Bargaining power and decision-making agency: Economic empowerment in South African households

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Abstract

Economic bargaining power and decision-making agency constitute two forms of empowerment. Through the lens of the Capability Approach (CA), economic bargaining power represents the 'means to achieve'; economic decision-making agency the vector of 'functionings', and gender the intermediate 'conversion factor'. These three components impact on household members' well-being. Employing data from South Africa's National Income Dynamics Study (NIDS), this study carries out a gendered analysis of economic bargaining power and economic decision-making agency. The econometric strategy employs descriptive analysis; probit and multinomial probit regression analysis for cross-sectional data; and the random effects probit regression analysis for panel data. Large strides have been made towards empowering women as economic decision-makers through enhancing their economic bargaining power. Persistent gender disparities in economic bargaining power and decision-making power however argue a case for gender-based economic empowerment policies.

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Key Words: Gender, bargaining power, decision-making agency, empowerment, South Africa

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1. Introduction

Gender empowerment remains an important policy issue. The United Nations' Sustainable Development Goal (SDG) No. 5 clearly stipulates the importance of gender equality, including on the economic front. Lack of women's economic empowerment is portrayed in various ways. Duflo (2012:1052) states that 'women are less likely to work, earn less than men for similar work, and are more likely to be in poverty even when they work'. In the African context specifically, gender inequality, including limitations to women's economic participation, remains a pronounced challenge (Wekwete, 2014). In point of fact, women have limited economic opportunities, have restricted agency, and usually bear the direct costs of inequalities, and this gender bias has a cost of reducing the pace of development, a cost to all (World Bank, 2016). Consequently, women empowerment has increasingly become a policy goal, both as an end in itself and a means to achieving other development goals (Ashraf et al., 2010; Duflo, 2012).

The South African context suggests that the pace of gender economic empowerment has been slow, as is evident in the fact that female-headed households are over-represented among the poor (Posel & Rogan, 2012). Posel and Rogan (2012) pointed out that poverty in South Africa remains a gendered phenomenon and that the post-apartheid decline in poverty has mainly favoured males and male-headed households.

Given this context, this paper draws from three consecutive survey rounds of the National Income Dynamics Study (NIDS) and proffers a gender-based analysis of the extent to which economic bargaining power influence female South Africans' economic decision-making within households. The paper makes a distinction between decision-making responsibility and power, a novel approach using data from a developing country. As such, a more nuanced analysis of women's economic decision-making agency is provided.

The paper is structured as follows. The theory is discussed in Section 2, while the empirical literature is reviewed in Section 3. Section 4 describes the data and methods. Section 5 presents the results and discussion, followed by limitations in Section 6. Section 7 concludes.
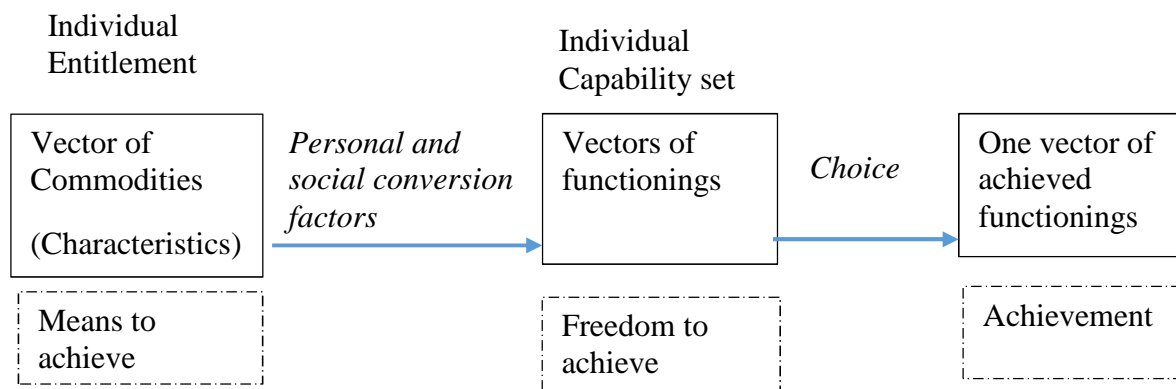
2. Theoretical framework

