Gender Differences in the Trust Game:
Evidence from a Field Experiment between Spouses in India

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Abstract:

I present results on gender differences from the first trust game conducted among married couples. Spouses were randomly assigned to the role of sender or receiver. The sender decides how much to transfer to her spouse, which is then tripled. The receiver then decides how much to keep of the tripled amount. The unitary and cooperative household is rejected as only 3% of spouses in the sender role transfer the entire amount, which is the household earnings maximizing strategy. Women send 6% less money than their male counterparts. Men return significantly more money than women, 58% versus 48% respectively. I use survey data to examine the mechanisms and find that prior non-cooperative behavior of husbands in the form of tobacco expenditure predicts less sharing by their wives.

Keywords: trust game experiment, intra-household allocation, India

JEL Classification: D13, O12, J12.

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1. Introduction

In this paper I present experimental results on gender differences from the first trust game conducted between spouses. Established married couples are perhaps the best population to examine whether socially efficient outcomes can be attained because decision-making within the household is characterized by repeated interaction and caring. Nonetheless, even between spouses contracts are incomplete because efficient behavior cannot be enforced formally. Household members then rely on informal contracting enforcement mechanisms to hinder the incentives for non-cooperative behavior that prevail when contracts are incomplete. Under a unitary or cooperative household trust, reciprocity, and altruism would be expected to eliminate the frictions of incomplete contracting. However, the empirical evidence of efficiency in intra-household allocation under complete information in developing countries is mixed. Bobonis (2009) in Mexico and LaFave & Thomas (2013) in Indonesia fail to reject efficient intra-household allocation across different margins of expenditure. In contrast, Udry (1996), Duflo and Udry (2004), and Robinson (2012) provide evidence of non-cooperative behavior, inefficient response to shocks to farm income, and limited insurance within households in Burkina Faso, Cote d'Ivoire, and Kenya respectively[2] The goal in this paper is to examine whether there are gender differences in the ability to exhaust opportunities for Pareto improvement, and examine the potential mechanisms.

For this purpose, spouses were asked to play a one-shot BDM trust game for the opportunity to earn up to 80% of daily household income. One spouse was randomly chosen to play the role of sender and the other of receiver. The Nash Equilibrium of this game between individuals with egotistic preferences is for the receiver to keep it all and thus in anticipation the sender transfers nothing. In contrast, the optimum household-earnings maximizing, strategy is for the sender to transfer the entire amount as it earns a 300% interest. This strategy, while not a Nash Equilibrium, could be observed under a unitary and/or cooperative household as transfers between spouses do not change the equilibrium allocations due to income-pooling (Lundberg and Pollak,

[2] There is also a growing literature on the prevalence and consequences of asymmetric information between spouses living under the same roof (see Ashraf (2009); Iversen et al. (2010); Mani (2011); Castilla & Walker (2013); Castilla (2014); Hoel (2014)). This line of research has found evidence of strategic behavior, inefficient allocations, and hiding of income between spouses.

1993; Chiappori & Browning, 1998). Thus, in a household where spouses jointly make decisions over how to allocate resources, there are no motives for the sender to transfer less than the entire amount, nor there should be gender differences in sending behavior. The gender differences would affect the final allocation of the earned resources depending on the distribution of bargaining power between spouses (returner behavior). In a non-cooperative household contract, however, control over money matters which will lead to efficiency losses and gender differences in both sending and returning behavior.

The field experiment and survey were conducted in Dehradun and Almora districts, in the mountain region of Uttarakhand State, India among 188 married couples, half from each location. Prior to responding to a survey, spouses were asked to play a one-shot investment game. Each spouse was randomly assigned to a role (sender or receiver) and taken to a separate room with an enumerator of the same gender. The sender was given Rs. 75 and informed that he or she could transfer any amount to her spouse and keep the remainder. The amount transferred was tripled prior to reaching the spouse in the receiving role. Each receiver spouse was then given the opportunity to return any amount of the transfer. In the standard BDM game the proportion transferred by the sender is an indicator of trust that the receiver will share some of the earnings, while the proportion that is returned measures reciprocity (Camerer (2003)). In the case of married couples, the experiment is just a snap-shot of a dynamic and more complex game. For this reason, in this paper I refrain from using the terms trust and reciprocity, as it is plausible to assume that spouses have altruistic preferences (they care for each other), in addition to trusting each other (at least to some extent). Instead, I focus on the differential efficiency losses by gender, understood as the difference between potential and realized household earnings, as a result of underinvestment by the sender spouse. Even if the allocation of experimental earnings can be undone after the experiment is over, decisions made by the sender cannot as only the amount that is sent is tripled. The response by the returner spouse has no direct effect on household efficiency other than through the distribution of earnings from the experiment. While returner allocation of experimental earnings can be undone after the experiment, returner behavior can provide insights on the mechanisms for sharing between spouses.

The results from this research are an important contribution to the literature on gender differences in cooperative behavior. The random assignment of spouses to roles allows me to test directly for differences across genders. In this sample, women send and return on average a smaller share than men; women send 54% and return 48% versus 60% and 58% by men respectively. In China, Korea, Russia, and South Africa experimental studies with college students found no gender

differences in sending behavior (trust), and women being more trustworthy than men (Croson and Buchan (1999); Ashraf (2006)). In contrast, trust experiments in developing countries considering a broad subject pool (instead of college students) find that women send and return significantly less money than their male counterparts (Schechter (2007); Barr (2003)). One explanation for the observed results could be a 50 – 50 sharing rule between spouses, or differential preferences for inequality by gender. I can reject both of these alternatives.

While the sample of spouses who participated in this experiment is not representative of the Indian population, I present evidence of household characteristics, expenditure and women decision-making power from the India Human Development Survey (IHDS) which is a nationally representative survey conducted between 2011 and 2013. The IHDS randomly sampled households from villages in all states in India, including Uttarakhand and the evidence suggests my sample is not significantly different from the IHDS sample. One of the concerns of laboratory experiments in developing countries can be a lack of understanding of the games. For this experiment, the procedure was translated to the subject's local language, subjects played one practice examples, and the enumerators were local. On spontaneously provided feedback, subjects gave the enumerators examples of similarities of the games to their everyday lives. This and the similarity of average behavior of the subjects in this experiment relative to Schechter (2007) and Barr (2003) makes me confident that misunderstanding of the game is not driving the results.

This paper also contributes to economic development research as the findings allow reconciliation of two literatures that seem to be in direct contrast with each other. On one hand, there is non-experimental evidence that women allocate more resources towards children human capital than their male counterparts (Duflo (2003); Thomas (1990)). This literature greatly influenced policy in targeting women in social transfer programs. However, there is substantial experimental evidence documenting that women are as or less cooperative than men (Ashraf (2009); Iversen et al., (2010); Munro et al. (2014); Mani (2011), Hoel (2012); Jakiela & Ozier, (2014)) even when this behavior is costly for the household. In the trust game, women in the sender role transfer less money, which implies that, on average, the couple is giving up earnings equivalent to about a third of daily household income. The econometric results show a negative and significant relationship between tobacco expenditure and the proportion sent by the wife but not the husband. It is possible that women perceive keeping the money as equally or less costly than transferring it to their husbands when they expect husbands to spend some of the transfer on goods they consider selfish or wasteful, for instance, tobacco. This behavior would imply no loss in allocation efficiency if the

costs of tobacco consumption are the same as the interest lost from keeping the money. I corroborate this hypothesis by looking at returning behavior. Husbands in households where the share of expenditure on tobacco is large return less money to their wives. Therefore, the experimental results showing that women are less cooperative than men are but an indication of households operating under non-cooperative bargaining contracts. Therefore, it is important to examine intra-household decision making more closely when considering policy targeting of women.

2. Experimental Design and Sample Description

The experiment was conducted in Dehradun and Almora districts, in Uttarakhand, India between March and June 2013. The sample consists of 188 established couples, half from Dehradun and the other half from Almora[3]. Recruiting of subjects was done door-to-door[4]. The enumerators knocked on the door, asked if both spouses were home and if they were willing to answer some questions about managing of household finances[5]. Respondents were first asked if they had children aged 3 – 18 years old, and were only interviewed if they met the criteria[6]. The criteria implied that the couple had children who were not yet adults and thus shared household goods other than just a house, food, and utilities. To minimize selection based on incentives, no information about potential earnings was provided prior to spouses agreeing to participate. Nonetheless, the experimental sample is not necessarily representative of the population of Uttarakhand or India. The second wave of the India Human Development Survey (IHDS) was conducted between 2011 and 2013 and it is a

[3] Out of the original 188 households, 3 had to be withdrawn due to data inputting mistakes.

[4] Uttarakhand, and in particular the districts examined have not been subject to research participation previously, thus it is even harder to recruit. In Dehradun 1 in 40 households agreed to participate. In Almora the response rate was similar, except for the first two villages where it was 1 in 4 households.

[5] Enumerators first knocked on the door/call out someone if the door is open/ look for household members in the nearby fields or in the cowshed. When someone appeared they said the following: "Namastey aunty-ji/uncle-ji! We are members of the S.P.D. (Society of People for Development) that runs the paper factory and the dairy near the dried up river bed (in Shankarpur). [Include description of the kind of work that S.P.D. does in case they don't know] S.P.D. has received a new project on how couples make financial decisions within the household, and we are working on the same. We would like to ask you and your husband/wife a few questions about management of household finances. Do you have children aged between 3-18 years? Is your husband/wife at home right now? Are you willing to spare 30-45 minutes for our study?"

[6] Three types of responses were observed: (1) Agreed to participate; (2) Negative (including No/not interested/husband not available and he is usually back late at night/husband will not be interested), in which case enumerators left; (3) I should consult with my spouse, in which case enumerators waited for spouse, explained the purpose and waited for an answer that could be positive, match (2) or (4); and (4) Husband/wife not available at home right now but will be available on (some particular day). For the last set of respondents, a preferred date and time was recorded when they could participate and enumerators returned at the set date and time.

nationally representative survey of the Indian population, drawing households randomly from villages in all states in the country, including Uttarakhand. The IHDS contains a comprehensive women's questionnaire, including some of the questions used in the experimental sample survey; this provides me with data to compare the experimental sample on observable household characteristics, expenditure, and decision-making of women relative to a nationally representative sample.

Upon agreement to participate, each spouse was asked to take an enumerator of his or her same gender to separate rooms in their home. First, spouses were asked to participate in a set of experiments and explained they could earn money depending on their choices. Later they answered a survey. The experimenter outlined the rules of the experiment and the tasks involved. Each spouse played one practice round, was encouraged to ask clarifying questions and experimenters verified the tasks were understood. In spontaneously offered feedback immediately after the practice rounds and after the game, no respondent said they had found the game unclear or confusing. Subjects were informed that one round would be chosen at random to be paid for real, and subjects knew that the investment and dictator games had a higher probability of being paid relative to the 7 rounds of the public goods game they played first[7]. In order to minimize concerns of conflict between spouses after the experiment, each spouse drew a random round to be paid and these did not have to match. Details on the script used by field assistants and enumerators can be found in Appendix A.

The sample consists of married couples of different ages, caste, and socio-economic backgrounds. Table 1 contains summary statistics on household characteristics for the experimental sample, as well as the IHDS Uttarakhand subsample and India as a whole. Households have on average around 5.5 members (including the respondent), at least one son and one daughter. In many cases the husband's parents also live with them, which is not uncommon in India. The experimental sample seems close to the IHDS sample in the proportion of Hindu and Muslim households, though scheduled castes or tribes are considerably underrepresented. The experiment was conducted among rural households, thus it is expected to find that the households in the sample are more likely to own or cultivate land, as well as to own livestock, relative to the population in Uttarakhand and the national average. Households in the sample are not among the poorest in India; with an average yearly household expenditure of 164 thousand rupees, which is considerably higher than the IHDS.

[7] Subjects played 7 rounds of a public goods game, one round of the trust game, and one round of the dictator game (in that order). The results from the public goods game can be found in Castilla (2014). To decide what round was paid for real, subjects rolled two dice. If the sum of the dice was between 1 and 7, the corresponding round of the public goods game was paid. If the sum of the dice was between 8 and 11 the highest between the trust and dictator game were paid, if sum of the dice was 12 both the trust and dictator games were paid. This was meant to compensate for differences in endowments across games as the public goods games had considerably larger endowments.

Over 60% of households own a bicycle, motorcycle, or scooter, and most households have access to electricity.

