# ONLINE APPENDIX (NOT FOR PUBLICATION)

for

# **Motivating Migrants:**

# A Field Experiment on Financial Decision-Making in Transnational Households

By Ganesh Seshan (Georgetown University) and Dean Yang (University of Michigan)

## **Appendix 1: Workshop Invitation Script**

The following text is the script used by the survey firm to contact subjects by phone and to invite them to attend the financial education workshop.

Thank you for participating in the Qatar Study of Kerala Families survey. As an exclusive service to you, we would like to invite you to a financial strategies workshop to help you better manage your finances and work towards your financial goals. The workshop titled "Oru Nalla Nalekku Vendi" will be conducted by Mr. K.V. Shamshudeen, chairman of a Dubai-based Pravashi Bandhu Welfare Trust, who for the past decade has been giving similar workshops to Malayalam expatriates in the Gulf. His workshops are well known and well-attended so this is an opportunity not to be missed.

The workshop will be held on Friday, Nov 26th at the Hotel Crystal Palace.

The program will begin at 5:30pm and dinner will be provided. We expect the workshop to last 3 hours. Please note that space for the workshop is limited and is by invitation only. We are not able to host all the participants that we interviewed previously. In the future we may hold additional workshops and inform them.

Can we count on your attendance to the workshop on Friday, Nov 26th? If yes, please make sure that you show up promptly at 5:30pm at the Hotel Crystal Palace. If not, it would help us to understand why you can't make it

Note: While migrants were told the workshop would last for 3 hours, total time in attendance was 5 hours due to the dinner held afterwards.

## **Appendix 2: Contents of the Workshop**

The workshop entitled "Towards a Better Tomorrow" was hosted by Mr. K.V. Shamsudheen (KVS) on Friday, November 26, 2010 in Doha, Qatar. The session was conducted in Malayalam, the local language of the people of Kerala, India. It lasted 3 hours, and was followed by a 2-hour dinner.

Major themes of the workshop were as follows:

#### 1. Introduction

 How migration and subsequently remittances sent home has benefited the family back home.

- Very few migrants working in the region have accumulated sufficient financial resources to maintain the same standard of living for their families when they permanently return to India
- Examples were given where migrants were told to leave again to work abroad by their family members who did not want to compromise their comfortable living standards previously sustained by remittances.
- Lessons learnt from the workshop should be shared with friends and families.

## 2. Goal Planning

- Everyone needs to set specific, achievable and realistic goals and work towards them. There should be dateline for each goal.
- Importance of maintaining a positive outlook or attitude and having good work ethics. Each migrant is an ambassador for his country.
- Need to also lead a healthy lifestyle give up bad habits such as smoking<sup>1</sup>.

# 3. Role of Family in Managing Remittances

- Migrant workers in the Gulf tend to work for the benefit of their families while sacrificing their own comforts. Examples provided of lavish homes built with rooms that are unoccupied by family members back home. Associated with this was the problem of obtaining large loans and consequently facing high indebtedness.
- Importance that the family back home not to spend excessively out of the remittance received. The family must be encouraged to save for future medical expenses, education, marriage (of daughters) and for retirement.
- In order to change the attitude of the family, the migrant must give them a realistic picture of his real circumstances and lifestyle abroad and not sugar-coat his actual living conditions.
- Family back home must be instructed to save a portion of the remittances sent and not treat the entire amount received as expendable.

## 4. Financial Planning, Budgeting and Savings

- Migrants must plan how to use their earnings by first taking stock of their expenditures in Qatar and then critically look for ways to reduce expenses and save the difference.
- Migrant and families must live within their means and not spend excessively.
- Migrant must discuss with the wife back home about starting a monthly budget.
- The budget must carefully note every expense by the household and look for ways to save money but cutting back on non-essential expenses. The same amount of remittances can be sent back prior to creating the budget but now the family must save a portion of it.
- The migrant must also prepare and follow a budget for his expenses in Qatar.

## 5. Investment Strategies

- Examine various investment options looking at the risk/reward trade-offs. These include fixed deposits, gold, real estate, stock market and life insurance.
- Business is an option but only if it pursued with proper recording and bookkeeping.

<sup>&</sup>lt;sup>1</sup> The speaker asked who in the audience was prepared to take an oath to end smoking (and implicitly to save the difference). Some participants stood up and made a pledge.