Economic bargaining power and economic decision-making agency can be conceptualised using Amartya Sen's Capability Approach (CA), a 'framework of thought, which can address diverse problems and be applied in quite different ways' (Robeyns, 2000:1). The CA's 'plurality of purposes' (Sen, 1993:49 cited in Robeyns, 2000:3), here acts as a tool for understanding the interrelatedness between economic bargaining power and economic decision-making agency. In this sense, the CA assists in advancing knowledge on gender empowerment, the process by which women acquire enabling resources and in turn enhance women's decision-making agency (Yount et al., 2016).

Women's agency refers to women's ability to make strategic life choices under historically evolving constraints (Kabeer, 1999), or in other words, to women's ability to define their own life choices (Yount et al, 2016). A general consensus is emerging that women's agency is multi-dimensional (Kabeer, 1999; Mason, 2005; Yount, 2005). Yount et al. (2016) point out that the multi-dimensionality of women's agency comprises of women's influence in family decisions, their freedom of movement, and attitudes about gender violence. Economic decision-making, therefore, as a feature of women's agency, is an important end in itself (Young et al., 1994), and a useful means to other ends.

As a 'broad normative framework for the evaluation and assessment of individual well-being and social arrangements, the design of policies, and proposals about social change in society' (Robeyns, 2005:94), the CA has two major constituents: 'functionings' and 'capabilities'. According to Robeyns (2000:4), 'functionings' relate to the 'beings and doings' of a person, while 'capabilities' are 'the various combinations of functionings that a person can achieve'. So, a functioning is considered an achievement whereas a capability is the ability to achieve. Robeyns (2005) points out that the CA highlights the difference between means and ends. Figure 1 describes the theoretical interdependence between economic bargaining power and economic decision-making agency.

Figure 1: The Capability Approach

Individual Entitlement

Individual Capability set

| Vector of Commodities (Characteristics) | *Personal and social conversion factors* | Vectors of functionings | *Choice* | One vector of achieved functionings |

| Means to achieve | | Freedom to achieve | | Achievement |

Source: Robeyns (2000:5)

The vector of commodities in this paper are employment status, employment income, total income and education, factors which epitomise fundamental sources of economic empowerment (Moghadam & Senftova, 2005; Varghese, 2011). Pambè et al. (2014) identify education, employment and being rich or poor, as indicators of gender economic empowerment. These economic factors therefore, are 'individual entitlements' which, in the CA framework, represent the 'means to achieve'. The role of economic factors depends on an individual's personal and social conversion factors (Robeyns, 2000/2005), including an individual's gender.

Economic decision-making agency is another component of economic empowerment (Mason & Smith, 2003; Varghese, 2011), representing a "functioning" in the CA. So, economic bargaining power can position an individual into assuming different economic decision-making responsibilities within a household, depending on the personal and social conversion factors. Gaining access to human, economic and social resources facilitate an individual's decision-making agency, which in turn, enhances achievements (Kabeer, 1999; Mahmud et al., 2012). In addition, "functionings" entail a set of things that an individual can do in life (Sen, 1999; Robeyns, 2000), including making economic decisions.

Although gender empowerment manifests in different forms (Heckert & Fabic, 2013) and is multi-dimensional (Mason & Smith, 2003), it takes on an economic and of a material nature (Iversen, 2003) in this paper. In this case, gender economic empowerment is embodied at two levels, i.e. having an individual entitlement to the factors of economic bargaining power, specifically education, employment and income, and possessing economic decision-making

agency. In other words, being employed, educated, and having an income presents evidence of economic empowerment, but so is participation in economic decision-making.

3. Empirical literature

Studies on the association between economic bargaining power and economic decision-making agency are limited. This section briefly reviews studies focusing on economic decision-making agency and its economic determinants.