Table 1: Summary Statistics, Household Characteristics

Variable	Experiment Data	IHDS Uttarakhand	IHDS India	Variable	Experiment Data	IHDS Uttarakhand	IHDS India
	N=188	N=468	N=42,127		N=188	N=468	N=42,118
No. HH Members	5.510	5.605	5.453	Exp. Tobacco	2.369	1.872	1.718
	(1.865)	(2.559)	(2.466)		(5.960)	(3.236)	(3.485)
No. Boys	1.345	1.100	0.993	Share Exp.	2.795	2.100	1.927
	(1.119)	(1.045)	(1.006)	Tobacco	(5.597)	(2.996)	(3.138)
No. Girls	1.292	1.057	0.941	% HH Purchase	0.569	0.628	0.603
	(1.072)	(1.179)	(1.075)	Tobacco	(0.496)	(0.483)	(0.489)
Scheduled Caste or Tribe	0.096	0.363	0.295	Exp. Adult Clothes	11.31	3.092	4.701
	(0.296)	(0.297)	(0.342)		(9.260)	(3.898)	(8.968)
Other Backwards Caste	0.209	0.275	0.406	Share Exp. Adult	11.17	3.176	4.402
	(0.408)	(0.447)	(0.491)	Clothes	(7.901)	(2.862)	(2.951)
Hindu	0.828	0.839	0.817	Exp. Personal Care	7.047	6.819	5.714
	(0.377)	(0.367)	(0.385)		(4.211)	(14.64)	(17.76)
Muslim	0.117	0.139	0.120	Share Exp.	7.869	5.791	4.740
	(0.323)	(0.347)	(0.325)	Personal Care	(6.002)	(4.750)	(4.013)
Own a Bicycle	0.281	0.405	0.542	Exp. Home Items	1.990	2.771	4.055
	(0.451)	(0.491)	(0.498)		(8.449)	(9.416)	(25.58)
Own Motorcycle / scooter	0.393	0.288	0.287	Share Exp. Home	1.410	1.632	2.207
	(0.489)	(0.453)	(0.452)	Items	(1.857)	(4.348)	(6.135)
Own Livestock	0.750	0.527	0.417	Exp. Ceremonies	13.69	4.879	6.657
	(0.434)	(0.499)	(0.493)		(38.78)	(22.84)	(38.33)
Own Bullock	0.191	0.198	0.124	Share Exp.	9.609	3.028	3.808
	(0.394)	(0.399)	(0.330)	Ceremomies	(12.87)	(5.836)	(7.775)
Own Cow	0.510	0.305	0.195	Exp.	14.80	5.680	5.914
	(0.501)	(0.461)	(0.396)	Transportation	(37.79)	(16.24)	(20.48)
Own Buffalo	0.276	0.262	0.147	Exp. Utilities	3.277	8.995	11.21
	(0.448)	(0.440)	(0.354)		(6.460)	(8.957)	(18.88)
Own Goat	0.170	0.113	0.109	Exp. Jewelry	4.955	3.259	3.051
	(0.376)	(0.317)	(0.312)		(26.69)	(16.90)	(30.69)
Own or cultivate land	0.833	0.575	0.463	Exp.	705.5	1.573	1.169
	(0.373)	(0.494)	(0.498)	Entertainment	(1.391)	(8.979)	(5.628)
Electricity Connection	0.967	0.950	0.873	Total Expenditure	164.4	109.2	127.9
	(0.177)	(0.216)	(0.332)		(201.9)	(100.1)	(126.2)

Note: Averages presented, and standard deviations in parentheses. IHDS data obtained from India Human Development Survey 2011-2013. Definition of all variables in Appendix Table B.1.

Table 2 contains summary statistics on individual characteristics, including decision making power of women. In IHDS the household head answered the survey, except for the women's questionnaire, where at least one woman per household, preferably the wife of the household head, was interviewed. Therefore, for information at the individual level, I can only compare the women in my sample to the IHDS women. The average age of women in my sample is roughly the same as in the IHDS data. Men are on average 6 years older than their wives. The couples have been married for 16 years on average, though there is a year difference on average between the answer of

husbands relative to wives. There is considerable variation in length of marriage: the youngest couple has been married for 3 years while the oldest for 49. Women's age at first marriage is also the same as in the IHDS sample. Women tend to have less schooling than men. Women in my sample are more likely to be literate than the IHDS women, however, the proportion of women within each education level category is not that different. Men are the main breadwinners in the household as less than 30% of women work outside the home, which is lower than the Uttarakhand and the national average in IHDS. However, in decision-making power, women in the sample are very similar to the IHDS women. Some of the items are particularly interesting for the experimental outcomes, for instance say over the ability to work outside the home, how many children to have, purchasing major household goods, and land. Overall, the experimental sample is not different from the Uttarakhand or national averages in observable characteristics.

Table 2: Summary Statistics by Gender

Variable	Experimental Data		IHDS Uttarakhand	IHDS India	Variable	Experimental Data		IHDS Uttarakhand	IHDS India
	Men		Women Only			Men		Women Only	
	N=186	N=185	N=436	N=42,127		N=182	N=186	N=436	N=42,127
Age	40.01	34.64	35.85	36.33	Work for Income	0.951	0.297	0.503	0.623
	(8.760)	(8.765)	(9.715)	(9.866)		(0.215)	(0.458)	(0.501)	(0.484)
Age 1st marriage	23.51	18.81	18.40	17.83	Say over work	0.818	0.395	0.406	0.457
	(4.152)	(3.393)	(3.197)	(3.676)		(0.386)	(0.490)	(0.491)	(0.498)
Years Married	15.87	16.55	17.42	18.40	Food to prepare	0.545	0.795	0.880	0.928
	(9.256)	(9.86)	(10.95)	(10.81)		(0.499)	(0.404)	(0.324)	(0.257)
Literacy	0.943	0.875	0.628	0.609	How many children to have	0.973	0.936	0.947	0.923
	(0.231)	(0.331)	(0.484)	(0.487)		(0.162)	(0.245)	(0.222)	(0.265)
No School	0.091	0.282	0.371	0.383	What do do when sick	0.834	0.791	0.834	0.923
	(0.288)	(0.451)	(0.483)	(0.486)		(0.372)	(0.407)	(0.371)	(0.265)
Some School	0.758	0.619	0.525	0.550	What to do when kids sick	0.946	0.882	0.894	0.906
	(0.429)	(0.486)	(0.499)	(0.497)		(0.225)	(0.322)	(0.307)	(0.291)
High school or above	0.129	0.065	0.103	0.066	Who children should marry	0.978	0.930	0.873	0.882
	(0.336)	(0.247)	(0.304)	(0.248)		(0.145)	(0.254)	(0.333)	(0.322)
Ideal No. Kids	-	1.989	2.462	2.406	Purchase major HH good	0.956	0.813	0.773	0.773
		(0.294)	(0.809)	(0.940)		(0.203)	(0.390)	(0.418)	(0.418)
Gifts to Spouse	0.532	0.727	-	-	Purchase or sell land	0.946	0.834	0.731	0.746
(dummy variable)	(0.500)	(0.446)				(0.226)	(0.372)	(0.443)	(0.435)
Contributes to Pay for Child Schooling (dummy)	0.891	0.861	-	-					
	(0.311)	(0.346)							

Note: Averages presented, and standard deviations in parentheses. IHDS data obtained from India Human Development Survey 2011-2013. Definition of all variables in Appendix Table B.2.

Each individual spouse was asked about their own expenditure over the last 12 months on different categories. Expenditure in assets and ceremonies are quite similar. The total monthly household income from all sources is reported separately by men and women, and there is on average about a one thousand Rs. difference between reports which is not uncommon among households in developing countries (Chen and Collins, (2014); De Weerdt et al. (2015)). One of the main variables of interest is expenditure on tobacco, which presumably is not an efficient use of the

household limited resources, has negative health consequences, and can be a source of conflict between spouses. In Uttarakhand, alcohol consumption is not common due to the state's history on anti-alcohol movements (Pathak, (1985); NIMS, (2009)). Some districts in the state have gone from wet to dry and back to wet over the last 30 years and thus consumption is less common that in other regions of India among both men and women regardless of religion (in addition to more tabooed and thus more likely to be underreported[8]). Men spend on average 3.6% of their own total expenditure on tobacco, while women spend about half of the proportion. While both men and women spend money on tobacco, men are the main consumers, both as reported in the survey and according to the World Health Organization (WHO, 2013). About 47% of men and 22% of women in a total of 107 households in the sample report a non-zero expenditure on tobacco. Among those who reported expenditures on tobacco, 73% of both men and women indicate tobacco was purchased for the husband (and the rest for members of the household other than the wife).

Table 3: Summary Statistics of Expenditure by Gender

Variable	Husband		Wife		Variable	Husband		Wife	
	N	Mean	N	Mean		N	Mean	N	Mean
Share Exp Tobacco	182	3.641 (7.582)	186	1.623 (6.062)	Share Exp. Clothing	182	14.23 (12.78)	186	9.884 (10.49)
Tobacco is for Husband (resp only if exp tobacco >0)	84	73.81	41	73.81	Share Exp. Home Items	182	1.412 (2.027)	186	1.494 (2.838)
Share Exp Health	182	18.75 (19.87)	186	21.15 (20.46)	Share Exp. Ceremonies	182	8.834 (14.92)	186	8.825 (10.61)
Share Exp. Assets	182	10.00 (16.90)	186	10.25 (16.92)	Share Exp Lotteries	182	0.299 (3.660)	186	0.228 (2.624)
Share Exp. Personal Care	182	8.948 (9.786)	186	8.015 (7.101)	Total Expenditure (th)	188	76.46 (114.2)	188	88.00 (144.7)
Share Exp. Home Improvement	182	10.44 (16.80)	186	14.20 (20.52)	Total HH Income (th)	179	8.488 (8.983)	165	7.704 (7.505)

Note: Averages presented, and standard deviations in parentheses. Definition of all variables in Appendix Table B.1.

Experimental Procedure:

Participants' tasks involved playing a BDM trust (or investment) game. In each household, spouses were randomly assigned to the role of sender or receiver. The initial endowment and the interest rate on the amount that is sent was common knowledge. The sender was given Rs 75 in Rs 5 denomination. Each individual in this role was informed that she could transfer any amount to her spouse in the other room and keep the remainder. The amount transferred was tripled prior to reaching the spouse in the receiving role. Then an enumerator took the tripled transfer amount in an envelope to the other room. To minimize demand effects the enumerators were of the same gender

[8] For this reason the survey did not contain questions on alcohol consumption or expenditure.

as the respondents, and they turned around while each individual made her decision of how much to send or return[9]. Each receiver spouse was given the opportunity to return part, all or none of the tripled amount of the transfer she received from her spouse. After making the decision on how much to return, individuals in the receiver role played a one-shot dictator game. They were given Rs. 75 and asked to decide how much to keep and how much to share with their spouse. They were informed their spouse would not be able to respond to the proposed split. At the end of the experimental session and after completion of the survey, subjects were informed of their own pay-offs. The amount was handed to them privately either immediately after the session or at the end of the day.

The Nash Equilibrium of the trust game under self-regarding preferences is for the receiver to keep the entire amount and in anticipation of this behavior the sender does not transfer anything. However, even between strangers the usual average share sent is around 50% of the endowment, and the amount returned is between 25% and 30% of the tripled amount (Berg et al. (1995); Cox (2004); Camerer (2003); Ashraf et al. (2006)). In standard trust game between strangers, an individual in the sender role transfers money to her partner if she trusts some of the tripled amount will be returned (aka. that her kindness will be reciprocated). Likewise, an individual in the receiver role returns a non-zero amount if she is motivated by positive reciprocity. Cox (2004) suggests other reasons to transfer a non-zero amount on either case, such as other-regarding preferences, pure altruism, or inequality aversion.

In the case of married couples, the experiment is just a snap-shot of a more complex dynamic game. Spouses have prior information on their partners' behavior due to day-to-day interaction (and perhaps conflict) which informs their beliefs not only of their partners' response in the game, but also of what can happen with their earnings after the experiment. For this reason, in this paper I refrain from using the terms trust and reciprocity, as it is plausible to assume that spouses have altruistic preferences (they care for each other), in addition to trusting each other (perhaps not so much on financial matters). Instead, I focus on the differential efficiency losses by gender, understood as the difference between potential and realized household earnings, as a result of underinvestment by the sender spouse. The response by the returner spouse has no direct effect on household efficiency other than the distribution of the earnings from the experiment and the expectations of how the money will be spent. While the returner allocations have the potential to be undone after the experiment, sender behavior cannot. Once the sender chooses the amount to transfer, the maximum

[9] Further, spouses were given blank notes to give the impression of a full envelope if they felt embarrassed that the enumerator would think they sent too little.

potential earnings from the experiment are set.; the distribution of those earnings are what is determined by returner behavior. For this reason, I then use the dictator game as a baseline to analyze motives for sharing money between couples when there are no strategic concerns.

In Appendix Table B.2 I present evidence of effective randomization. I test whether the wives (husbands) in the sender role differ from those in the returner role on observables. There are only two variables that are significantly different between husbands in the sender relative to husbands in the receiving role and only at the 10% level. Husbands in the sender role are 1.3 percentage points more likely to report making gifts to their wives, and husbands in the receiver role are 6 percentage points more likely to be in charge of handling household money. There are no significant differences on observables between wives in the sender or receiving roles.

3. Experimental Results on Gender Differences

As stated before, the household earnings maximizing strategy in the trust game is for the sender to transfer her entire endowment as it will be tripled. The receiver's response is then trivial because regardless of her choice the outcome is efficient. This strategy, while not a Nash Equilibrium with egotistic preferences, could be observed under a unitary or cooperative (collective) household as transfers between spouses do not change the equilibrium allocations due to income pooling. In contrast, in a non-cooperative household individual control over resources matters and there are efficiency losses. The first notable result is that couples do not attain the efficient, household earnings maximizing outcome. While there are no spouses who choose not to transfer any money in either role, only 5 men (5%) and 2 women (2%) transfer the entire amount[10]. As a result, men are giving up Rs. 90, and women are giving up Rs. 105 of potential earnings on average. These results imply that both the unitary and collective household models can be rejected. Table 4 contains the main experimental outcomes.

[10] The experimental results on the whole sample, without gender differences, were published in Castilla (2015).

Table 4: Main Experimental Outcomes

	Inter-Spousal Transfers		
	Sender [a/]	Receiver [a/]	Dictator [a/]
Total Earnings			
Husband	94.631	48.500	-
	[3.193]	[3.118]	
Wife	108.166	70.578	-
	[3.527]	[4.325]	
Amounts transferred to spouse			
Husband	45.105	74.000	36.500
	[1.542]	[4.641]	[1.342]
Wife	40.833	64.736	39.105
	[1.606]	[3.617]	[1.606]
Proportion transferred to Spouse			
Husband	60.140	58.863	51.333
	[2.057]	[2.051]	[1.789]
Wife	54.444	48.898	47.859
	[2.141]	[2.268]	[2.142]
Mean Tests for Differences of Husband vs. Wife [b/]			
Husband - Wife	4.271	9.263	2.605
(Amount)	(0.0565)	(0.115)	(0.2174)
Husband - Wife	5.695	9.964	3.474
(shares)	(0.0565)	(0.0014)	(0.2174)

a/ Standard error in brackets.

b/ p-values in parentheses.

