

Online Appendix for:

He Says, She Says: Spousal Disagreement in Survey Measures of Bargaining Power

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Appendix A: Outcome Variables

Here we provide further justification for the outcome variables included in Section 4 of the main text. We study the following indicators, which, according to prior research, are positively related to women's bargaining power or empowerment: body mass index (BMI), use of contraception ever, number of groups in which the woman is active, whether she currently has a loan, and the woman's subjective ranking of her life satisfaction.

Various studies find that women's control over assets and overall WEAI scores are associated with improved women's nutrition in Bangladesh and Nepal (Sraboni et al., 2014; Malapit et al., 2015). We use the wife's BMI as a proxy for her nutritional status. Schuler, Hashemi, & Riley (1997) find that measures of women's empowerment are associated with the use of contraception in Bangladesh. The WEAI uses group participation as an indicator of leadership, one of the domains of empowerment (Alkire et al., 2013; Narayan, 2002). Several studies find positive impacts of women's credit in Bangladesh on dimensions of women's empowerment (Hashemi, Schuler, & Riley, 1996; Pitt, Khandker, & Cartwright, 2003), while others report mixed impacts, depending on the type of program and who ultimately controls the loan (Goetz & Gupta, 1996; Kabeer, 2001b). Finally, while each of the previous outcomes is related to a specific component of a woman's well-being, reported life satisfaction is an overall impression, in the woman's opinion, of her well-being. The variable is measured from 1 to 10 and is the answer to the following question: "How would you rate your satisfaction with your life overall?"

Appendix B: Sensitivity Analysis

The regressions presented in Section 5 provide a descriptive picture of how the agreement categories are correlated with women's outcomes. Although we cannot causally identify the impact of the agreement categories on these outcomes, here we provide evidence that our estimates are not being driven by unobserved factors.

The rich set of control variables included is meant to address factors that are correlated with the bargaining power measures which might be driving the results. The goal is to include control variables that impact outcomes but not bargaining power so as not to soak up the variation that we want to explain. As such, all our outcome variables are at the household level. For example, we expect women to have better outcomes in households that are better off overall. Therefore, we include three variables meant to proxy for income and wealth: consumption, asset ownership, and the area of cultivable land owned.

The extent to which the estimates that we present provide information about the relationship between responses to the survey questions and the outcomes depends on how well the control variables account for other factors that could be correlated with the survey measures and which also impact the outcome variables. One standard approach in the economics literature is to examine the sensitivity of regression results to changes in the control variables. We follow the procedure developed by Oster (forthcoming), which draws on previous work by Altonji, Elder, and Taber (2005). Compared to simple comparisons of coefficient estimates with and without control variables, this approach allows for the estimation of a bound on the treatment effect that takes into account the movements in R-squared when control variables are introduced. One bound is the estimated coefficient from the regression with control variables, and the other is the adjusted coefficient for a regression with the maximum R-squared possible if all observed

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and unobserved control variables were included. Oster (forthcoming) argues that this maximum

R-squared is not likely to be one due to measurement error, and suggests 1.3 times the estimated R-squared as a rule of thumb. This estimation is also conducted under the assumption that the degree of selection for unobservables is equal to the degree of selection for observables (described by Oster (forthcoming) and Altonji, Elder, and Taber (2005) to be an appropriate upper bound for the degree of selection).

Appendix Table 5 presents these bounds for the coefficient estimates obtained for asset ownership (Panel A) and decision making (Panel B). For each outcome, the first column is the estimated coefficient from the regression analyzing the agreement categories in Panel D of Tables 6 and 7. Indicators of significance are included to remind the reader of the main results. The second column is the adjusted coefficient. It should be noted that this procedure allows the adjusted coefficient to be less than or greater than the original estimate. The goal of this analysis is to examine how close the coefficients are, and specifically, whether their range includes zero. In all cases, the adjusted coefficients for the main results are quite close in magnitude, and their range does not include zero. Overall, this analysis suggests that our results are not driven by omitted variable bias.

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Appendix C: Appendix Tables

"He Says, She Says: Spousal Disagreement on Household Asset Ownership" **Appendix Table 1: Does the household own the asset?**

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		Ag. land	Large livestock	Small livestock	Poultry	Fish pond or fishing equip.	Equip. (non mech.)	Farm equip. (mech.)	Non-farm business equip.	House	Large durables	Small durables	Mobile phone	Non-ag. land	Means of transport
1	A: Household owns	0.60	0.47	0.21	0.68	0.17	0.49	0.05	0.12	0.97	0.24	0.52	0.71	0.29	0.31
2	A: Household does not own	0.35	0.51	0.76	0.28	0.74	0.36	0.90	0.78	0.00	0.70	0.40	0.26	0.67	0.63
3	D: Wife says hh owns, husband does not	0.02	0.01	0.02	0.02	0.05	0.08	0.02	0.02	0.02	0.04	0.05	0.01	0.02	0.03
4	D: Husband says hh owns, wife does not	0.03	0.01	0.01	0.01	0.04	0.07	0.03	0.08	0.01	0.02	0.03	0.01	0.02	0.02
	<i>Total agreement</i>	0.95	0.98	0.97	0.96	0.91	0.85	0.95	0.90	0.97	0.94	0.92	0.98	0.96	0.94
	<i>Total disagreement</i>	0.05	0.02	0.03	0.04	0.09	0.15	0.05	0.10	0.03	0.06	0.08	0.02	0.04	0.06
	Number of observations	4,944	4,944	4,944	4,944	4,944	4,944	4,944	4,944	4,944	4,944	4,944	4,944	4,944	4,944

Notes: Sample for each asset is all households in the analysis sample.