A gender empowerment study in the Oman by Varghese (2011) produced a domestic Women Empowerment Index (WEI). The study focuses on economic decision-making power (economic empowerment), household decision-making power (household empowerment), and physical freedom of movement (social empowerment) as components of WEI. Each index can take a value within the range 0 (full deprivation in the given empowerment) and 1 (full level of empowerment). WEI allocates equal weights to these indices. Varghese (2011) establishes that women in Oman report high levels of empowerment indices for all the three domains, which are 0.753 for economic empowerment index, 0.794 for household empowerment index, and 0.628 for Social empowerment index.

Mahmud et al. (2012) investigate decision-making agency in rural Bangladesh and establish that married women are commonly secondary decision-makers regardless of the type of decision, and are least likely to have the final say in financial decisions (buying furniture, taking a loan, and selling livestock). On average, married women's roles in household decision-making is relatively greater only on health and family planning decisions, but lower on decisions related to household expenditures and personal autonomy. Making decisions together however, is a common phenomenon (Mahmud et al., 2012).

Economic decision-making is reported to depend on some economic determinants. MacPhail and Dong (2007) evaluate whether market work, as represented by employment status, is a determinant of women's "household status" in rural China. The findings suggest that unemployed women have lower "household status" than men, an indication that women are more involved in domestic labour, responsible for domestic tasks and have less household decision-making control. The market wage for employed women reduces domestic work and responsibility for domestic tasks, and enhances household decision-making control. Rao (2014)

points out that paid work can enhance monetary contributions and also lead to a sense of self-worth in rural South India.

Exploring women's education and participation in wage work as determinants of economic bargaining power in Nepal, Acharya et al. (2010) suggest that such economic empowerment impacts positively on women's say in economic decision-making. Similarly, Boateng et al. (2014) find that employed and educated women in Ghana are more likely to have an opinion on all aspects of household decision-making relative to unemployed women and women with no formal education. In rural India, women's bargaining power increases with wages and education (Sinha, 2012). According to Pambè et al.'s (2014) study in Burkina Faso, high levels of human capital and financial autonomy positively influence women's participation in economic decision-making.

An analysis of the association between economic bargaining power and economic decision-making agency is therefore relevant and called for to broaden the literature.

4. Data and methods

Data for this paper is from the first three consecutive waves (2008; 2010; 2012) of the South African National Income Dynamics Study (NIDS) and facilitates the analysis of decision-making dynamics in households, including transitions over time in economic decision-making agency, among resident members that are 15-years and older (hereafter, household member).[3] The NIDS allow a gendered cross-sectional and panel data analysis of the associations between economic bargaining power and economic decision-making.

Economic bargaining power is measured by four factors. A household member's employment status is a binary variable (=1) if the individual is employed and (=0) otherwise. Next is the employment income and total income, in real South African Rand.[4] Educational level, the

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[3] In NIDS, a resident is one who 'usually resides at the house for more than four nights a week' (Brown et al., 2012:3).
[4] Employment income is the sum of monthly income derived from the main job, casual job, piece jobs, self-employment, profit sharing, thirteenth cheque and bonus. Non-employment income include social welfare grants, inheritance, rentals, gifts and remittances. Total income represents the aggregate of employment income and non-employment income. Income values were adjusted for inflation using wave 1 (2008) as the base. The consumer Price Indices of 111.7 and 123.9 for wave 2 (2010) and wave 3 (2012) were respectively used for adjustments (StatsSA, 2012).

fourth factor, is measured as a continuous variable representing a household member's number of years of schooling.

NIDS collects information on intra-household decision-making from household members. The economic decision-making indicator used here was constructed from combining the "day-to-day expenditure" and the "large, unusual purchases" spheres of decision-making.[5] For each sphere, the household member has to identify the main decision-maker within the household, and where relevant, also the joint decision-maker. Self-identification by household members is possible. For the purpose of the analysis conducted in this paper, household members were assigned their "highest" recorded level of decision-making power. In other words, if the household member identified him/herself as "main" decision-maker, or any other household member identified the person as "main" decision-maker, the identified household member was assigned the status of "main" decision-maker. Next, household members were assigned the status of "joint" decision-maker if they themselves or any other household member accorded them the role of "additional" decision-maker. Non-decision-makers are those household members who did not identify themselves as decision-makers and was not identified as decision-makers by any other household member.