Women send on average 6 percentage points less than men, and this difference is statistically different from zero at the 94 confidence level. Women in the receiver role return 10 percentage points less money than men, also statistically significant (at the 99% confidence level). In contrast, there are no gender differences among receivers in how much they share with their spouse in the dictator game. Overall, men in the receiver role share more money with their wives in the trust game than in the dictator game, while women exhibit no differences. What is puzzling, though, is that men transfer more money back in the trust game (relative to women and men themselves in the dictator game) even though they are receiving less from their wives in the first place. The decision by returners in the investment game and dictator games is the same except for the size of the endowment and the fact that they are responding to what their wives did in the trust game (strategic interaction). If there are differences in responses to endowments by gender, perhaps that could explain the results. Say men and women have different thresholds in mind of the minimum amount of money they need to keep whenever they receive a transfer. If that was the case, then men and women would keep different amounts in the dictator game. However, in the dictator game husbands keep on average Rs. 36.5 and wives keep Rs. 39.1, and differences by gender in the amount or

proportion kept in the dictator game are statistically equal to zero (and small in magnitude). Table 5 contains results to test for differences in behavior by gender in the dictator and trust game. Even after controlling for individual (and household) heterogeneity via fixed-effects, a 6.7 percentage point difference remains in men's sharing across games. Thus, it seems that men are being more responsive to strategic interaction than women.

Table 5: Fixed-effects Results on Gender Differences across Trust and Dictator games

	(1)	(2)	(3)
Dictator	-4.197***	-3.777	0.0528
	[1.476]	[2.295]	[2.825]
Dictator * Male	-	-	-6.723***
			[2.956]
Endowment	-	0.008	0.018
		[0.032]	[0.032]
Observations	370	370	370
R-squared	0.042	0.042	0.069

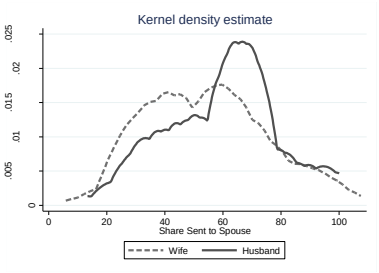
Note: Fixed Effects results.

Finally, in Figure 1, I present the estimated probability density functions by gender. The Epps-Singleton test examines equality of distributions, while the Mann-Whitney test also considers the possibility that one of the distributions is shifted to the left (or right). These results thus indicate that women send less than men as the distribution of the proportion sent by women is shifted leftwards. The kernel density distributions of the proportion returned are also statistically different across genders, with women sending less than their male counterparts. Consistent with the average results, the distribution of the proportion shared in the receiving role in the dictator game is statistically equivalent between genders. In the bottom panel in Figure 1 (Panel B) I present results of differences in sending and returning behavior within couples. The densities of the proportion sent by women in the sender role and the proportion returned by men in the receiver role are statistically equivalent, implying that women are able to anticipate their husbands' behavior. However, the same distributions when men are in the sending role and women in the receiving role are not, with women returning less money.

Figure 1: Distribution of Sharing across Genders

Panel A

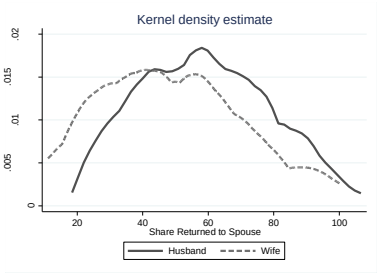
Proportion Sent by Sender



Epps-Singleton: 6.32 (0.176)

Mann-Whitman: 2.117 (0.034)

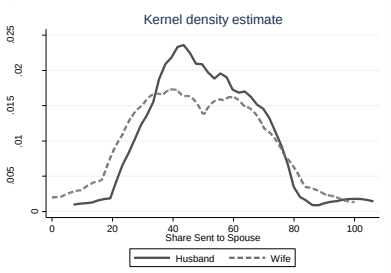
Proportion Returned



Epps-Singleton: 17.44 (0.001)

Mann-Whitman: 3.161 (0.002)

Proportion Sent by Dictator

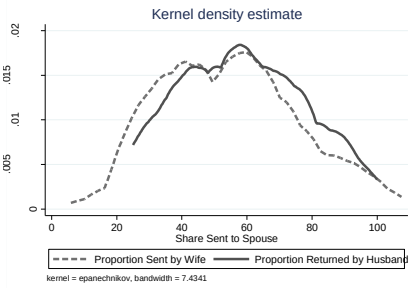


Epps-Singleton: 9.24 (0.055)

Mann-Whitman: 1.149 (0.251)

Panel B

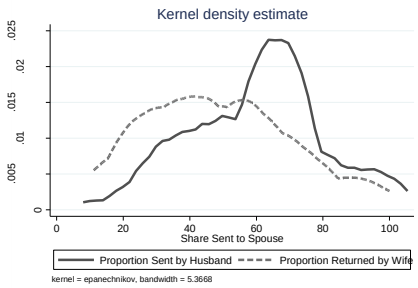
Wives in Sender Role vs Husbands in Receiver Role



Epps-Singleton: 3.74 (0.441)

Mann-Whitman: 1.47 (0.142)

Husbands in Sender Role vs Wives in Receiver Role



Epps-Singleton: 16.27 (0.003)

Mann-Whitman: -3.71 (0.000)

One potential explanation for the observed behavior between spouses could be exhibiting inequality aversion. The experimental money was in Rs. 5 denomination, thus for senders testing whether the proportion transferred is equal to 50% can yield deceiving results. The closest to 50% that senders can do is sending Rs. 35 or Rs. 40, thus sharing 46% or 53% of the Rs. 75 endowment. There are only 12 women and 9 men who sent Rs. 40, and 8 women and 9 men who sent Rs. 35. The average amount and proportion sent by women is consistent with inequality aversion because the average proportion sent by women is not statistically different from 53% (average amount sent

Rs. 40). Men do not exhibit inequality aversion as they send an amount and proportion significantly larger than 53%. Testing for inequality aversion in returner behavior is slightly more complicated. If the sender transfers on average Rs. 40, then the receiver can split the final earnings 50-50 by returning Rs. 60. However, if the sender transfers on average Rs. 35 then the receiver's "even" split is either to keep Rs. 50 or Rs. 55, equivalent to either 47% or 52%. In Table 6 I present results testing for all 3 alternatives. The proportion returned by women is not statistically different from 50% (or 47% or 52%), while the proportion returned by men is larger. In the dictator game, however, both men and women transfer the equivalent of an equal split. Women behave consistently across games and roles, transferring on average about 50% of the money to their husbands, while men both in the sender and returner roles send more than that. Another alternative is that spouses could have a 50-50 sharing rule which leads them to equate individual final earnings instead of proportions shared. I can also reject a 50-50 sharing rule as the average share of final earnings by sender and receiver are statistically different from each other at the 99% significance level.

Table 6: Inequality Aversion and 50 – 50 sharing rule Tests

	Share Sent		Share Returned		Share Sent by		Earnings
	Equal to 50%		Equal to 50%		Equal to 50%		50-50 Split
Husband	4.930		4.321		0.745		6.219
	(0.000)		(0.000)		(0.458)		(0.000)
Wife	2.075		-0.486		-0.999		16.379
	(0.0408)		(0.6283)		(0.320)		(0.000)
	Robustness						
	53%	46%	52%	47%	53%	46%	
Husband	3.472	6.875	3.346	5.783	-0.932	2.981	-
	(0.001)	(0.000)	(0.001)	(0.000)	(0.354)	(0.004)	
Wife	0.675	3.943	-1.368	0.837	-2.399	0.868	-
	(0.502)	(0.000)	(0.175)	(0.405)	(0.018)	(0.388)	

The experimental evidence on gender is inconclusive but somewhat consistent with my results. In most trust games implemented in a population other than college students women send less and return less (Schechter (2007); Bellemare and Kroger (2007))[11]. Schechter argues that gender differences are driven by women being more risk averse than men. Spouses are engaged in a repeated game on their daily lives, with the experimental games being just another round. It is also possible that women invest (send) and return less, and receive more in return because their husbands

[11] Ashraf et al. (2006); Croson and Gneezy (2009); Buchan, Croson, and Solnick (2008); Chaudhuri and Gangadharan, (2007). In all of these papers the samples are drawn from among college students and they find consistent results that women send less and return more in the trust game.

know women are better at managing the limited household resources. Barr (2003) presents anecdotal evidence that women in Zimbabwe have both less access to money and less control within the household and thus have a harder time letting go of the money. In the following section I examine the mechanisms driving the observed differences in sharing across genders.

4. Mechanisms for the Observed Gender Differences

Conceptual Framework:

The aforementioned experimental results support the rejection of a unitary or cooperative household and indicate that spouses engage in a non-cooperative household allocation contract where women share less than men. The gender differences in sending behavior are troubling because in public policy interventions transfers are usually given to women, however, their choices in the trust game are not consistent with the non-experimental evidence that women allocate more resources towards children human capital than their male counterparts (Duflo (2003); Thomas (1990)). However, as mentioned earlier there is growing experimental evidence on women being as or less cooperative than their husbands. It is possible that women want to keep control over money due to their expectations of how their husbands will spend the money. Therefore it is important to understand the mechanisms driving the limited investment behavior because if the counterfactual is that, by sharing more and increasing household earnings, the difference is spent frivolously by husbands, say on tobacco, then the experimental evidence is neither troubling nor inconsistent with the previous non-experimental results.

Consider a standard non-cooperative model of allocation between spouses similar to Chen and Woolley (2001). Spouses have preferences over personal expenditure (x_i), and expenditure on household goods (Q_i) which are of the Samuelson type (non-rival in utility). Preferences over own consumption are represented by a utility function, $U(Q, x_i)_{\text{i}}$, which is assumed to be separable in x_i and Q, where $Q = Q_i + Q_{-i}$. Therefore, each spouse independently decides on his or her contribution towards household goods but both derive utility from the realized investment or expenditure.

In the experiment, one spouse is randomly chosen to receive an endowment and decide whether to keep the money or to send it to her spouse who will receive the money with 300% interest. Let the endowment be ω, the amount sent be κ_s (which is then tripled), and thus the

amount kept by the sender is $\omega - \kappa_s$. The returner chooses the amount to return, r_r, from the $\tau\kappa_s$ where τ is the interest earned, in this case $\tau = 3$. Once the payments are made, each spouse chooses his or her private and household allocation to maximize her individual utility subject to the experimental earnings. There are two main differences of examining transfers in the trust game with couples (relative to strangers): (1) decisions in the game depend on the expectations of what their spouse will do with the money afterwards, and (2) even in the absence of caring preferences, their utilities are interdependent via household goods.

Before the payoffs of the experiment are realized, the sender solves the following problem:

$$max_{\kappa_s, x_s, Q_s}\ U_s = u_s(x_s) + v_s(Q_s + E(Q_r))^{12} \quad s.t. \quad (\omega - \kappa_s) + E(r_s) \geq x_s + Q_s \qquad (1)$$

The optimum choices of money to send (as well as allocations towards public and personal consumption) result from solving the following system:

$$\kappa_s = \kappa\big(\omega, E(Q_r), E(r_s), \tau\big) \qquad (2)$$

$$Q_s = \kappa\big(\omega, E(Q_r), E(r_s), \tau\big) \qquad (3)$$

The amount (or share) of the endowment that is sent depends on his or her expectation of what the returner spouse will do with the money. In a more general model, altruism, gender roles, and/or bargaining power can also influence the decision. Note that even if a wife cares about her husband, she may limit the proportion of the endowment sent as a result of whether he shares money with her on a day-to-day basis, his prior contribution towards the household goods that she values, and his expenditure on things that she considers selfish or wasteful, for instance, tobacco.

Once the sender has decided on κ_s, the receiver solves:

$$max_{r_r, x_r, Q_r}\ U_r = u_r(x_r) + v_r\big(Q_r + E(Q_s)\big) \quad s.t. \quad \kappa_r \leq x_r + Q_r \ \ and\ \kappa_r = \tau\kappa_s - r_r \qquad (4)$$

The optimum choices for the returner then are:

$$r_r = r\big(\omega, E(Q_s), \kappa_s, \tau\big) \qquad (5)$$

$$Q_r = f\big(\omega, E(Q_s), \kappa_s, \tau\big) \qquad (6)$$

For the individual in the returning role there is only uncertainty about his or her spouse's contribution towards the public good after the experiment. However, given repeated interaction over the years they have been married, individuals can form a prediction of future contributions based on previous behavior.

[12] The functions $u(\cdot)$ and $v(\cdot)$ satisfy the standard assumptions that $u' > 0, v' > 0, u'' < 0, v'' < 0$, and $u'(0) = \infty$. $v'(0) = \infty$, implying x_i and Q are normal goods. The model allows for differences in relative preferences for household and private goods across spouses. This framework can also be extended to include caring preferences as in Chen and Woolley (2001).

In what follows, I estimate the reduced-form reaction functions, (3) and (5), to examine the mechanisms driving the observed differences in sharing across genders. I cannot however estimate the reaction functions (4) and (6) as I do not observe spousal expenditure after the experiment concluded. I resort to the survey data collected on previously incurred expenditure, control over money, and household characteristics. The survey was conducted privately with each spouse in separate rooms and by enumerators of the same gender. The expenditure reported is pre-existing to the experiment (over the last 12 months) and can be used to proxy the expectations of what the spouse will do with the money after the payoffs from the experiment are realized. I use indicators of an individual spouse's perception of the reality of his/her ability to influence the decision to work outside the home to account for differences in bargaining power. These indicators of decision-making and bargaining power are subjective and thus actually capture what matters in deciding whether to turn over money or not.