# **Appendix 3: Self-Reported Impact of the Workshop on Participants**

We were interested in documenting what lessons migrants who attended the financial education workshop took away from the workshop. At the follow-up survey which took place more than 12 months after the workshop, the participants were asked to choose which aspects of their financial lives were positively affected by the workshop from list read out to them by their interviewer and to rank order their choices. Appendix Figure 1 provides a graphical representation of the items selected as being the most significant influence. The top three most ranked lessons were as follows:

- 1. Having regular savings (ranked first by 33% of the participants)
- 2. Spending wisely and avoiding excessive expenditures (ranked first by 31% of the participants)
- 3. Managing debt (ranked first by 17% of the participants)

## **Appendix 4: Sample Description**

The baseline survey, which took place between August and November 2010, was implemented by a survey firm hired for the purpose. Recruitment focused on migrants residing in Doha's Industrial Area, where most resided in labor camps. Survey staff members, who were themselves migrants from Kerala, knocked on residential doors and approached migrants in public spaces of residential areas to find subjects to invite to participate in the study. After obtaining consent to participate in the study, migrants were asked to provide contact information and times suitable for a future baseline interview with him and his wife in India that would take place simultaneously. Migrant interviews took place in person, while interviews with his wife were conducted over the phone.<sup>2</sup> A total of 232 couples were interviewed at baseline.

After the baseline surveys were completed, the survey firm was provided with a list of randomly selected migrant subjects to contact and invite to attend a financial literary workshop held at the end of November 2010. Out of the sample of 232 male migrants, 157 were assigned to the treatment group.<sup>3</sup> The migrant subjects were encouraged to attend the workshop and told it was exclusively organized for them in appreciation of their participation in the baseline survey. Apart from the dinner provided, there was no other compensation for attendance. See Appendix 1 for the invitation script.

Follow-up surveys occurred over a year after the baseline surveys, between December 2011 and April 2012. The same survey firm was hired to complete the follow-up survey with separate interviews conducted with the migrant and his wife. Survey staff first made an attempt to contact the migrant for a face-to-face interview. If it was not feasible to meet the migrant, the interview

-

<sup>&</sup>lt;sup>2</sup> For a separate study on survey methodology, couples were randomly assigned to two groups that differed in how they were interviewed at baseline. Half of couples were assigned to a "public" survey, where husband and wife were interviewed together (with the husband in person and the wife on the phone), with each being able to hear the other's responses. The remaining couples were assigned to a "private" survey, where husbands and wives were interviewed separately and could not hear one another's responses. In all regressions of this paper, we control for assignment to the "public" baseline survey. This control variable has no material impact on the estimates.

<sup>&</sup>lt;sup>3</sup> Originally, each subject was assigned with 50% probability to the treatment. Initial indications were that many subjects would not be able to attend the workshop due to schedule conflicts. Because we had promised the workshop speaker a certain number of attendees, some of the remaining subjects were also randomly assigned to treatment, each with 1/3 probability. Each study participant therefore had a 2/3 probability of being in the treatment group.

was done by phone. If the migrant could not be interviewed, then no interview was carried out with the wife. Once a migrant was successfully interviewed, a separate interview was then conducted with the wife over the phone.

## **Appendix 5: Variable definitions**

Data used in this paper came from two survey rounds. A baseline survey was conducted between August and November 2010 and a follow-up survey from December 2011 to April 2012. All figures in monetary terms are in Indian rupees (INR).

# **Baseline characteristics (from baseline survey)**

Migrant age is respondent's age in years.

Migrant years of education is the respondent's years of completed schooling.

Migrant years abroad is the respondent's years working abroad.

Migrant's annual income is the respondent's annual income in Qatar converted to Indian rupees.

Migrant's landholding in India is the size of the respondent's land holdings in India, expressed in cents. One cent is equal to 1/100 acre or 40.5 square meters.

Migrant's annual remittances is the respondent's annual remittances sent to his household in India. Annual remittances equal frequency of remittance transactions over the previous 12 months multiplied by the average amount sent per remittance transaction. If the migrant sends remittances infrequently, we use the total amount he reports sending in the past 12 months.