Decision-making agency here comprises two components, "responsibility" and "power". The *economic decision-making responsibility* of a household member is represented by a binary variable taking the value (=1) if the household member is an economic decision-maker and (=0) otherwise. *Economic decision-making power* in turn is a categorical variable taking the value (=3) if the household member is a *main decision-maker*, the value (=2) if the household member is a *joint decision-maker*, and the value (=1) if the household member is a *none-decision-maker*.

The econometric analysis here follows a multi-pronged approach. *First,* gender-based comparisons of economic bargaining power are carried out reporting mean values and t-tests for the differences in mean values for each wave and the overall pooled data. *Second*, transitions in both economic decision-making responsibility and power, are described. *Third*, appropriate probit and multinomial probit regression models for pooled and panel data are used

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[5] The full set of questions on decision-making in the adult questionnaire reads as follows: "Who makes decisions about: (a) "day-to-day household expenditures (e.g. groceries), (b) "large, unusual purchases such as appliances, vehicles or furniture", (c) "where your children should go to school", (d) "who is allowed to live in the household as part of the household (for example, if a relative or family member does not have a place to stay)", (e) "where the household live".

to determine the role of gender (female) in predicting economic decision-making. The general regression function in this case is represented as:

Economic decision-making = Ω (gender; socio-demographics) …………………………........(i)

Economic decision-making in above case is represented by different variables. The binary form for probit models include 'yes (=1) versus no (=0)'; 'joint (=1) versus none (=0)'; 'main (=1) versus none (=0)', and 'main (=1) versus joint (=0)' and the categorical form for multinomial probit models is none-, joint- and main-decision-maker (see above).

Fourth, regression analyses seeking to establish the impact of economic bargaining power on decision-making for female household members are carried out. Appropriate random effects (RE) probit regression models for panel data are employed where:

Economic decision-making = Ω (economic bargaining power; socio-demographics)……...(ii)

Economic decision-making is represented by different binary forms as in (i) above. Due to concerns with multicollinearity, separate regression models are estimated for each economic bargaining power factor, i.e. employment status, employment income, total income, and education. Socio-demographics included as control variables include age, race, headship, household size, and marital status.

In order to assess the robustness of the findings, analysis is carried out in various ways. Pooled data with subjects that have post stratified weights and drawn from all waves are put together and analysed as cross-sectional data. Combined panels, i.e. comprising subjects from the '2008 – 2010' and '2010-2012' panels only, balanced in some cases as well as unbalanced in other cases, are also used applying appropriate panel analyses. This way, the richness of the panel data is fully exploited.

5. Results and discussion

The analyses below focus on gender differences in the economic bargaining power; gender and economic decision-making agency, and transitions in economic decision-making agency. In addition, how gender predicts economic decision-making agency is assessed. Finally, the analyses focus on how economic bargaining power predicts the women's economic decision-making agency.

5.1 Economic bargaining power

In the Capability Approach (CA), economic bargaining power is identified as a means to achieve 'functionings', and so is an important means of economic empowerment [Table 1]. The results in each survey round reflects that approximately half of male household members are employed, whereas about a third of female household members are employed. The females' employment income ranges between 33% and 48% of the employment income of their male counterparts, while the total income of females ranges between 57% and 80% of the total income of their male counterparts. The mean differences between males and females, regarding years of education, range from 0.16 years to 0.24 years, in favour of males. The gender gap for employment income and education level, however, narrowed over time, but widened for total income. The t-tests for the mean differences are all significant at the 1% level. These descriptive statistics suggest that females indeed are at a disadvantage compared to males in as far as economic bargaining power is concerned.