Sending Behavior:

There are various channels that can motivate the lack of sending in the trust game among married couples. Expectations about the way earnings from the experiment will be spent are an important factor, not only theoretically but also given evidence from development research. Poor households in developing countries spend a considerable amount of their income on alcohol, tobacco, and/or other indulging goods, instead of better quality calories (Duflo and Banerjee, (2007)). According to a report from the National Institute of Medical Statistics (NIMS) from 2007, in Uttarakhand only 6.6% of women consume tobacco (concentrated among elder women), while 47.7% of men either smoke or chew tobacco (NIMS, (2007)). In my sample, neither women nor men report the tobacco that was purchased was meant for the wives; 73% of respondents stated it was meant for the husband, and the rest for other members of the household. Further, 47% of men report spending money on tobacco in the last 12 months, thus resulting in a similar proportion of tobacco consumption by men in my sample as the reports by the NIMS. If this is a source of contention between spouses, which was suggested anecdotally during the data collection, it may be one of the reasons women send less money even if it comes at a cost.

It is possible that gender differences in altruistic behavior on a day-to-day basis correlate with sharing behavior in the experiment. I use the answer to the question: "Do you buy gifts for your spouse?" as a proxy for day-to-day altruism between spouses. Alternatively, gender differences in sending behavior may be masking differences in control over money inside the household. Barr

(2003) suggests that in developing countries it may be harder for women to let go of money in the experiments because on their day-to-day lives they have less control over household resources. Finally, I use an indicator equal to 1 if the respondent can influence his/her choice to work outside the house. Most men can influence their labor force particpation (85%), but only 39% of women do. I also include a variable on the share of wife's total expenditure relative to husband's total expenditure as another measure of women's bargaining power.

In the regression analysis that follows, I estimate reduced-form reaction functions of the share of the endowment that is transferred by the sender of gender g to his or her spouse.

$$\left(\frac{K_s}{\omega}\right)_s^g = \theta_1\ GS_s^g + \theta_2\ BP_s^g + \pi\ \ Exp_h\ + \varphi\ \ X_h + \sum_{d=1}^{2} \alpha_d + \varepsilon_s \qquad (7)$$

Where $\left(\frac{K_s}{\omega}\right)_s^g$ is the share of the endowment that the sender of gender g transfers to her spouse in household h; GS_s is an indicator variable equal to 1 if spouse s buys gifts for her partner; Exp_s is a matrix of different expenditure categories over the last 12 months by each spouse in household h; BP_s^g is an indicator of self-reported control over money in the household; X_h is a matrix of household characteristics; and $\sum_{d=1}^{2} \alpha_d$ are district fixed-effects. Detailed description of all variables can be found in Appendix Table B.1.

The results on sending behavior are presented in Table 7. I split the sample and estimate variants of equation (7) for men and women separately for ease of interpretation (in Appendix B.4 I present robust results using interactions instead of separate regressions by gender). Column (1) contains the results from regressing the proportion sent on expenditure and district[13]. In Column (5) I add control variables, indicators of altruism, bargaining power, total household expenditure, and in Column (6) I further add education controls[14]. There are systematic differences in the variables that influence sending behavior across genders. For women, the share of total household expenditure on tobacco correlates negatively with the proportion sent, but it is not relevant for men. The result is robust to adding a variety of control variables; the point estimate becomes smaller but it continues to be statistically significant, negative, and statistically equal to 1. While both men and women spend money on tobacco, in Uttarakhand men are the ones who consume most of it. However, it is not at the extensive margin that this negative relationship arises, but at the intensive margin. Thus, among those households that purchase tobacco, a greater expenditure is associated with a one-to-one

[13] Ten observations are lost due to missing values in the variables on bargaining power and gifts to/from spouse, 6 more are lost due to missing values on expenditure, and 4 more are lost due to missing values on schooling indicators. Only women were asked the household composition questions, thus when there are mistakes in data entry or non-responses, it affects both spouses.

[14] Appendix B.4 contains columns (2) to (4) where controls are progressively introduced showing the results are robust.

decrease in sharing in the trust game. Figure B.1a in the Appendix shows there are outliers in the share spent on tobacco out of household expenditure. However, after removing the outliers (see Appendix Figure B.1b) there continues to be a negative relationship between proportion sent by wives and expenditure on tobacco.

To further examine whether the results are driven by households where the share spent on tobacco is large, in Columns (1a), (5a), and (6a) I present results using a dummy variable equal to 1 if the share spent on tobacco is greater than the 85th percentile (8.1% or more), and zero otherwise. It is clear that women in households that spend a share above 8% on tobacco reduce the amount sent by a more than proportional response[15]. These results are intuitive because negligible expenditure in tobacco is unlikely to cause conflict, while a share of expenditure around 8% is 5 times the average share spent on home items. The results are robust when lower thresholds of the share spent in tobacco are used as long as it remains above the 75th percentile[16]. Thus, the results suggest that non-cooperative behavior observed in women in the experiment is motivated by prior non-cooperative behavior from their husbands in the form of large expenditure on tobacco. The husband's expenditure on weddings, dowries and funerals is also negatively correlated with sending by women, though to a lesser order of magnitude.

Men on the other hand send more if their wives spent money in children's schooling (fees, books, clothes, etc). This result is both robust and becomes stronger as controls are introduced. Among sending spouses, men pay for schooling expenses in 45% of the households, and in 43% the wife pays. Further, only 4 of these households do not have a school-going son or daughter, thus variation comes from which member of the household pays for schooling expenses. Interestingly, both men and women pay for schooling, and yet, women's sending behavior is uncorrelated with the husbands' contribution towards children human capital investments. Therefore, wives are compensated for paying for schooling expenses when unanticipated income shocks occur (experimental money), while husbands are not.

[15] A sensitivity analysis was conducted to find the minimum threshold of expenditure on tobacco that yields robust results. The 80th percentile is a share of expenditure on tobacco of 7.3% when considering only the households with non-zero expenditure. Using an indicator equal to 1 if the share of household expenditure on tobacco exceeds 7.3% (and zero otherwise) the results are robust but statistical significance drops to 10% instead of at the 5% level. The results can be requested directly from the author.

[16] Results are robust up to a threshold of 6.2% of household expenditure in tobacco, which corresponds to the 75th percentile. These results can be requested directly from the author.

Table 7: Reaction Functions on Sending Behavior

	Women						Men					
	(1)	(5)	(6)	(1) a	(5) a	(6) a	(1)	(5)	(6)	(1) a	(5) a	(6) a
Dummy Expenditure in Tobacco	1.590	-1.043	-0.723	0.240	-1.228	-0.798	2.412	-0.931	-1.712	0.496	-3.372	-4.371
(= 1 if Expenditure in Tobacco>0)	[4.693]	[5.088]	[5.405]	[4.610]	[5.004]	[5.299]	[4.924]	[5.241]	[5.343]	[4.330]	[4.986]	[5.115]
HH Expenditure in Tobacco	-1.029***	-0.669**	-0.690*	-15.613***	-12.599**	-13.172**	-0.223	-0.351	-0.303	8.700	7.933	9.303
(= share relative to total HH exp, 0 o/w)	[0.306]	[0.311]	[0.351]	[5.216]	[6.387]	[6.640]	[0.592]	[0.458]	[0.406]	[10.456]	[10.933]	[10.168]
Own Expenditure in Assets	-	-0.229	-0.331	-	8.259	9.488	-	0.168	0.182	-	4.075	4.215
(= share relative to total Own Exp)		[0.211]	[0.239]		[6.436]	[6.733]		[0.167]	[0.168]		[7.434]	[7.177]
Own Expenditure in Ceremonies	-	0.247	0.290	-	-0.249	-0.358	-	-0.203	-0.234	-	0.166	0.176
(= share relative to total Own Exp)		[0.199]	[0.191]		[0.210]	[0.238]		[0.156]	[0.160]		[0.165]	[0.166]
Spouse Expenditure in Assets	-0.040	0.156	0.156	-0.033	0.170	0.172	-0.205*	-0.276*	-0.285*	-0.191*	-0.251*	-0.260*
(= share relative to total Spouse Exp)	[0.110]	[0.157]	[0.172]	[0.110]	[0.157]	[0.172]	[0.115]	[0.148]	[0.148]	[0.114]	[0.145]	[0.146]
Spouse Expenditure in Ceremonies	-0.233*	-0.267*	-0.207	-0.203*	-0.236	-0.171	-0.020	-0.003	-0.028	-0.050	-0.030	-0.053
(= share relative to total Spouse Exp)	[0.119]	[0.152]	[0.183]	[0.119]	[0.153]	[0.184]	[0.223]	[0.217]	[0.220]	[0.236]	[0.213]	[0.216]
Wife Share of Total HH Expenditure	0.037	-0.034	-0.031	0.057	-0.013	-0.010	0.203*	0.074	0.064	0.220*	0.111	0.093
(= Wife tot Exp / Tot HH Exp)	[0.110]	[0.157]	[0.156]	[0.109]	[0.156]	[0.153]	[0.118]	[0.139]	[0.142]	[0.120]	[0.137]	[0.138]
Spouse Exp. Child Schooling	0.253	0.175	2.216	2.194	1.376	3.573	9.679*	12.766**	13.890**	9.998*	12.952**	14.164**
(= 1 if spent $ in children's schooling)	[7.273]	[10.275]	[11.843]	[7.533]	[10.021]	[11.577]	[5.711]	[5.416]	[5.483]	[5.836]	[5.411]	[5.424]
N	87	80	78	87	80	78	93	90	89	93	90	89
R-squared	0.209	0.336	0.353	0.202	0.342	0.360	0.094	0.219	0.248	0.101	0.221	0.255
Controls												
Demographic & HH Composition	N	Y	Y	N	Y	Y	N	Y	Y	N	Y	Y
Bargaining Power & Altruism	N	Y	Y	N	Y	Y	N	Y	Y	N	Y	Y
Total Expenditure	N	Y	Y	N	Y	Y	N	Y	Y	N	Y	Y
Education	N	N	Y	N	N	Y	N	N	Y	N	N	Y

Note: Robust standard errors in brackets. Results with control variables in Appendix Table B.3.

*** p-value<0.01; ** p-value<0.05; * p-value<0.1.

a/ Instead of Share of household Expenditure on Tobacco using Dummy =1 if share of hh expenditure on tobacco >8, and 0 otherwise. The p-value on this coefficient in columns (5)a and (6)a is 0.052 and 0.053 respectively, thus the **.

Expenditure on assets by the wife is negatively associated with transfers by men; however, result is not robust to the inclusion of control variables for own and total household expenditure. Appendix Table B.3 contains the results for the control variables, some of which provide interesting insights. Having an additional daughter is associated with men sending around 5 percentage points less to their wives. This can indicate a preference towards sons for men (they can spend the money earned on their sons) or anticipation by the husband of his wife's preference towards daughters.

Receiver Behavior:

The channels that influence receiver behavior can be somewhat different from those of senders. While senders experience uncertainty about how much they will get in return, receivers know the actions chosen by the first mover. Further, there is no need for strategic behavior in the returner role (because there is no response by the sender) other than through the cost benefit analysis

between expectations of how their spouse will spend the money and the returner's own preferences. Finally, returners face no direct cost of keeping the money, as there is no interest to be made by sharing. To examine the mechanisms motivating returner behavior between spouses I estimate the following reaction function:

$$\left(\frac{r_s}{\tau(\omega-\kappa_s)}\right)_s^g = \theta_1\ GS_s^g + \theta_2\ BP_s^g + \pi\ \ Exp_h\ + \varphi\ \ X_h + \sum_{d=1}^{2}\alpha_d + \varepsilon_s \qquad (8)$$

Where $\left(\frac{r_s}{\tau(\omega-\kappa_s)}\right)_s^g$ is the share of the sent amount plus interest that the receiver of gender g in household h returns to her spouse; GS_s^g is an indicator variable equal to 1 if spouse s buys gifts for her partner; Exp_h is a matrix of different expenditure categories over the last 12 months; BP_s^g is an indicator of self-reported control over money in the household by spouse s; X_h is a matrix of household characteristics; and $\sum_{d=1}^{2}\alpha_d$ are district fixed-effects.

Table 8 contains the results on returning behavior by gender. As before, I present results for variations of equation (8) separate for husbands and wives but include full sample estimations with interactions by gender in Appendix B.6. I do not include a variable on the proportion of the endowment transferred by the sender in Table 5 but results are unchanged when I do. The first notable result is that most of the variables that significantly correlate with returner behavior differ from those that influence the proportion sent, or the response goes in opposite directions. As the wife's share of total household expenditure and her share of expenditure on personal items increases, women return less money. The wife's share of household expenditure measures control over money on a daily basis, thus proxies bargaining power on management of household purchases. This does not significantly correlate with women's sending behavior, thus suggesting that individuals will try to increase their share of control over money as long as there is no direct cost of doing so. Further, when the returner's spouse pays for schooling returners send a larger proportion of their money back regardless of gender. An exception is women's response to the share of household expenditure on tobacco. Women in households with non-zero expenditure on tobacco return less money to their husbands, which is consistent with the result on sending behavior by women. Overall, it seems that prior non-cooperative behavior of the husband (in the form of tobacco expenditure) plays an important role in wives sharing decisions.