Migrant own savings is the sum of cash, bank and postal account balances, chitty fund (ROSCA) balance, value of life insurance or pension plan contributions, value of gold, market value of stocks/share and other financial assets owned by the respondent in Qatar and in India. Gold value equals gold weight in grams multiplied with the monthly price of gold per gram at the time of the baseline interview.

Migrant joint savings with wife is the total amount of savings the respondent reports holding jointly with his wife.

Migrant saves regularly equals 1 if the respondent reports putting money aside to save on a regular basis, and 0 if not.

Wife's age is respondent's age in years.

Wife years of education is the respondent's years of completed schooling.

Wife household size in Kerala is the number of people counted as members of the respondent's household in Kerala, India at the time of the baseline survey. This excludes members who are working abroad.

Wife employed in Kerala equals 1 if the wife was working at the time of the baseline survey, and 0 if not.

Wife's household annual income in Kerala is the sum of income by people counted as members of the respondent's household in Kerala.

Wife's own savings is the sum of cash, bank and postal account balances, chitty fund (ROSCA) balance, value of life insurance or pension plan contributions, value of gold, market value of stocks/share and other financial assets owned by the respondent in India. Gold value equals gold weight in grams multiplied with the monthly price of gold per gram at the time of the baseline interview.

Wife's joint savings with migrant is the total amount of savings the respondent reports holding jointly with her migrant husband.

Wife saves regularly equals 1 if the respondent reports putting money aside to save on a regular basis, and 0 if not.

Migrant and wife interviewed together at baseline equals 1 if the migrant and wife were interviewed together so that each could know each other's responses.

Months between baseline and follow-up surveys is the number of months between baseline and follow-up survey interviews with the migrant and his wife.

#### Variables from follow-up survey:

Attended KVS financial education workshop equals 1 if the migrant self-reports in the follow-up survey as having attended K.V. Shamsudheen's workshop on November 26, 2010, and 0 if not.

Listened to KVS radio show equals 1 if the migrant reports listening to K.V. Shamsudheen's radio show on money matters which is broadcasted from the United Arab Emirates, and 0 if not.

Attended some financial education workshop equals 1 if the migrant wife's reports attending a financial education workshop in India after the workshop in Qatar concluded on November 26, 2010, and 0 if not.

Financial practices reported by migrant in follow-up survey:

Discussed and plan financial goals with family in Kerala equals 1 if migrant reports discussing and planning financial goals with household in Kerala, and 0 if not.

Made a budget plan equals 1 if the migrant reports having worked on a budget plan as to how much to spend and save with his income, and 0 if not.

Always or very often...

...review financial goals equals 1 if the migrant reports from a 4-point scale either always or very often reviewing his financial goals, and 0 if not. The 4-point scale used is always, very often, sometimes or never.

...keep record of expenses equals 1 if the migrant reports either always or very often keeping a record of what he spends money on, and 0 if not.

...make sure that expenses do not exceed income equals 1 if the migrant reports either always or very often making certain that expenses are not more than income, and 0 if not.

..put aside money to save on a regular basis equals 1 if the migrant reports either always or very often putting aside money to save regularly, and 0 if not.

...spend less if spend more elsewhere equals 1 if the migrant reports either always or very often spending less on one or more items if more has been spend on something else, and 0 if not.

...make sure that expenses do not exceed budget equals 1 if the migrants reports either always or very often making sure that expenses do not exceed what was budgeted for, and 0 if not.

..list anticipated expenses in advance equals 1 if the migrant reports either always or very often listing in advance all expense items and anticipated amount for each, and 0 if not.

...encourage family in Kerala to follow budget equals 1 if the migrant reports either always or very often encouraging family in Kerala to stick to a budget, and 0 if not.

...remind family of planned spending or savings equals 1 if the migrant reports either always or very often reminding family in Kerala of what was planned spending or savings as per budget, and 0 if not.

## Financial practices reported by migrant's wife in follow-up survey:

*Made a budget plan* equals 1 if migrant's wife reports that her household having worked on a budget plan as to how much to spend and save in Kerala, and 0 if not.

Always or very often..

...review financial goals equals 1 if the wife reports from a 4-point scale either always or very often reviewing her financial goals, and 0 if not. The 4-point scale used is always, very often, sometimes or never.