[Table 1 about here]

5.2 Gender and economic decision-making

Evidence on gender differences in economic decision-making among household members is presented in Table 2. A relatively large share of household members are deemed decision-makers, particularly main decision-makers. The percentage of economic decision-makers among household members increases over time from 67% (2008) to 72% (2010) and 82% (2012), a trend that is preserved when the analysis is presented by gender. The percentage of economic decision-makers among female household members is 68%, 74% and 85%, while that among male household members is 66%, 70% and 79%, for 2008, 2010, and 2012, respectively. The data show that female household members in each individual survey year are statistically significantly more likely than male household members to be identified as the economic decision-maker. An analysis by Gumede (2009) that draws on the 2008 NIDS survey data found similar results of greater female involvement in economic decision-making within households.

Economic decision-making power (main, joint, none) reflected in the three survey rounds show that most household members are main decision-makers and that the percentage increases over time from 52% (2008) to 57% (2010) and 66% (2012). The percentage of none decision-makers correspondingly decreases over time from 32% (2008) to 27% (2010) and 17% (2012). The

percentage of joint-decision-makers among household members remains constant at 14-15%. Thus, main decision-making power is more prominent than joint decision-making power.

The percentages of main and joint (none) decision-makers among female household members increase (decrease) over time, which is indicative of women's greater involvement in economic decision-making. Whilst the percentage of none-decision-makers among male household members also decreases over time, the percentage of main (joint) decision-making falls (rises) in 2010 and rises (falls) again in 2012. As expected, the 2008 and 2012 surveys show that the percentage of female household members who are joint-decision-makers is higher than the percentage of male household members who are joint-decision-makers, i.e. males are more likely than females to be main decision-makers. The main finding (Table 2) is that, on aggregate, females are more likely to assume a decision-making role, a clear sign of greater decision-making responsibility. However, higher percentage of female household members identified as joint decision-makers shows that women still lag behind in terms of relative power in making economic decisions. It is also interesting, however, to note that participation in economic decision-making has increased over time for both female and male household members, in these cross-sections. This may be the result of key decision-makers, who often are the household heads and/or their partners, being less likely to attrite from households over the course of the study, but non-decision-makers leaving households interviewed at baseline.

[Table 2 about here]

Transition probabilities for both economic decision-making responsibility [Tables 3a] and economic decision-making power [Table 3b] are presented by gender. The results show that slightly more than a third of none-decision-makers gained decision-making responsibility between survey rounds. The data show that among those household members who were not decision-makers at any point in time, 28% (males) and 41% (females) had taken on the role of decision-maker by a subsequent period. Losses in responsibility for economic decision-making are only 10% for males and 8% for females. Interestingly, therefore, females have made larger strides in acquiring decision-making responsibility than males (41% vs 28%) and females were relatively less likely than males to relinquish decision-making responsibility (8% vs 10%). Thus, gender economic empowerment with regards to economic decision-making responsibility is relatively evident as reflected in the transitions in economic decision-making responsibility between the three survey rounds.

[Table 3a about here]

An examination of the transition probabilities for economic decision-making power [Table 3b] shows that approximately half or more of joint decision-makers acquired main decision-making power over the course of time. The percentage transitioning from joint to main decision-making power for male household members is 56%, while the percentage for female household members is 54%, a slight difference. The percentages show that almost half of women remain joint decision-makers, an indication of less gaining of decision-making power by female household members as compared to male household members.

As expected, transitions from main to joint decision-making is far less common for both male household members (14%) and female household members (12%). Joint decision-makers, as expected, are much less likely to retain their decision-making power over time than are main decision-makers (19% vs 8% for males and 16% vs 5% for females), although the figures clearly show that, and as reported elsewhere, women are making gains in terms of holding on to decision-making power, more than men. Expressed differently, female household members are more likely than male household members to gain main and joint decision-making power over time ('23% and 18%' vs '17% and 11%'). Possible explanations of transition probabilities for economic decision-making are the dissolution of households across waves due to divorces or deaths in the household and the resultant reconstitution of household structure due to these and other demographic factors; an avenue worth interrogating in future research.