Husbands' expenditure on ceremonies significantly increases the proportion returned by women, while it decreases the proportion transferred by female senders. This suggests that women are unwilling to incur a cost of sharing money with their spouse when they expect the money to go towards social capital investments, but compensate their husbands if they have incurred such

expenses when it is not costly. These women are on different households from those in the sender role, however, due to random assignment of spouses to roles, it is unlikely that these differences are explained by household unobserved heterogeneity. The share of expenditure on personal items can be an indicator of both bargaining power and/or selfish preferences. Interestingly, while own personal expenditure is uncorrelated with sending behavior (see Appendix Table B.3), it is negatively associated with the share returned. A greater share spent on personal items can result from increased bargaining power, but it can also reflect a preference for items that only benefit oneself (selfish preferences). Returners can unilaterally decide how much to keep, thus any sharing is likely to be caused by caring or because the sender holds most (all) of the bargaining power in the household.

Table 8: Reaction Function on Returning Behavior

	Women						Men					
	(1)	(5)	(6)	(1) a	(5) a	(6) a	(1)	(5)	(6)	(1) a	(5) a	(6) a
Dummy Expenditure in Tobacco	-5.786	-9.724**	-9.689**	-5.234	-7.888*	-7.975*	9.189**	9.482*	11.094**	9.756**	9.609*	11.456**
(= 1 if Expenditure in Tobacco>0)	[4.693]	[4.873]	[4.632]	[4.390]	[4.477]	[4.263]	[4.486]	[5.367]	[5.166]	[4.393]	[5.210]	[4.996]
HH Expenditure in Tobacco	0.147	0.580	0.568	1.047	9.429	9.909	-0.414	-0.693	-0.681	-11.172*	-15.278*	-15.943*
(= share relative to total HH exp, 0 o/w)	[0.491]	[0.478]	[0.443]	[10.785]	[11.036]	[10.857]	[0.292]	[0.491]	[0.506]	[5.782]	[8.895]	[8.914]
Spouse Expenditure on Assets	-	-0.010	-0.072	-	-0.017	-0.080	-	0.020	0.046	-	0.014	0.040
(=share relative to total spouse exp)		[0.202]	[0.204]		[0.203]	[0.204]		[0.152]	[0.158]		[0.152]	[0.158]
Spouse Expenditure on Ceremonies	-	0.216*	0.168	-	0.204*	0.158	-	0.033	0.131	-	0.018	0.115
(=share relative to total spouse exp)		[0.118]	[0.127]		[0.119]	[0.129]		[0.200]	[0.202]		[0.185]	[0.182]
Spouse Personal Expenditure	-	0.608*	0.594*	-	0.625*	0.610*	-	-0.226	-0.217	-	-0.187	-0.188
(=share relative to total spouse exp)		[0.346]	[0.340]		[0.334]	[0.326]		[0.576]	[0.560]		[0.591]	[0.586]
Own Expenditure in Assets	-0.221	-0.185	-0.216	-0.223	-0.187	-0.218	-0.313***	-0.180	-0.120	-0.316***	-0.171	-0.109
(= share relative to total Own Exp)	[0.177]	[0.190]	[0.174]	[0.176]	[0.189]	[0.173]	[0.111]	[0.164]	[0.155]	[0.110]	[0.162]	[0.151]
Own Expenditure in Ceremonies	0.175	0.140	0.144	0.182	0.152	0.155	-0.114	-0.124	-0.066	-0.119	-0.104	-0.048
(= share relative to total own Exp)	[0.200]	[0.246]	[0.254]	[0.204]	[0.248]	[0.254]	[0.104]	[0.158]	[0.164]	[0.099]	[0.157]	[0.164]
Own Personal Expenditure	-1.333***	-1.507***	-1.579***	-1.323***	-1.487***	-1.564***	-0.077	-0.179	-0.027	-0.100	-0.228	-0.080
(= share relative to total Own Exp)	[0.406]	[0.532]	[0.554]	[0.403]	[0.528]	[0.552]	[0.171]	[0.194]	[0.182]	[0.168]	[0.188]	[0.174]
Wife Share of Total HH Expenditure	-0.289***	-0.238**	-0.274**	-0.292***	-0.246**	-0.282**	-0.093	-0.128	-0.201	-0.090	-0.105	-0.181
(= Wife tot Exp / Tot HH Exp)	[0.086]	[0.105]	[0.109]	[0.087]	[0.102]	[0.107]	[0.116]	[0.149]	[0.133]	[0.116]	[0.151]	[0.134]
Spouse Exp. Child Schooling	10.319*	19.505***	20.047***	10.144*	19.126***	19.731***	12.891***	9.853	6.220	11.468**	7.776	3.915
(= 1 if spent $ in children's schooling)	[5.572]	[5.636]	[6.514]	[5.457]	[5.497]	[6.351]	[4.790]	[6.105]	[6.586]	[5.138]	[6.890]	[7.257]
Receive Gifts for Spouse	-	0.215	3.203	-	0.914	3.983	-	11.981**	7.723	-	11.046**	6.527
(=1 if Yes)		[5.223]	[5.129]		[5.311]	[5.193]		[5.179]	[5.127]		[5.344]	[5.264]
Controls												
Demographic & HH Composition	N	Y	Y	N	Y	Y	N	Y	Y	N	Y	Y
Bargaining Power & Altruism	N	Y	Y	N	Y	Y	N	Y	Y	N	Y	Y
Total Expenditure	N	Y	Y	N	Y	Y	N	Y	Y	N	Y	Y
Spouse Expenditure	N	Y	Y	N	Y	Y	N	Y	Y	N	Y	Y
Education	N	N	Y	N	N	Y	N	N	Y	N	N	Y
N	93	89	88	93	89	88	87	81	81	87	81	81
R-squared	0.233	0.429	0.463	0.232	0.425	0.460	0.203	0.367	0.434	0.221	0.386	0.457

Note: Robust standard errors in brackets. Results on control variables in Appendix Table B.5.
*** p-value<0.001; ** p-value<0.05; * p-value<0.1.

a/ Instead of Share of Household Expenditure on Tobacco using Dummy =1 if share of hh expenditure on tobacco >8, and 0 otherwise.

Men in households that spend money on tobacco return a large, though weakly statistically significant, share to their wives. It is worth noting that the point estimate is quite stable as controls are introduced. As in the results on sending behavior, I use a dummy variable equal to 1 if the share of household expenditure on tobacco is greater than the 85% percentile (8%) and zero otherwise to examine whether the results are only driven by the outliers. Columns (1)a, (5)a, and (6)a provide even stronger evidence that expenditure on tobacco influences returning behavior by husbands. Men in households where the household expenditure share on tobacco exceeds 8% return significantly less money to their partners, while those in households with smaller shares of tobacco expenditure return more. Husbands where the household expenditure share on tobacco is large have presumably more bargaining power, which explains the decreased sharing. Alternatively, expenditure on tobacco indicates lack of self-control (among other things). Therefore, husbands where the share of expenditure on tobacco is moderate could be returning the money to their wives as a commitment device.

5. Conclusions

In this paper I presented results from the first investment (trust) game conducted among established couples. Between March and July 2013, I conducted laboratory experiments among a sample of 188 established couples in Dehradun and Almora districts, in Uttarakhand, India. Couples were recruited door-to-door, taken into separate rooms, not allowed to communicate, and given a significant endowment. The experiment consisted of a BDM investment and dictator games where spouses were randomly assigned to the role of sender or receiver. The socially optimum strategy is in direct contrast with the self-interest optimum; the household earnings maximizing strategy is to send the entire amount (as it is tripled), while the Nash Equilibrium of the game is to not send anything because the receiver has incentives to keep the entire amount.

The unitary and cooperative models of the household are rejected as only 5% of men and 2% of women send the entire endowment and thus maximize household earnings. On average, women transfer 54% of the endowment, while men send 60% on average. These choices, evaluated at the mean, costs the household Rs. 96, equivalent to one fourth of average daily household income. I examine alternative explanations such as a 50-50 sharing rule between spouses or inequality aversion. Women seem to have a preference for equality, consistently sharing around 50%

of the money with their husbands. Men, however, share closer to 60% in the trust game regardless of the role they play. While the empirical evidence is indicative of non-cooperative behavior between spouses, the survey responses (and experimental results) suggest spouses have not reverted to separate spheres as transfers between spouses in the game and in real life are non-negative. Consistent with mixed models of the household by Munro (2014), Malapit (2012), and Castilla (2011) the results provide further evidence that households operate under contracts where some outcomes can be contracted, while others cannot, yielding efficiency losses.

The examination of the mechanisms driving observed behavior in the trust game suggest that perhaps women perceive keeping the money as equally or less costly than transferring it to their husbands who will spend some of the money they keep on tobacco. The unitary elasticity is strong evidence of this. If the perceived costs of tobacco consumption are as large as the interest lost from keeping the money, there would be no loss in household efficiency. Results on returning behavior show that husbands in households where the share of expenditure on tobacco exceeds the 85th percentile keep a larger share in the trust game, thus supporting the choices by women to keep the money even if it comes at a cost. On the other hand, women underestimate their husbands' reciprocity to some degree because men return more money when their wives pay for child schooling expenses (conditional on expenditure on tobacco), which plausibly improves efficiency in intra-household allocation.

This paper's results help reconcile the findings on development research where women allocate more resources towards children human capital investments (Duflo, (2000); Thomas, (1990)) and the experimental research in developing countries that finds that women are as or less cooperative than men ((Ashraf (2009); Iversen et al., (2010); Munro et al. (2014); Mani (2011), Hoel (2012); Jakiela & Ozier, (2014)); Castilla, (2014)). The experimental setting allowed me to test for differences across genders due to random assignment of subjects to the role of sender or receiver. Women share less money with their husbands on either role. This finding is consistent with the previous experimental results using samples from developing countries that do not consist of college students. However, between spouses it would be expected to find higher levels of cooperation. The lower sharing by women seems to be motivated by prior non-cooperative behavior on the part of their husbands in the form of expenditure on tobacco, which is neither consumed by women nor welfare improving. Nonetheless, the differences in sharing by gender, the implications on household efficiency, and the mechanisms found in this paper suggest the need for further research on intra-

household decision making and the role of prior bargaining outcomes as these are important predictors of non-cooperative behavior by women.

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Appendix A: Experiment Instructions

Instructions to Sender:

\Aunty-i/Uncle-ji, we have kept Rs.75 worth fake notes in this envelope and we are giving you some blank papers. You have to now decide how much to keep for yourself and how much to give to your spouse. However, whatever amount you give to your spouse will be tripled before reaching him/her. Then it will be your spouse's decision on how much to give you back from the tripled amount. Therefore, if you decide to give Rs.30 to your spouse and keep the rest for yourself, then your spouse will receive Rs. (30 * 3 = 90). Then, your spouse can return to you something less than Rs. 30, exactly Rs. 30 or something more than that. Take out the amount that you want to keep for yourself from the envelope and leave the amount that you wish to be sent to your spouse. Again, note that your spouse will receive three times the amount you left in the envelope. Please take this decision freely as we will not be seeing them. We will turn our heads around while you take this decision. Only the Research Assistant will open the envelope and triple the amount in it. You can stuff the envelope with the blank papers provided to you when you feel you are sending too little. The game ends for you once you've handed the envelope to us."

Instructions to Receiver:

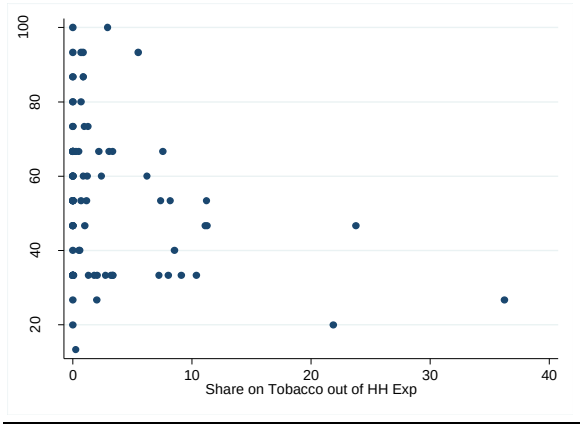
Aunty-ji/Uncle-ji, we had asked your husband/wife to divide Rs.75 into two parts, something for you and the remainder for self. But he/she was told that whatever amount he/she sends you will be tripled and then you will have to make a decision about how much of the tripled amount to return. Now, this envelope contains the tripled amount of what he/she had originally sent you. You must open this envelope, count how much money it contains, make an estimate of how much your spouse must have sent you originally (that is if you want to), and then place whatever amount you want to return to your spouse back in the envelope. It is purely a personal decision and we will not take this envelope back to your spouse. For instance, if you and Rs.90 in the envelope, your spouse must have originally sent Rs.30 out of the Rs.75 given to him. Now it's your decision whether you want to return something less than Rs.30, more than that or exactly the same amount. We will turn our heads around while you make this decision. You can also stuff up the envelope with the blank papers provided in case you feel that you are sending too little.

Dictator Game Instructions:

Aunty-ji/Uncle-ji, we would also like you to make a similar decision as your spouse did. You have to divide Rs.75 into two parts, something for yourself and the remainder for your spouse. However, the game ends with your split decision. Your spouse will receive the exact amount you send, NOT the tripled amount. Further, your spouse will have no further decisions to take. This envelope contains Rs.75 worth fake notes (with the lowest denomination of Rs.5). Take out the money you want to keep for yourself and leave what you want to for your spouse in the envelope. We will not see your personal decision. We will turn our heads around while you make this decision. You can also stuff up the envelope with the blank papers provided in case you feel that you are sending too little."