		Agricultural production	Taking crops to market	Livestock raising	Non-farm business activity	Minor household expenditures	Use of family planning
1	A: Household made decision	0.59	0.52	0.58	0.27	0.96	0.69
2	A: Household did not make decision	0.31	0.32	0.28	0.41	0.00	0.09
3	D: Wife says decision made, husband does not	0.05	0.08	0.07	0.09	0.01	0.12
4	D: Husband says decision made, wife does not	0.05	0.08	0.07	0.23	0.03	0.10
	<i>Total agreement</i>	0.90	0.83	0.85	0.68	0.96	0.78
	<i>Total disagreement</i>	0.10	0.17	0.15	0.32	0.04	0.22
	Number of observations	4,944	4,944	4,944	4,944	4,944	4,942

Notes: Sample for each activity is all households in the analysis sample.

Appendix Table 3: Agreement and disagreement regarding who owns assets: Restricted sample

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	Ag. land	Large livestock	Small livestock	Poultry	Fish pond or fishing equip.	equip. (non mech.)	Farm equip. (mech.)	Non-farm business equip.	House	Large durables	Small durables	Mobile phone	Non-ag. land	Means of transport
1 A: Wife does not own	0.81	0.57	0.40	0.18	0.82	0.78	0.85	0.84	0.79	0.67	0.33	0.65	0.84	0.79
2 A: Wife owns	0.09	0.12	0.23	0.48	0.05	0.03	0.04	0.06	0.09	0.10	0.21	0.14	0.07	0.13
3 D: Wife says wife owns, husband does not	0.08	0.24	0.28	0.26	0.10	0.14	0.08	0.07	0.08	0.18	0.40	0.15	0.07	0.05
4 D: Husband says wife owns, wife does not	0.02	0.07	0.08	0.08	0.02	0.04	0.03	0.03	0.04	0.06	0.07	0.07	0.02	0.03
<i>Total agreement</i>	0.90	0.69	0.63	0.66	0.87	0.82	0.89	0.90	0.88	0.77	0.54	0.78	0.91	0.92
<i>Total disagreement</i>	0.10	0.31	0.37	0.34	0.13	0.18	0.11	0.10	0.12	0.23	0.46	0.22	0.09	0.08
Number of observations	2,982	2,337	1,041	3,366	843	2,433	253	570	4,783	1,196	2,553	3,530	1,453	1,548
P-value: row 3 = row 4	0.000	0.000	0.000	0.000	0.000	0.000	0.008	0.003	0.000	0.000	0.000	0.000	0.000	0.015

Notes: Sample for each asset is all households where the spouses agree that the household owns the asset.

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Appendix Table 4: Agreement and disagreement regarding decision making on activities: Restricted sample
 The table displays the proportion of households that agree or disagree with the decision made by the household head.
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		Agricultural production	Taking crops to market	Livestock raising	Non-farm business activity	Minor household expenditures	Use of family planning
1	A: Wife does not decide	0.44	0.43	0.19	0.43	0.23	0.20
2	A: Wife decides	0.14	0.15	0.38	0.13	0.30	0.62
3	D: Wife says wife decided, husband does not	0.36	0.38	0.39	0.38	0.40	0.16
4	D: Husband says wife decides, wife does not	0.05	0.05	0.04	0.05	0.07	0.02
	<i>Total agreement</i>	0.58	0.57	0.57	0.57	0.53	0.82
	<i>Total disagreement</i>	0.42	0.43	0.43	0.43	0.47	0.18
	Number of observations	2,940	2,567	2,843	1,313	4,739	3,430
	P-value: row 3 = row 4	0.000	0.000	0.000	0.000	0.000	0.000

Notes: Sample for each activity is all households where the spouses agree that the household makes the decision.

Appendix Table 5: Coefficient Stability

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Woman's BMI		Number of groups		Woman has loan		Use birth control		Woman's life satisfaction	
	Estimated β	Bound on β	Estimated β	Bound on β	Estimated β	Bound on β	Estimated β	Bound on β	Estimated β	Bound on β
Panel A: Asset ownership										
2: <i>Both:</i> Wife owns	-0.324	-0.335	0.158***	0.159	0.0896***	0.088	0.0144	0.026	0.486**	0.486
3: <i>Wife:</i> Wife owns	0.483*	0.326	0.100**	0.086	0.0149	0.013	0.0149	0.016	0.724***	0.647
<i>Husband:</i> Wife does not own										
4: <i>Wife:</i> Wife does not own	-0.115	-0.189	0.00956	0.009	0.0258	0.025	0.0735	0.085	0.667**	0.632
<i>Husband:</i> Wife owns										
Panel B: Decision making on activities										
2: <i>Both:</i> Wife decides	-0.0855	-0.079	0.143***	0.146	0.0732***	0.075	0.158***	0.163	1.324***	1.363
3: <i>Wife:</i> Wife decides	0.148	0.234	0.053	0.062	0.0359**	0.038	0.0209	0.034	0.743***	0.843
<i>Husband:</i> Wife does not decide										
4: <i>Wife:</i> Wife does not decide	-0.552*	-0.556	-0.00276	-0.002	0.0122	0.014	-0.455***	-0.429	0.18	0.313
<i>Husband:</i> Wife decides										

Notes: Coefficients in columns 1, 3, 5, 7, and 9 are repeated from Table 7. Columns 2, 4, 6, 8, and 10 are the bound on that coefficient estimated using the procedure described in Oster (forthcoming) using R-squared multiplied by 1.3 and delta equal to one.

*** p<0.01, ** p<0.05, * p<0.1