[Table 3b about here]

The probit and multinomial probit regression models were used to analyse the role of gender in economic decision-making in the pooled data (Table 4 upper panel). Being a female household member raises the probability of being an economic decision-maker by a statistically significant margin ($\beta = 0.112$; $p < 0.01$). Except for the main-joint comparison (with $p < 0.10$), being a female household member statistically significantly enhances the probability of being a joint- rather than a none-decision-maker ($\beta = 0.446$; $p < 0.01$) and being a main- rather than a none-decision-maker ($\beta = 0.525$; $p < 0.01$).

The balanced panel probit regression analysis (Table 4 lower panel) confirms that gender predicts economic decision-making responsibility and economic decision-making power. The gender dummy is positive and statistically significant ($\beta = 0.525$; $p < 0.01$) for decision-making responsibility and conforms that being a female household member increases the probability of being an economic decision-maker. For economic decision-making power in the balanced panel, a female household member are more likely to be a main- than a none-decision-maker

(β = 0.525; p < 0.01), more likely to be a joint- than a none-decision-maker (β = 0.492; p < 0.01), and, finally, more likely to be a main- than a joint-decision-maker (β = 0.039; p < 0.10). Important to note though, is the smaller and marginally significant coefficient of being main- than joint-decision-maker by female household members. Such a result implies that gains in power are relatively small once women are designated as joint decision-makers.

Overall, the regression results corroborate the earlier descriptive analysis on economic decision-making power that women are relatively more empowered in terms of economic decision-making. Hence, there is some evidence of gender economic empowerment with regard to economic decision-making agency. In actual fact, participation in economic decision-making, as an economic empowerment indicator, has therefore, shown that female household members are centrally involved in economic decision-making and more so over time. The emphasis now shifts to the question as to whether improvements in economic bargaining power has a role to play in these gains in decision-making agency among female household members.

[Table 4 about here]

5.3 Women's economic bargaining power and economic decision-making agency

The factors of economic bargaining power were plugged into a multivariate random effects (RE) panel regression model in order to test the hypothesis that when a female household member gains economic bargaining power, she is also empowered by gaining economic decision-making agency (Table 5). In other words, being employed, having a higher income, or being more educated, should positively affect economic decision-making responsibility and economic decision-making power of a female household member. The results in Table 5 are from a balanced panel data analysis (pooled and unbalanced panel results for these multivariate models are similar to the presented results and are available upon request). All the four economic factors show positive and statistically significant results (p < 0.01) in as far as explaining the gaining of decision-making responsibility by female household members is concerned.

An analysis of probabilities of 'joint versus none', 'main versus none' and 'main versus joint' decision-making shows that employment status has a clear positive relation with economic decision-making power. As expected, the coefficient, is largest for the 'main versus none', followed by 'joint versus none', and lastly for the 'main versus joint' decision-making. Income (both employment and total income) produced consistent and statistically significant results that are similar to the way employment status influences economic decision-making power, an

indication that incomes promote female household members from position of disadvantage in terms of economic decision making agency. Education also impacts significantly on the probabilities of the 'joint versus none' and 'main versus none' decision-making. In other words, employment status, income (both employment and total income) and education, are important in differentiating between decision-makers with regards to decision-making power and determining decision-making responsibility. The four factors raise the probability of a female household member being a decision-maker than a none-decision-maker, being a main versus a none-decision-maker, being a joint versus none-decision-maker and even being a main versus a joint decision-maker.

[Table 5 about here]

6. Limitation

The paper has an important limitation. Decision-making questions were posed with no clear distinction between high-level decisions on the allocation of resources to expenditure categories and instrumental decisions regarding the management of the allocated resources (Holden, 2011; Lauer & Yodanis, 2011; Skogrand et al, 2011). The findings of greater involvement of females in economic decision-making could reflect household members' involvement in the instrumental management of household resources and not an overall allocative control. Economic bargaining power may be directly linked to overall allocative control than to instrumental management. Decision-making agency, as measured here, cannot distinguish instrumental from allocative control, calling for further research, including surveys with a more carefully designed module on decision-making.