APPENDIX B: Additional Tables and Robustness

Figure B.1: Scatter plot of Proportion Sent by Wife and HH Expenditure on Tobacco



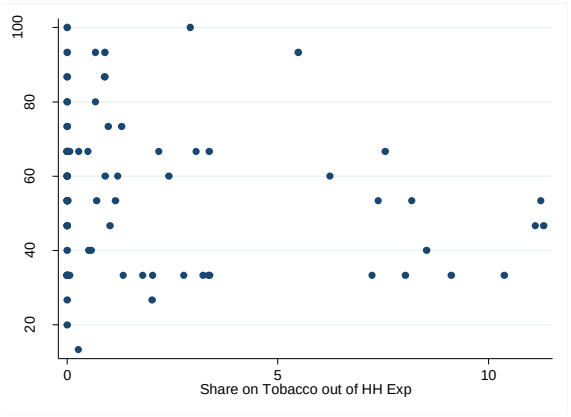


Table B.1: Description of Variables from the Survey

Variable	Description	Unit
Education	What level of schooling have you attained? (1) No schooling; (2) Elementary; (2) Middle School; (3) High School; (5) College or higher.	Categorical
Literacy	Are you able to read and write your name in any language?	Dichotomous
Household Composition	Number of sons Number of Daughters Total number of individuals living in the household	Only asked to wife
Age	How old were you in your last birthday?	In years
Caste	Do you belong to: Scheduled Caste, Scheduled Tribe, Other Backward Caste, None	Categorical
Owns House	Who owns the house you live in?	Categorical
Livestock	Do you and your wife own any animals? If yes, what kind of animals do you own?	Categorical
Income (amount)	During the past month, how much income did you get from: (1) wages, salaries, or other cash income; (2) In kind payment for working for others or self-employment; (3) Farming; (4) Livestock; (5) Other family run business; (6) Remittances or payments from people living outside the house; (7) Pensions or government transfers; (8) Other	Thousands of Indian Rupees.
Assets	Which of these assets/items do you own?	Categorical
House Quality Index	Add 1 for each of the following: (1) Kuchcha House; (2) Electricity connection; (3) Water connection; (4) Toilet facility; (5) Gas stove	Scale of 1 to 6
Transportation Assets Index	Add 1 for each of the following: (1) Motorcycle; (2) Cycle; (3) Car	Scale of 1 to 3
Expenditure	In the last 12 months, did you spend on these items and services? And what was the value?	Thousands of Indian Rupees
Share of Expenditure	Expenditure on category X divided by total expenditure. This is done at HH, and individual level	Thousands of Indian Rupees
Expenditure on Ceremonies	In the last 12 months, how much did you spend on gifts or dowries for others' weddings or funerals?	Dichotomous
Gifts and Dowries to others	In the last 12 months, did you spend on gifts or dowries for others' weddings?	Dichotomous
Gifts to Spouse	Do you buy gifts for your spouse?	Dichotomous
Years Married	How long have you been married to your current wife/husband?	Years
Say about work	Equal to 1 if the respondent can influence the decision of whether she (he) can work outside the home	Dichotomous
Handles HH money	Equal to 1 if the respondent handles the household money.	Dichotomous
Work	Equal to 1 if the respondent works for income	Dichotomous

Table B.2: Tests of Balance of Treatment (effective randomization)

Variable	Husband	Wife	Variable	Husband	Wife
Age	0.560	0.078	Contributes to Pay for Child	0.035	0.056
	(0.664)	(0.951)	Schooling	(0.442)	(0.262)
Years of Marriage	-0.020	0.134	Share Exp. Tobacco	-1.345	0.760
	(0.988)	(0.928)		(0.232)	(0.393)
Scheduled Caste	-0.037	0.014	Share Exp. Ceremonies	3.140	-0.982
	(0.412)	(0.687)		(0.156)	(0.529)
Other Backwards castes	0.021	-0.030	Share Exp Assets	1.744	-1.334
	(0.713)	(0.627)		(0.488)	(0.592)
Illiterate	-0.037	-0.027	Share Exp. Personal Items	2.991	1.541
	(0.303)	(0.576)		(0.227)	(0.453)
No Schooling	-0.006	-0.025	Share Exp. Clothing	-0.116	1.956
	(0.872)	(0.706)		(0.951)	(0.204)
Some Schooling	0.043	-0.003	Share Exp. Personal Care	3.107	-0.414
	(0.49)	(0.966)		(0.031)	(0.691)
High School or above	-0.058	0.004	Total Expenditure	-20.68	31.40
	(0.23)	(0.907)	(thousands Rs)	(0.215)	(0.137)
Give gifts to Spouse	-0.127*	-0.103	HH Income	-0.639	-1.434
	(0.083)	(0.124)	(monthly, thousand Rs.)	(0.636)	(0.221)
Separate Spheres	-0.078	-0.035	Say over Work	-0.050	-0.021
	(0.25)	(0.507)		(0.33)	(0.762)
Handles HH Money	0.067*	0.012	Works for Pay	-0.014	-0.066
	(0.057)	(0.826)		(0.647)	(0.326)

Household Level Variables			
No. Sons	0.067	Share HH Exp Health	-4.222
	(0.64)		(0.132)
No. Daughters	0.291	Share Exp. Ceremonies	1.777
	(0.089)		(0.346)
Mother in Law	-0.021	Share Exp Assets	0.340
	(0.755)		(0.871)
Father in Law	-0.084	Share Exp Home	0.527
	(0.128)		(0.849)
% HH with Son of School Age	0.031	Share Exp Personal Items	1.167
	(0.587)		(0.492)
% HH with Daughter of School Age	0.109	Share Exp Transportation	-0.332
	(0.114)		(0.838)
% HH from Almora	0.033	Share Exp Utilities	-0.328
	(0.641)		(0.686)
Transportation Assets Index	-0.133	Share Exp Jewelry	1.464
	(0.236)		(0.134)
House Quality Index	0.042	Share Exp Entertainment	-0.030
	(0.827)		(0.873)
% of HH with Exp Tobacco >0	-0.038	Share Exp Other items	1.040
	(0.597)		(0.110)
% HH where Tobacco for Husband	0.040	Total HH Expenditure	10.719
	(0.597)		(0.717)
Share Exp. Tobacco	-0.211	Total HH Income	-1.831
	(0.796)		(0.158)

Table B.3: Results on Sending behavior, robustness

	Women										Men									
	(1)	(2)	(3)	(4)	(5)	(6)	(6)	(1) a	(5) a	(6) a	(1)	(2)	(3)	(4)	(5)	(6)	7	(1) a	(5) a	(6) a
Dummy Expenditure in Tobacco	1.590	1.218	-0.335	-0.958	-1.043	-0.723	-0.868	0.240	-1.228	-0.798	2.412	1.268	-1.501	-1.388	-0.931	-1.712	-0.741	0.496	-3.372	-4.371
(= 1 if Expenditure in Tobacco>0)	[4.693]	[4.891]	[5.029]	[4.976]	[5.088]	[5.405]	[5.486]	[4.610]	[5.004]	[5.299]	[4.924]	[4.946]	[5.061]	[5.136]	[5.241]	[5.343]	[5.360]	[4.330]	[4.986]	[5.115]
HH Expenditure in Tobacco	-1.029***	-0.922**	-0.747***	-0.681**	-0.669**	-0.690*	-0.730**	-15.613***	-12.599*	-13.172*	-0.223	-0.192	-0.132	-0.237	-0.351	-0.303	-0.394	8.700	7.933	9.303
(= share relative to total HH exp, 0 o/w)	[0.306]	[0.357]	[0.268]	[0.290]	[0.311]	[0.351]	[0.364]	[5.216]	[6.387]	[6.640]	[0.592]	[0.573]	[0.471]	[0.484]	[0.458]	[0.406]	[0.401]	[10.456]	[10.933]	[10.168]
Own Expenditure in Assets	-	-	-	-0.236	-0.229	-0.331	-0.306	-	8.259	9.488	-	-	-	0.173	0.168	0.182	0.163	-	4.075	4.215
(= share relative to total Own Exp)				[0.224]	[0.211]	[0.239]	[0.266]		[6.436]	[6.733]				[0.163]	[0.167]	[0.168]	[0.168]		[7.434]	[7.177]
Own Expenditure in Ceremonies	-	-	-	0.244	0.247	0.290	0.282	-	-0.249	-0.358	-	-	-	-0.205	-0.203	-0.234	-0.282*	-	0.166	0.176
(= share relative to total Own Exp)				[0.196]	[0.199]	[0.191]	[0.199]		[0.210]	[0.238]				[0.155]	[0.156]	[0.160]	[0.157]		[0.165]	[0.166]
Spouse Expenditure in Assets	-0.040	-0.015	0.071	0.165	0.156	0.156	0.135	-0.033	0.170	0.172	-0.205*	-0.191	-0.160	-0.286*	-0.276*	-0.285*	-0.254*	-0.191*	-0.251*	-0.260*
(= share relative to total Spouse Exp)	[0.110]	[0.116]	[0.135]	[0.168]	[0.157]	[0.172]	[0.191]	[0.110]	[0.157]	[0.172]	[0.115]	[0.116]	[0.113]	[0.146]	[0.148]	[0.148]	[0.151]	[0.114]	[0.145]	[0.146]
Spouse Expenditure in Ceremonies	-0.233*	-0.209	-0.269*	-0.261*	-0.267*	-0.207	-0.226	-0.203*	-0.236	-0.171	-0.020	-0.016	0.022	-0.009	-0.003	-0.028	-0.067	-0.050	-0.030	-0.053
(= share relative to total Spouse Exp)	[0.119]	[0.127]	[0.136]	[0.138]	[0.152]	[0.183]	[0.185]	[0.119]	[0.153]	[0.184]	[0.223]	[0.222]	[0.201]	[0.207]	[0.217]	[0.220]	[0.223]	[0.236]	[0.213]	[0.216]
Wife Share of Total HH Expenditure	0.037	0.028	-0.044	-0.028	-0.034	-0.031	-0.013	0.057	-0.013	-0.010	0.203*	0.164	0.162	0.082	0.074	0.064	0.088	0.220*	0.111	0.093
(= Wife tot Exp / Tot HH Exp)	[0.110]	[0.109]	[0.131]	[0.144]	[0.157]	[0.156]	[0.181]	[0.109]	[0.156]	[0.153]	[0.118]	[0.112]	[0.113]	[0.135]	[0.139]	[0.142]	[0.139]	[0.120]	[0.137]	[0.138]
Spouse Exp. Child Schooling	0.253	0.129	-1.826	0.487	0.175	2.216	2.138	2.194	1.376	3.573	9.679*	9.722	11.567*	12.551**	12.766**	13.890**	13.561**	9.998*	12.952**	14.164**
(= 1 if spent $ in children's schooling)	[7.273]	[8.850]	[9.590]	[9.608]	[10.275]	[11.843]	[11.912]	[7.533]	[10.021]	[11.577]	[5.711]	[5.907]	[5.934]	[5.506]	[5.416]	[5.483]	[5.274]	[5.836]	[5.411]	[5.424]
District	-12.625***	-13.691***	-12.551	-15.714*	-15.382*	-16.254*	-15.913*	-12.302**	-15.612*	-16.531*	-4.656	-4.592	-0.449	-1.076	-4.037	-4.214	-6.551	-5.577	-3.476	-3.900
(=1 if Almora)	[4.641]	[5.063]	[7.902]	[8.274]	[8.635]	[8.956]	[9.198]	[4.664]	[8.437]	[8.781]	[5.052]	[5.566]	[6.295]	[6.318]	[7.870]	[8.268]	[8.286]	[5.018]	[7.401]	[7.782]
Age		-1.279	-1.172	-1.947	-1.988	-2.896	-2.682		-2.644	-3.582		-1.397	-1.543	-0.804	-0.210	-0.680	-0.785		-0.545	-1.000
		[2.276]	[2.293]	[2.357]	[2.421]	[2.674]	[2.886]		[2.453]	[2.675]		[1.823]	[1.931]	[1.975]	[2.088]	[2.091]	[2.088]		[1.998]	[2.010]
Age Squared		0.022	0.020	0.030	0.030	0.044	0.041		0.040	0.054		0.018	0.018	0.009	0.003	0.007	0.009		0.006	0.010
		[0.030]	[0.030]	[0.031]	[0.031]	[0.035]	[0.037]		[0.032]	[0.035]		[0.020]	[0.021]	[0.021]	[0.022]	[0.022]	[0.022]		[0.021]	[0.022]
No. of Sons		-2.486	-0.937	0.156	0.086	1.571	1.399		0.092	1.647		-3.106	-3.405	-2.617	-2.675	-2.616	-2.164		-2.884	-3.025
		[1.754]	[2.475]	[2.538]	[2.517]	[2.724]	[2.957]		[2.447]	[2.651]		[3.304]	[3.375]	[3.598]	[3.681]	[3.898]	[3.974]		[3.566]	[3.797]
No. of Daughters		1.467	3.259	3.808	3.708	4.268	4.234		4.142	4.811*		-4.055**	-4.929**	-4.835**	-4.632**	-4.680**	-4.818**		-4.866**	-4.964**
		[1.941]	[2.524]	[2.458]	[2.420]	[2.590]	[2.707]		[2.494]	[2.681]		[1.968]	[2.093]	[2.220]	[2.300]	[2.337]	[2.299]		[2.252]	[2.308]
Scheduled Caste			-14.913*	-12.601	-12.514	-6.567	-7.199		-11.209	-5.029			3.345	3.214	2.217	0.909	1.839		2.041	0.497
			[8.626]	[8.518]	[8.677]	[11.741]	[11.979]		[9.196]	[12.294]			[6.511]	[6.108]	[6.122]	[6.100]	[6.439]		[5.851]	[5.764]
Other Backwards Caste			-6.980	-11.039	-10.933	-8.051	-7.948		-11.556	-8.688			5.937	5.292	4.211	1.858	2.507		5.385	3.277
			[7.471]	[8.799]	[8.773]	[9.388]	[9.361]		[8.688]	[9.260]			[5.260]	[5.217]	[5.445]	[6.117]	[5.967]		[5.441]	[6.298]
Buy Gifts for Spouse			6.289	9.517**	9.209*	11.677*	11.103		8.799	11.367*			-7.651	-8.233	-7.810	-5.125	-5.991		-7.686	-4.743
(=1 if Yes)			[5.398]	[4.730]	[5.424]	[6.519]	[7.064]		[5.398]	[6.480]			[4.983]	[5.290]	[5.390]	[6.092]	[6.263]		[5.392]	[5.985]
Say over Work			5.626	8.073	8.260	9.488	9.534		0.249	0.292			4.027	3.585	2.306	2.423	1.047		-0.154	-0.189
(dummy variable)			[5.861]	[6.209]	[6.672]	[6.939]	[7.326]		[0.197]	[0.190]			[6.238]	[6.804]	[7.131]	[7.128]	[7.346]		[0.155]	[0.157]
Total HH Expenditure (log)					0.507	-0.416	-1.186		0.016	-1.043					-3.291	-2.865	-0.320		-1.900	-1.466
					[3.953]	[4.366]	[4.884]		[4.086]	[4.511]					[3.693]	[3.835]	[4.365]		[3.741]	[3.811]
Some Schooling						6.237	6.258			6.533						-2.112	-0.498			-0.758
						[6.511]	[6.647]			[6.453]						[4.898]	[5.269]			[5.036]
High School or Above						11.103	11.482			11.494						-11.506	-9.007			-11.598
						[12.631]	[13.099]			[12.853]						[9.248]	[9.995]			[9.490]
Own Expenditure in Personal Care							-0.039										0.184			
(= share relative to total Own Exp)							[0.268]										[0.361]			
Spouse's Expenditure in Personal Care							-0.123										0.668			
(= share relative to total Spouse Exp)							[0.262]										[0.490]			
N	87	86	80	80	80	78	78	87	80	78	93	93	92	90	90	89	89	93	90	89
R-squared	0.209	0.240	0.302	0.336	0.336	0.353	0.357	0.202	0.342	0.360	0.094	0.152	0.199	0.209	0.219	0.248	0.269	0.101	0.221	0.255

