEW. Household headship share = share of household heads amongst the respective population aged 15 years and older. Single-person household share = share of people living in one-person households amongst the respective population aged 15 years and older. The share of single-person households is a subset of the rate of household heads in general.

3 Research method

To study household formation, we set up a linear probability model for indicator variables of household headship and single-person household headship. We include in this model variables for the drivers of household formation identified in the theoretical and empirical literature (Ermisch 1981, Fafchamps & Quisumbing 2007). These are age and education to capture preferences for privacy and autonomy; as well as, employment and marital status. Other relevant covariates include race group, formality of dwelling, pension recipient status, rural location, and province fixed effects. As previously explained, econometric studies on South Africa have usually excluded marital status because of its endogeneity with employment status. In this paper, we include marital status along with its interaction with employment status in order to model some of this endogeneity. The interaction between these two variables is highly significant in our regression results.

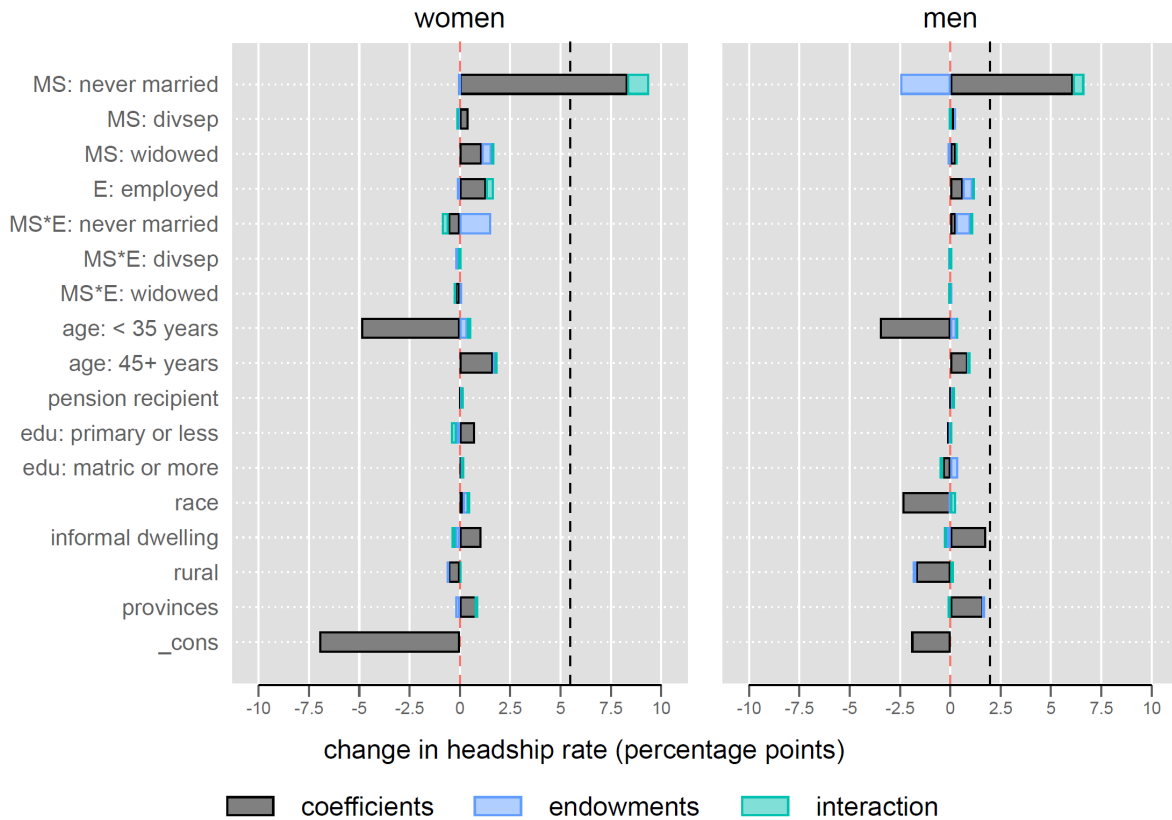
We then use an Oaxaca-Blinder decomposition to decompose our model across time and understand which components of our model have contributed most to the increase in the headship rate (Oaxaca 1973, Blinder 1973). The Oaxaca-Blinder decomposition differentiates between effects owed to change in predictor levels (called the ‘endowment’ effect); effects owed to change in coefficients (called the ‘coefficient’ effect); and, effects owed to a combination of the two (called the ‘interaction’ effect) (Jann 2008). In this way, we are further able to understand whether drivers are mainly operating through a change in attributes (endowments) or behaviour (coefficients). For example, are there more household heads because fewer adults have ever married, or because unmarried people have become more likely to form their own household? As a robustness check for our model choice, we run a logit model and then use the Yun (2004) decomposition for non-linear models to extract the detailed decomposition output. Our results are highly robust to both versions of our analysis.

4 Preliminary results

Our main finding is that change in the household formation *behaviour* of never-married people is one of the key drivers of household proliferation in South Africa. This can be seen in preliminary decomposition results presented in Figure 1 below for household headship. The growth of the headship rate in percentage points between the beginning and end of the period is indicated by the black dotted line.¹ The figure reports by how many percentage points a particular driver would change the headship rate, if all other variables were held constant; as well as, how this is broken down into the coefficient, endowment, and interaction effect. For women, for example, change in the rate at which never-married women (compared to married women) head households would have hypothetically have increased the female headship rate by almost 8 percentage points, if all other factors were held constant. This finding is echoed in the results for single-person household headship, whereby never-married men have significantly increased the rate at which they live alone. We consider how this finding might reflect the disruption of household gender specialisation by South Africa’s high unemployment rate. Ultimately, rapid household formation in South Africa’s high unemployment context cannot be properly understood without considering the role of the marriage market.

¹Three years at the beginning and end of the period were pooled to make the decomposition more robust, so these changes might not correspond exactly with Table 1.

Figure 1: Oaxaca-Blinder decomposition results for household headship between 1996-8 and 2009-11



Notes: own calculations using the OHS-GHS series weighted using Best CEW. Black dotted line = overall gap in percentage points. MS = marital status dummies, base is 'married'. E = employment status dummy, base is 'not employed'. edu = education level dummies, base is 'incomplete secondary schooling'. divsep = divorced/separated. matric = high school graduate.

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