7. Conclusion

Economic bargaining power is still a gendered phenomenon in South Africa. Female household members are less economically empowered than male household members, a finding which confirms the importance of the United Nations' Sustainable Development Goal (SDG) No. 5, and calls for the need to prioritise females on the economic opportunities front. The study's focus on decision-making agency however, reveals that female household members are more likely than male household members, to be identified as economic decision-makers. In fact,

there is an upward trend in female household members' economic decision-making responsibility over time suggesting an improvement in women's economic decision-making agency. Once gained decision-making responsibility and power, there is also some permanency to the women holding on to this economic decision-making agency. Great strides therefore, have been made in terms of women's economic decision-making agency. Nevertheless, there is evidence that women lags behind men in terms of decision-making power, with men more likely than women to be main decision-makers. Economic bargaining power plays a significant role in advancing women's economic decision-making agency. Specifically, all the four economic factors are seen to drive women's economic decision responsibility and power. Enhancing women's economic bargaining power is therefore an important policy consideration so as to reduce the persistent disparities that are clearly existing and enhancing women's decision-making agency.

Acknowledgement

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Table 1: Economic bargaining power, by survey round

Socio-economic factors	Survey round	Male		Female		Total		t-tests
		Mean	Sample (n)	Mean	Sample (n)	Mean	Sample (n)	
Employed (Y/N)	2008	0.56	6,633	0.35	9,498	0.45	16,131	22.17***
	2010	0.48	7,439	0.31	10,309	0.39	17,748	18.19***
	2012	0.52	8,066	0.34	11,485	0.42	19,551	19.43***
	pooled	0.52	22,138	0.33	31,292	0.42	53,430	34.24***
Employment income (ZAR)	2008	2,845	6,684	958	9,980	1,786	16,664	19.29***
	2010	2,547	7,441	1,246	10,366	1,852	17,807	10.17***
	2012	2,911	7,979	1,290	11,445	2,045	19,424	17.34***
	pooled	2,766	22,104	1,166	31,791	1,898	53,895	25.82***
Total income (ZAR)	2008	3,933	6,684	3,160	9,980	3,499	16,664	4.54***
	2010	2,786	7,441	1,812	10,366	2,266	17,807	3.69***
	2012	3,252	7,979	1,886	11,445	2,522	19,424	6.31***
	pooled	3,299	22,104	2,280	31,791	2,746	53,895	7.88***
Education (years)	2008	9.06	7,420	8.82	10,010	8.93	17,430	5.87***
	2010	9.30	7,897	9.08	10,700	9.18	18,597	5.91***
	2012	9.48	8,331	9.32	11,691	9.39	20,022	6.70***
	pooled	9.28	23,648	9.08	32,401	9.17	56,049	10.62***

Notes: ***$p < 0.01$, **$p < 0.05$, *$p < 0.1$; Post-stratified weights used in the calculations; t-tests are for mean differences by gender

Table 2: Economic decision-making power and responsibility, by gender and wave

Decision-making	2008			
	Male	Female	Total	Chi2 p-value
None	33.75	31.68	32.62	
Joint	9.21	19.23	14.66	<0.01
Main	57.04	49.09	52.71	
Total	*100.00*	*100.00*	*100.00*	
Yes	66.25	68.32	67.37	<0.01
Sample (n)	6,081	8,797	14,878	
	2010			
None	29.80	25.16	27.30	
Joint	15.97	15.01	15.45	<0.01
Main	54.23	59.83	57.25	
Total	*100.00*	*100.00*	*100.00*	
Yes	70.20	74.84	72.70	<0.01
Sample (n)	6,133	8,829	14,962	
	2012			
None	20.06	14.96	17.29	
Joint	12.33	18.82	15.86	<0.01
Main	67.61	66.23	66.86	
Total	*100.00*	*100.00*	*100.00*	
Yes	79.94	85.05	82.72	<0.01
Sample (n)	6,125	8,828	14,953	
	Pooled			
None	28.15	24.28	26.05	
Joint	12.41	17.73	15.30	<0.01
Main	59.44	57.98	58.65	
Total	*100.00*	*100.00*	*100.00*	
Yes	71.85	75.72	73.95	<0.01
Sample (n)	18,339	26,454	44,793	