Table B.4: Results on Sending behavior with Interactions by Gender instead of Split Sample

	Women								Coefficients on Interaction with Male Dummy							
	(1)	(2)	(3)	(5)	(6)	(1) a	(5) a	(6) a	(1)	(2)	(3)	(5)	(6)	(1) a	(5) a	(6) a
Dummy Male	-	-	-	-	-	-	-	-	-7.448	-7.173	-11.507	-10.923	-9.068	-5.765	-10.118	-8.191
(= 1 if Sender is Male)									[8.650]	[9.685]	[11.474]	[11.736]	[12.148]	[8.771]	[11.500]	[11.994]
Dummy Expenditure in Tobacco	2.002	1.866	1.307	1.496	1.292	0.218	-0.293	-0.617	-	-	-	-	-	-	-	-
(= 1 if Expenditure in Tobacco>0)	[3.395]	[3.400]	[3.516]	[3.614]	[3.674]	[3.161]	[3.391]	[3.469]								
HH Expenditure in Tobacco	-1.029***	-0.941***	-0.941***	-0.967***	-0.958***	-15.715***	-14.806***	-14.192**	0.727	0.611	0.655	0.657	0.668	23.429**	23.539**	23.821**
(= share relative to total HH exp, 0 o/w)	[0.284]	[0.300]	[0.298]	[0.320]	[0.325]	[4.672]	[5.426]	[5.706]	[0.588]	[0.593]	[0.564]	[0.556]	[0.518]	[11.605]	[11.621]	[11.004]
Own Expenditure in Assets	-0.056	-0.036	-0.085	-0.092	-0.113	-0.082	-0.109	-0.125	0.200	0.195	0.240	0.244	0.270	0.234	0.268	0.288
(= share relative to total Own Exp)	[0.165]	[0.172]	[0.190]	[0.186]	[0.205]	[0.163]	[0.183]	[0.203]	[0.216]	[0.223]	[0.238]	[0.238]	[0.252]	[0.214]	[0.236]	[0.250]
Own Expenditure in Ceremonies	0.123	0.149	0.193	0.188	0.177	0.131	0.207	0.194	-0.340	-0.372	-0.429*	-0.422	-0.444	-0.304	-0.395	-0.415
(= share relative to total Own Exp)	[0.169]	[0.185]	[0.192]	[0.196]	[0.210]	[0.164]	[0.187]	[0.201]	[0.236]	[0.247]	[0.259]	[0.263]	[0.274]	[0.235]	[0.257]	[0.268]
Spouse Expenditure in Assets	0.018	0.018	0.024	0.037	-0.005	0.027	0.036	-0.006	-0.396**	-0.410**	-0.396*	-0.403*	-0.374*	-0.380**	-0.376*	-0.345
(= share relative to total Spouse Exp)	[0.129]	[0.132]	[0.147]	[0.142]	[0.152]	[0.130]	[0.144]	[0.154]	[0.188]	[0.193]	[0.214]	[0.213]	[0.220]	[0.186]	[0.214]	[0.221]
Spouse Expenditure in Ceremonies	-0.229**	-0.259**	-0.292***	-0.286**	-0.308**	-0.195*	-0.259**	-0.283**	0.190	0.242	0.290	0.282	0.295	0.122	0.219	0.238
(= share relative to total Spouse Exp)	[0.103]	[0.103]	[0.110]	[0.115]	[0.127]	[0.104]	[0.115]	[0.126]	[0.249]	[0.264]	[0.274]	[0.283]	[0.295]	[0.259]	[0.290]	[0.298]
Spouse Exp. Child Schooling	-0.863	0.572	0.153	0.586	3.285	0.083	0.058	0.055	15.147*	14.007	14.438	14.010	12.327	12.581	12.126	10.448
(= 1 if spent $ in children's schooling)	[7.142]	[8.444]	[9.913]	[10.203]	[10.544]	[0.084]	[0.096]	[0.097]	[8.791]	[9.783]	[11.065]	[11.204]	[11.640]	[9.017]	[11.044]	[11.494]
Wife Share of Total HH Expenditure	0.056	0.040	0.031	0.035	0.031	1.409	2.252	5.015	-	-	-	-	-	-	-	-
(= Wife tot Exp / Tot HH Exp)	[0.085]	[0.087]	[0.095]	[0.096]	[0.098]	[7.432]	[10.019]	[10.385]								
District	-10.187***	-11.070***	-9.252*	-9.858*	-10.599*	-10.541***	-9.673*	-10.482**	-	-	-	-	-	-	-	-
(=1 if Almora)	[3.447]	[3.592]	[4.682]	[5.173]	[5.389]	[3.415]	[5.014]	[5.214]								
Age	-	-0.053	-0.324	-0.234	-0.122		-0.325	-0.204	-	-	-	-	-	-	-	-
		[1.168]	[1.189]	[1.211]	[1.255]		[1.191]	[1.225]								
Age Squared	-	0.002	0.005	0.004	0.002		0.005	0.003	-	-	-	-	-	-	-	-
		[0.014]	[0.014]	[0.014]	[0.015]		[0.014]	[0.014]								
No. of Sons	-	-2.039	-1.698	-1.648	-1.898		-1.922	-2.277	-	-	-	-	-	-	-	-
		[1.752]	[2.014]	[2.020]	[2.123]		[1.970]	[2.065]								
No. of Daughters	-	-1.434	-1.339	-1.213	-1.521		-1.321	-1.674	-	-	-	-	-	-	-	-
		[1.361]	[1.556]	[1.615]	[1.688]		[1.626]	[1.709]								
Scheduled Caste	-	-	1.386	1.138	0.674		1.153	0.524	-	-	-	-	-	-	-	-
			[5.373]	[5.429]	[5.459]		[5.337]	[5.404]								
Other Backwards Caste	-	-	1.884	1.717	1.461		2.151	1.797	-	-	-	-	-	-	-	-
			[4.809]	[4.848]	[5.239]		[4.827]	[5.243]								
Buy Gifts for Spouse	-	-	0.178	0.453	2.625		0.390	2.585	-	-	-	-	-	-	-	-
(=1 if Yes)			[3.661]	[3.765]	[4.272]		[3.747]	[4.196]								
Say over Work	-	-	6.368	6.018	6.060		6.326	6.305	-	-	-	-	-	-	-	-
(dummy variable)			[4.288]	[4.490]	[4.583]		[4.551]	[4.585]								
Total HH Expenditure (log)	-			-0.843	-0.822		-0.320	-0.202	-	-	-	-	-	-	-	-
				[2.499]	[2.570]		[2.554]	[2.625]								
Some Schooling	-	-	-	-	0.784			0.733	-	-	-	-	-	-	-	-
					[4.111]			[4.051]								
High School or Above	-	-	-	-	-7.083			-7.734	-	-	-	-	-	-	-	-
					[7.043]			[7.150]								
N	178	177	170	170	167	178	170	167	-	-	-	-	-	-	-	-
R-squared	0.171	0.178	0.188	0.189	0.208	0.160	0.182	0.201								