...keep record of expenses equals 1 if the wife reports either always or very often keeping a record of what she spends money on, and 0 if not.

...make sure that expenses do not exceed income equals 1 if the wife reports either always or very often making certain that expenses are not more than income, and 0 if not.

..put aside money to save on a regular basis equals 1 if the wife reports either always or very often putting aside money to save regularly, and 0 if not.

...spend less if spend more elsewhere equals 1 if the wife reports either always or very often spending less on one or more items if more has been spend on something else, and 0 if not.

...make sure that expenses do not exceed budget equals 1 if the wife reports either always or very often making sure that expenses do not exceed what was budgeted for, and 0 if not.

..list anticipated expenses in advance equals 1 if the wife reports either always or very often listing in advance all expense items and anticipated amount for each, and 0 if not.

...encourage family in Kerala to follow budget equals 1 if the wife reports either always or very often encouraging family in Kerala to stick to a budget, and 0 if not.

...remind family of planned spending or savings equals 1 if the wife reports either always or very often reminding family in Kerala of what was planned spending or savings as per budget, and 0 if not.

#### Savings goals reported by migrant from follow-up survey:

Saves regularly equals 1 if the migrant reports putting money aside to save on a regular basis, and 0 if not.

Satisfied with level of savings equals 1 if the migrant reports being either very satisfied or satisfied with his own savings and those held jointly with his wife, and 0 if not. The 5-point scale used is very satisfied, not very satisfied, not satisfied at all, and no plan for savings.

## Purpose of savings is...

...to buy land equals 1 if the migrant reports planning to buy land with his own savings or savings held jointly with his wife, and 0 if not.

...to buy or build a home equals 1 if the migrant reports planning to buy or build a home with his own savings or savings held jointly with his wife, and 0 if not.

...to buy vehicle equals 1 if the migrant reports planning to buy a vehicle with his own savings or savings held jointly with his wife, and 0 if not.

...to pay for children's education equals 1 if the migrant reports planning to pay for his children's education with his own savings or savings held jointly with his wife, and 0 if not.

...to pay for marriage expenses equals 1 if the migrant reports planning to pay for his children's marriage expenses (including dowry) with his own savings or savings held jointly with his wife, and 0 if not.

...to pay medical expenses equals 1 if the migrant reports planning to pay for medical expenses with his own savings or savings held jointly with his wife, and 0 if not.

... for emergencies equals 1 if the migrant reports planning to meet emergency expenses with his own savings or savings held jointly with his wife, and 0 if not.

... for emergencies equals 1 if the migrant reports planning to meet emergency expenses with his own savings or savings held jointly with his wife, and 0 if not.

... for retirement equals 1 if the migrant reports planning for retirement with his own savings or savings held jointly with his wife, and 0 if not.

...to start or expand a business equals 1 if the migrant reports planning to start or expand a business with his own savings or savings held jointly with his wife, and 0 if not.

# Savings goals reported by migrant's wife from follow-up survey:

Saves regularly equals 1 if the migrant's wife reports putting money aside to save on a regular basis, and 0 if not.

Satisfied with level of savings equals 1 if the wife reports being either very satisfied or satisfied with her own savings and those held jointly with her migrant husband, and 0 if not. The 5-point

scale used is very satisfied, not very satisfied, not satisfied at all, and no plan for savings.

Purpose of savings is...

...to buy land equals 1 if the wife reports planning to buy land with her own savings or savings held jointly with her husband, and 0 if not.

...to buy or build a home equals 1 if the wife reports planning to buy or build a home with her own savings or savings held jointly with her husband, and 0 if not.

...to buy vehicle equals 1 if the wife reports planning to buy a vehicle with her own savings or savings held jointly with her husband, and 0 if not.

...to pay for children's education equals 1 if the wife reports planning to pay for her children's education with her own savings or savings held jointly with her husband, and 0 if not.

...to pay for marriage expenses equals 1 if the wife reports planning to pay for her children's marriage expenses (including dowry) with her own savings or savings held jointly with her husband, and 0 if not.

...to pay medical expenses equals 1 if the wife reports planning to pay for medical expenses with her own savings or savings held jointly with her husband, and 0 if not.

... for emergencies equals 1 if the wife reports planning to meet emergency expenses with her own savings or savings held jointly with her husband, and 0 if not.