Notes: Post stratified weights used in the calculations

Table 3a: Transitions in economic decision-making responsibility, by gender

Transition			Yes	No	Total	Sample (n)
Combined	**Male**	**Yes**	89.31	10.89	100	5,827
		No	28.53	71.47	100	4,799
	Female	**Yes**	91.39	8.61	100	10,453
		No	41.57	58.43	100	5,509
	Total	**Yes**	90.64	9.36	100	16,280
		No	35.50	64.50	100	10,308

Notes: transitions are for individuals with "panel weights" in a combined unbalanced panel

Table 3b: Transitions in economic decision-making power, by gender

Transition			Main	Joint	None	Total	Sample (n)
Combined	**Male**	**Main**	77.29	14.33	8.38	100	4,628
		Joint	56.71	23.69	19.60	100	1,199
		None	17.19	11.34	71.47	100	4,799
	Female	**Main**	81.32	12.76	5.91	100	7,828
		Joint	54.13	29.22	16.65	100	2,625
		None	23.23	18.33	58.43	100	5,509
	Total	**Main**	79.82	13.34	6.83	100	12,456
		Joint	54.94	27.48	17.57	100	3,824
		None	20.42	15.08	64.50	100	10,308

Notes: Transitions are for individuals with "panel weights" in combined unbalanced panel

Table 4: Gender as a predictor of economic decision-making responsibility and power

	Pooled data			
	decision-making responsibility	decision-making power		
Predictor	**Probit**	**Multinomial Probit**		**Probit**
	Yes/No	**Joint-none**	**Main-none**	**Main-joint**
Female dummy	0.112***	0.446***	0.525***	0.074*
	(13.64)	(10.99)	(12.74)	(1.95)
Sample (n)	51,620	51,620		31,468
Wald chi2	4667.27***	6293.65***		1841.26***
	Balanced panel			
Predictor	**decision-making responsibility**	**decision-making power**		
		Joint-none	**Main-none**	**Main-joint**
Female dummy	0.525***	0.492***	0.525***	0.039*
	(22.83)	(18.07)	(18.12)	(1.72)
Sample (n)	41,918	21,949	36,061	25,826
Wald chi2	6614.23***	2720.14***	4256.53***	3745.49***

Notes: ***p < 0.01, **p < 0.05, *p < 0.10; Marginal effects calculated at the mean are reported; Adjusted for age, race, headship, household size and marital status; Marginal effects equal to coefficients, and no weights used in the regression analysis and panel probit functions for balanced panel in the lower panel of the table.

Table 5: Economic factors as predictors of women's economic decision-making responsibility and power

Economic factors	Decision-making responsibility	Decision-making power		
		Joint-none	Main-none	Main-joint
Employed (comparison: not employed)	0.577*** (19.02)	0.455*** (12.38)	0.643*** (17.26)	0.292*** (10.55)
No. of observations (N)	24,982	12,325	20,905	16,734
Wald Chi2	4111.71***	1771.37***	2700.14***	2586.87***
Employment income (R`000)	0.107*** (11.68)	0.080*** (7.64)	0.115*** (10.90)	0.021*** (4.63)
No. of observations (N)	25,139	12,413	21,039	16,826
Wald Chi2	4078.24***	1760.17***	2699.37***	2569.58***
Total income (R`000)	0.113*** (12.42)	0.083*** (8.11)	0.119*** (11.41)	0.023*** (5.24)
No. of observations (N)	25,139	12,413	21,039	16,826
Wald Chi2	4072.63***	1760.88***	2695.06***	2571.84***
Education (years)	0.040*** (9.41)	0.042*** (8.26)	0.035*** (6.58)	0.006* (1.87)
No. of observations (N)	25,115	12,404	21,019	16,807
Wald Chi2	4033.32***	1736.51***	2669.11***	2560.98***

Notes: ***$p < 0.01$, **$p < 0.05$, *$p < 0.10$. Marginal effects at the mean for un-weighted panel probit regression models and for combined balanced panel; adjusted for age, race, headship, household size and marital status.