Table B.5: Results on Returning behavior, robustness

	Women										Men									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1) a	(5) a	(6) a	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1) a	(5) a	(6) a
Dummy Expenditure in Tobacco	-5.786	-5.928	-4.813	-9.611**	-9.724**	-9.689**	-8.701*	-5.234	-7.888*	-7.975*	9.189**	8.537*	8.923*	8.869	9.482*	11.094**	11.423**	9.756**	9.609*	11.456**
(= 1 if Expenditure in Tobacco>0)	[4.693]	[4.899]	[4.957]	[4.805]	[4.873]	[4.632]	[4.661]	[4.390]	[4.477]	[4.263]	[4.486]	[4.602]	[4.807]	[5.428]	[5.367]	[5.166]	[4.982]	[4.393]	[5.210]	[4.996]
HH Expenditure in Tobacco	0.147	0.151	0.111	0.548	0.580	0.568	0.470	1.047	9.429	9.909	-0.414	-0.456	-0.589*	-0.494	-0.693	-0.681	-0.695	-11.172*	-15.278*	-15.943*
(= share relative to total HH exp, 0 o/w)	[0.491]	[0.543]	[0.585]	[0.502]	[0.478]	[0.443]	[0.396]	[10.785]	[11.036]	[10.857]	[0.292]	[0.289]	[0.352]	[0.369]	[0.491]	[0.506]	[0.503]	[5.782]	[8.895]	[8.914]
Spouse Expenditure on Assets	-	-0.049	-0.058	-0.007	-0.010	-0.072	-	-	-0.017	-0.080	-	0.205*	0.211*	0.062	0.020	0.046	-	-	0.014	0.040
(=share relative to total spouse exp)		[0.272]	[0.261]	[0.202]	[0.202]	[0.204]			[0.203]	[0.204]		[0.120]	[0.125]	[0.157]	[0.152]	[0.158]			[0.152]	[0.158]
Spouse Expenditure on Ceremonies	-	0.065	0.047	0.231*	0.216*	0.168	-	-	0.204*	0.158	-	0.101	0.031	0.076	0.033	0.131	-	-	0.018	0.115
(=share relative to total spouse exp)		[0.096]	[0.102]	[0.121]	[0.118]	[0.127]			[0.119]	[0.129]		[0.138]	[0.144]	[0.187]	[0.200]	[0.202]			[0.185]	[0.182]
Spouse Personal Expenditure	-	0.232	0.262	0.540	0.608*	0.594*	-	-	0.625*	0.610*	-	-0.260	-0.231	0.030	-0.226	-0.217	-	-	-0.187	-0.188
(=share relative to total spouse exp)		[0.323]	[0.332]	[0.341]	[0.346]	[0.340]			[0.334]	[0.326]		[0.256]	[0.442]	[0.529]	[0.576]	[0.560]			[0.591]	[0.586]
Own Expenditure in Assets	-0.221	-0.172	-0.185	-0.184	-0.185	-0.216	-0.296**	-0.223	-0.187	-0.218	-0.313***	-0.364***	-0.370***	-0.235	-0.180	-0.120	-0.109	-0.316***	-0.171	-0.109
(= share relative to total Own Exp)	[0.177]	[0.243]	[0.232]	[0.185]	[0.190]	[0.174]	[0.143]	[0.176]	[0.189]	[0.173]	[0.111]	[0.121]	[0.131]	[0.170]	[0.164]	[0.155]	[0.132]	[0.110]	[0.162]	[0.151]
Own Expenditure in Ceremonies	0.175	0.202	0.187	0.135	0.140	0.144	0.125	0.182	0.152	0.155	-0.114	-0.160	-0.177	-0.159	-0.124	-0.066	-0.040	-0.119	-0.104	-0.048
(= share relative to total own Exp)	[0.200]	[0.214]	[0.219]	[0.236]	[0.246]	[0.254]	[0.239]	[0.204]	[0.248]	[0.254]	[0.104]	[0.098]	[0.120]	[0.146]	[0.158]	[0.164]	[0.148]	[0.099]	[0.157]	[0.164]
Own Personal Expenditure	-1.333***	-1.333***	-1.263***	-1.664***	-1.507***	-1.579***	-1.534***	-1.323***	-1.487***	-1.564***	-0.077	-0.119	-0.135	-0.068	-0.179	-0.027	-0.025	-0.100	-0.228	-0.080
(= share relative to total Own Exp)	[0.406]	[0.433]	[0.453]	[0.405]	[0.532]	[0.554]	[0.547]	[0.403]	[0.528]	[0.552]	[0.171]	[0.196]	[0.205]	[0.216]	[0.194]	[0.182]	[0.171]	[0.168]	[0.188]	[0.174]
Wife Share of Total HH Expenditure	-0.289***	-0.266***	-0.257**	-0.249**	-0.238**	-0.274**	-0.307***	-0.292***	-0.246**	-0.282**	-0.093	-0.148	-0.147	-0.194	-0.128	-0.201	-0.173	-0.090	-0.105	-0.181
(= Wife tot Exp / Tot HH Exp)	[0.086]	[0.096]	[0.105]	[0.106]	[0.105]	[0.109]	[0.090]	[0.087]	[0.102]	[0.107]	[0.116]	[0.125]	[0.125]	[0.136]	[0.149]	[0.133]	[0.124]	[0.116]	[0.151]	[0.134]
Spouse Exp. Child Schooling	10.319*	10.188*	7.188	19.254***	19.505***	20.047***	18.215***	10.144*	19.126***	19.731***	12.891***	10.486**	10.015*	8.143	9.853	6.220	6.015	11.468**	7.776	3.915
(= 1 if spent $ in children's schooling)	[5.572]	[5.739]	[6.655]	[5.700]	[5.636]	[6.514]	[6.488]	[5.457]	[5.497]	[6.351]	[4.790]	[4.832]	[5.239]	[6.316]	[6.105]	[6.586]	[6.602]	[5.138]	[6.890]	[7.257]
District	-7.228	-8.418	-9.021	-1.785	-1.253	-2.337	-1.453	-7.137	-1.302	-2.395	-12.896***	-10.546**	-10.311**	-13.454**	-14.921**	-16.026***	-16.764***	-12.082***	-14.607**	-15.694***
(=1 if Almora)	[5.818]	[6.134]	[6.616]	[8.100]	[8.187]	[8.269]	[7.820]	[5.783]	[8.213]	[8.295]	[4.400]	[4.093]	[4.604]	[5.607]	[5.789]	[5.543]	[4.973]	[4.444]	[5.678]	[5.396]
Age			0.829	0.459	0.319	0.770	1.274*		0.185	0.645			0.310	0.252	0.670	-1.031	-0.793		0.635	-1.132
			[0.952]	[0.789]	[0.829]	[0.856]	[0.718]		[0.803]	[0.834]			[2.053]	[2.269]	[2.227]	[2.166]	[2.161]		[2.250]	[2.188]
Age Squared			-0.012	-0.007	-0.005	-0.013	-0.020**		-0.003	-0.011			0.002	0.002	-0.003	0.017	0.015		-0.002	0.018
			[0.013]	[0.011]	[0.012]	[0.012]	[0.009]		[0.011]	[0.012]			[0.024]	[0.027]	[0.026]	[0.026]	[0.026]		[0.026]	[0.026]
No. of Sons			4.840*	4.235*	4.151	2.462	2.480		3.890	2.136			-0.601	2.991	3.623	3.786	4.107		3.847	4.037
			[2.865]	[2.505]	[2.524]	[2.539]	[2.422]		[2.576]	[2.628]			[2.884]	[3.113]	[3.198]	[3.169]	[2.726]		[3.161]	[3.095]
No. of Daughters			2.332	-0.541	-0.833	-1.653	-0.997		-0.771	-1.637			0.592	1.904	2.782	2.708	3.190*		3.238	3.175
			[2.354]	[2.457]	[2.408]	[2.382]	[2.102]		[2.436]	[2.407]			[1.633]	[2.294]	[2.347]	[2.210]	[1.875]		[2.278]	[2.119]
Scheduled Caste				-14.944	-12.766	-14.349	-11.385		-12.592	-14.291				-9.181*	-9.173	-7.990	-6.995		-8.347	-6.870
				[9.981]	[10.085]	[10.526]	[12.039]		[10.291]	[10.784]				[5.471]	[5.682]	[5.426]	[6.048]		[5.551]	[5.369]
Other Backwards Caste				24.377***	24.829***	20.925***	17.451***		24.814***	20.917***				-5.012	-6.481	-4.146	-5.489		-7.643	-5.365
				[5.706]	[5.733]	[6.304]	[5.222]		[5.887]	[6.393]				[8.266]	[7.932]	[7.999]	[6.876]		[7.979]	[8.034]
Receive Gifts for Spouse				0.475	0.215	3.203	3.940		0.914	3.983				10.805**	11.981**	7.723	8.715**		11.046**	6.527
(=1 if Yes)				[5.121]	[5.223]	[5.129]	[5.047]		[5.311]	[5.193]				[4.907]	[5.179]	[5.127]	[3.900]		[5.344]	[5.264]
Say over Work				0.656	0.782	2.984	2.945		0.776	3.044				-0.441	-0.408	1.689	1.168		-0.199	1.984
(dummy variable)				[5.216]	[5.217]	[5.283]	[5.308]		[5.177]	[5.231]				[5.695]	[5.769]	[5.815]	[5.232]		[5.849]	[5.830]
Total HH Expenditure (log)					2.627	3.209	1.552		2.701	3.312					-5.755	-5.400	-5.071		-6.375	-6.184
					[4.508]	[4.560]	[4.196]		[4.546]	[4.590]					[4.587]	[4.101]	[3.561]		[4.682]	[4.135]
Some Schooling						-6.089	-6.319			-6.247						5.553	6.051			5.410
						[6.265]	[5.843]			[6.294]						[5.680]	[5.080]			[5.725]
High School or Above						-22.615**	-23.801***			-23.001**						26.229**	25.608**			26.893**
						[9.132]	[8.285]			[8.971]						[10.498]	[9.897]			[10.379]
Controls																				
Demographic & HH Composition	N	N	Y	Y	Y	Y	Y	N	Y	Y	N	N	Y	Y	Y	Y	Y	N	Y	Y
Bargaining Power & Altruism	N	N	N	Y	Y	Y	Y	N	Y	Y	N	N	N	Y	Y	Y	Y	N	Y	Y
Total Expenditure	N	N	N	N	Y	Y	Y	N	Y	Y	N	N	N	N	Y	Y	Y	N	Y	Y
Spouse Expenditure	N	N	N	N	Y	Y	N	N	Y	Y	N	N	N	N	Y	Y	N	N	Y	Y
Education	N	Y	Y	Y	N	Y	N	N	N	Y	N	Y	Y	Y	N	Y	N	N	N	Y
N	93	91	91	89	89	88	90	93	89	88	87	87	86	81	81	81	81	87	81	81
R-squared	0.233	0.215	0.252	0.425	0.429	0.463	0.451	0.232	0.425	0.460	0.203	0.239	0.266	0.345	0.367	0.434	0.428	0.221	0.386	0.457

Table B.6: Results on Returning behavior using Interactions with Gender instead of Split Sample

	Women								Coefficient of Interactions with Men Dummy							
	(1)	(2)	(4)	(5)	(6)	(1) a	(5) a	(6) a	(1)	(2)	(4)	(5)	(6)	(1) a	(5) a	(6) a
Male	-	-	-	-	-	-	-	-	8.677	5.355	7.631	7.454	5.663	10.383	8.418	6.746
(= 1 if receiver spouse is Male)									[8.739]	[9.851]	[10.707]	[11.141]	[11.494]	[8.754]	[11.003]	[11.330]
Dummy Expenditure in Tobacco	1.470	1.791	0.290	0.326	0.144	1.654	0.606	0.401	-	-	-	-	-	-	-	-
(= 1 if Expenditure in Tobacco>0)	[3.413]	[3.453]	[3.768]	[3.886]	[3.901]	[3.249]	[3.638]	[3.648]								
HH Expenditure in Tobacco	-0.119	-0.183	0.080	0.075	0.042	-1.359	2.406	1.843	-0.094	-0.140	-0.278	-0.286	-0.230	-6.358	-9.102	-8.334
(= share relative to total HH exp, 0 o/w)	[0.581]	[0.654]	[0.551]	[0.564]	[0.598]	[11.386]	[11.346]	[11.713]	[0.601]	[0.657]	[0.592]	[0.595]	[0.621]	[12.627]	[12.799]	[13.141]
Spouse Expenditure on Assets	-0.104	-0.085	-0.058	-0.058	-0.062	-0.103	-0.058	-0.062	0.320	0.283	0.253	0.251	0.246	0.320	0.249	0.244
(=share relative to total spouse exp)	[0.260]	[0.247]	[0.215]	[0.215]	[0.217]	[0.259]	[0.215]	[0.217]	[0.284]	[0.273]	[0.264]	[0.265]	[0.265]	[0.283]	[0.265]	[0.265]
Spouse Expenditure on Ceremonies	0.048	0.025	0.115	0.117	0.115	0.050	0.120	0.119	0.073	0.050	0.116	0.113	0.129	0.075	0.109	0.124
(=share relative to total spouse exp)	[0.095]	[0.093]	[0.108]	[0.109]	[0.113]	[0.095]	[0.106]	[0.110]	[0.175]	[0.176]	[0.216]	[0.216]	[0.223]	[0.169]	[0.210]	[0.216]
Spouse Personal Expenditure	0.245	0.249	0.377	0.365	0.352	0.233	0.352	0.337	-0.605	-0.603	-0.632	-0.640	-0.662	-0.583	-0.603	-0.624
(=share relative to total spouse exp)	[0.344]	[0.350]	[0.333]	[0.349]	[0.351]	[0.342]	[0.345]	[0.348]	[0.429]	[0.559]	[0.624]	[0.625]	[0.628]	[0.427]	[0.629]	[0.633]
Own Expenditure in Assets	-0.136	-0.153	-0.163	-0.162	-0.180	-0.133	-0.158	-0.176	-0.204	-0.188	-0.156	-0.152	-0.121	-0.218	-0.156	-0.125
(= share relative to total Own Exp)	[0.232]	[0.223]	[0.187]	[0.188]	[0.195]	[0.231]	[0.187]	[0.195]	[0.259]	[0.255]	[0.242]	[0.247]	[0.250]	[0.257]	[0.245]	[0.248]
Own Expenditure in Ceremonies	0.257	0.239	0.185	0.185	0.198	0.252	0.181	0.194	-0.418*	-0.378	-0.389	-0.387	-0.411	-0.421*	-0.386	-0.409
(= share relative to total own Exp)	[0.224]	[0.221]	[0.216]	[0.215]	[0.222]	[0.227]	[0.218]	[0.225]	[0.238]	[0.251]	[0.260]	[0.262]	[0.267]	[0.242]	[0.263]	[0.269]
Own Personal Expenditure	-1.199***	-1.168***	-1.486***	-1.505***	-1.502***	-1.215***	-1.515***	-1.515***	1.081**	1.074**	1.457***	1.470***	1.449***	1.074**	1.462***	1.445***
(= share relative to total Own Exp)	[0.400]	[0.416]	[0.383]	[0.440]	[0.443]	[0.401]	[0.442]	[0.445]	[0.434]	[0.451]	[0.430]	[0.467]	[0.467]	[0.434]	[0.467]	[0.466]
Wife Share of Total HH Expenditure	-0.197**	-0.190**	-0.214**	-0.213**	-0.217**	-0.195**	-0.210**	-0.214**	-	-	-	-	-	-	-	-
(= Wife tot Exp / Tot HH Exp)	[0.080]	[0.082]	[0.083]	[0.085]	[0.086]	[0.080]	[0.085]	[0.085]								
Spouse Exp. Child Schooling	10.757*	8.015	13.653**	13.602**	11.925*	10.819*	13.433**	11.770*	0.046	1.725	-2.704	-2.546	-0.497	-1.032	-3.474	-1.524
(= 1 if spent $ in children's schooling)	[5.622]	[6.120]	[6.094]	[6.181]	[6.885]	[5.497]	[6.155]	[6.843]	[7.236]	[7.809]	[7.345]	[7.399]	[7.888]	[7.323]	[7.565]	[8.012]
Receive Gifts for Spouse			6.030*	6.086	6.116		-1.106	-0.432	-	-	-	-	-			
(=1 if Yes)			[3.599]	[3.743]	[3.918]		[3.767]	[3.891]								
District	-9.297**	-8.990**	-5.544	-5.622	-5.874	-8.969**	-5.387	-5.634	-	-	-	-	-	-	-	-
(=1 if Almora)	[3.717]	[4.006]	[4.406]	[4.425]	[4.563]	[3.742]	[4.456]	[4.588]								
Age		0.529	0.543	0.556	0.555		0.504	0.510								
		[0.930]	[0.787]	[0.783]	[0.785]		[0.774]	[0.778]								
Age Squared		-0.004	-0.005	-0.005	-0.005		-0.004	-0.005								
		[0.012]	[0.010]	[0.010]	[0.011]		[0.010]	[0.010]								
No. of Sons		1.767	2.695	2.723	2.722		2.823	2.847								
		[1.928]	[1.961]	[2.031]	[2.073]		[2.058]	[2.103]								
No. of Daughters		1.191	0.532	0.586	0.577		0.705	0.702								
		[1.375]	[1.724]	[1.845]	[1.824]		[1.867]	[1.854]								
Scheduled Caste			-10.014*	-10.152*	-10.219*		-9.936*	-9.988*								
			[5.478]	[5.602]	[5.723]		[5.631]	[5.748]								
Other Backwards Caste			13.371***	13.298**	12.533**		13.160**	12.442**								
			[4.930]	[5.112]	[5.367]		[5.207]	[5.450]								
Say over Work			-1.170	-1.191	-0.489		5.952	5.945								
(dummy variable)			[3.776]	[3.779]	[3.902]		[3.749]	[3.927]								
Total HH Expenditure (log)				-0.372	-0.856		-0.541	-1.042								
				[3.274]	[3.385]		[3.283]	[3.393]								
Some Schooling					-2.036			-1.872								
					[4.623]			[4.616]								
High School or Above					1.162			1.429								
					[7.809]			[7.793]								
N	178	177	170	170	169	178	170	169								
R-squared	0.239	0.257	0.344	0.344	0.344	0.244	0.348	0.347								