... for emergencies equals 1 if the wife reports planning to meet emergency expenses with her own savings or savings held jointly with her husband, and 0 if not.

... for retirement equals 1 if the wife reports planning for retirement with her own savings or savings held jointly with her husband, and 0 if not.

...to start or expand a business equals 1 if the wife reports planning to start or expand a business with her own savings or savings held jointly with her husband, and 0 if not.

## Financial decision-making variables from follow-up survey:

Migrant and wife both decide on money matters (migrant's report) equals 1 if the migrant reports that only he and his wife jointly decide on whether money will be saved or spent on something for the household in Kerala, and 0 if not.

Migrant and wife both decide on money matters (wife's report) equals 1 if the wife reports that only she and her migrant husband jointly decide on whether money will be saved or spent on something for the household in Kerala, and 0 if not.

# Savings variables from follow-up survey:

Own savings is the sum of cash, bank and postal account balances, chitty fund (ROSCA) balance, value of life insurance or pension plan contributions, value of gold, market value of stocks/share and other financial assets reported by the migrant (wife) as his (her) own. Gold value equals gold weight in grams multiplied with the monthly price of gold per gram at the time of the follow-up interview.

Jointly savings with spouse is the sum of cash, bank and postal account balances, chitty fund (ROSCA) balance, value of life insurance or pension plan contributions, value of gold, market

value of stocks/share and other financial assets reported by the migrant (wife) as being held jointly with his wife (her husband). Gold value equals gold weight in grams multiplied with the monthly price of gold per gram at the time of the follow-up interview.

Report of spouse's own savings with spouse is the sum of cash, bank and postal account balances, chitty fund (ROSCA) balance, value of life insurance or pension plan contributions, value of gold, market value of stocks/share and other financial assets reported by the migrant (wife) as being owned by his wife (her husband). Gold value equals gold weight in grams multiplied with the monthly price of gold per gram at the time of the follow-up interview.

Total household savings is the sum of own savings, joint savings with spouse and spouse's own savings averaged across migrant's and wife's reports.

## Remittance variables from follow-up survey:

Remittances sent by migrant to wife is the average of the migrant's and wife's separate reports of annual remittance sent by the migrant to the wife in Kerala, India. Annual remittances equal frequency of remittance transactions over the previous 12 months multiplied by the average amount sent per remittance transaction. If the migrant sends remittances infrequently, we use the total amount he reports sending over the 12 months prior to the follow-up survey. If the wife receives remittances infrequently, we use the total amount she reports receiving over the 12 months prior to the follow-up survey.

## Other variables from follow-up survey:

Own expenses in Qatar is the migrant's annual expenses in Qatar. Annual expenses equals monthly expense reported by the migrant multiplied by 12.

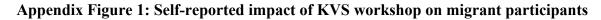
*Number of new loans taken out (in Qatar or India)* is migrant's report on the number of new loans obtained by the migrant or household members in India after the financial education workshop date on November 26<sup>th</sup>, 2010.

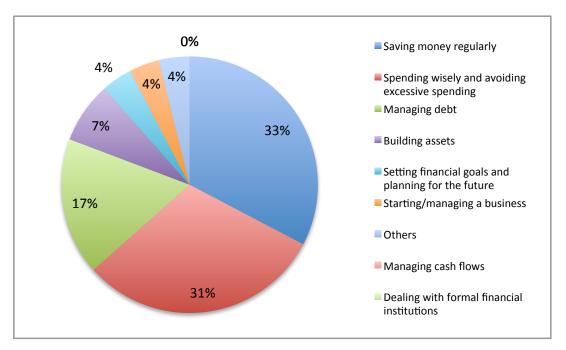
Total owed on loan outstanding (in Qatar or India) is the migrant's report of the total amount owed on new loans obtained by the migrant or his household members after the financial education workshop date on November 26<sup>th</sup>, 2010.

Household expenses in India is the household's annual expenses in Kerala, India. Annual expenses equals monthly expense reported by the wife multiplied by 12.

*Number of new loans taken out (in India)* is the wife's report on the number of new loans obtained by the migrant or household members in India after the financial education workshop date on November 26<sup>th</sup>, 2010.

Total owed on loan outstanding (India) is the wife's report of the total amount owed on new loans obtained by the migrant or his household members after the financial education workshop date on November 26<sup>th</sup>, 2010.





<u>Note:</u> Shares are based on items ranked as the most important lesson gained from the financial education workshop and are calculated from the follow-up survey.

## Appendix Table 1: Impact of treatment on attrition from follow-up and on whether migrant interviewed by phone

		(1)	(2)
	Dependent variable:	Attrition: migrant not included in follow-up survey (indicator)	Phone interview with migrant at follow-up survey (indicator)
Treatment		0.016	-0.042
D caused		(0.047)	(0.051)
R-squared		0.09	0.606
Mean dep.var., cont. group			
No. of observations		232	200

<sup>\*</sup> significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

Notes: Each treatment coefficient estimated in a separate OLS regression with robust standard errors. Each regression includes full set of control variables included in Table 1, except for attrition (column 1) which excludes duration between survey rounds. Attrition is mostly due to unsuccessful re-contact at follow-up, but also includes two observations dropped because migrant and wife were divorced by time of follow-up.

Appendix Table 2: Intent-to-Treat Estimates for Financial Practices of Migrant

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Dependent variabl		Made a			Always or very often						
	and planned financial goals with family in Kerala	budget plan	review financial goals	keep record of expenses	make sure that expenses do not exceed income	save on a regular basis	spend less if spend more elsewhere	make sure that expenses do not exceed budget	list anticipated expenses in advance	encourage family in Kerala to follow budget	remind family of planned spending or savings
Panel A											
Treatment	0.118	0.028	0.013	-0.11	0.045	0.057	0.109	0.063	0.006	-0.028	-0.005
	(0.075)	(0.031)	(0.057)	(0.071)	(0.056)	(0.073)	(0.071)	(0.056)	(0.078)	(0.070)	(0.053)
R-squared	0.14	0.18	0.26	0.13	0.17	0.13	0.17	0.26	0.11	0.15	0.26
Mean dep.var. in control group	0.485	0.045	0.182	0.394	0.818	0.591	0.258	0.167	0.364	0.288	0.167
Panel B: Treatment Effects in Subsan	nples										
Low savings  High savings	0.196	-0.037	0.052	-0.094	0.016	0.115	0.099	0.083	-0.067	0.040	-0.015
	(0.112)*	(0.056)	(0.081)	(0.110)	(0.081)	(0.115)	(0.098)	(0.085)	(0.116)	(0.099)	(0.074)
	0.101	0.076	-0.030	-0.101	0.109	-0.029	0.147	0.101	0.031	-0.074	0.024
P-value of F-te	(0.105)	(0.045)*	(0.094)	(0.111)	(0.086)	(0.100)	(0.106)	(0.081)	(0.133)	(0.106)	(0.086)
	st 0.488	0.077	0.461	0.964	0.379	0.291	0.710	0.861	0.533	0.381	0.701
Low years abroad	0.255	0.009	0.072	-0.063	0.047	0.054	0.183	0.160	0.136	-0.047	-0.057
	(0.100)**	(0.048)	(0.080)	(0.089)	(0.087)	(0.104)	(0.097)*	(0.078)	(0.102)	(0.087)	(0.082)
High years abroad	0.010	0.022	-0.036	-0.099	0.048	0.079	0.052	-0.016	-0.128	-0.016	0.084
	(0.120)	(0.039)	(0.096)	(0.109)	(0.075)	(0.108)	(0.102)	(0.079)	(0.126)	(0.120)	(0.070)
P-value of F-te	st 0.079	0.811	0.334	0.777	0.993	0.847	0.297	0.075	0.066	0.815	0.142
High income	0.236	0.035	0.022	0.160	-0.001	-0.021	0.134	0.096	0.006	-0.084	-0.039
	(0.110)**	(0.061)	(0.102)	(0.099)	(0.080)	(0.113)	(0.108)	(0.089)	(0.109)	(0.117)	(0.096)
Low income	0.017 (0.132)	0.030 (0.027)	0.019 (0.069)	-0.307 (0.106)***	0.043 (0.083)	0.118 (0.120)	0.066 (0.119)	0.066 (0.080)	0.024 (0.116)	-0.023 (0.096)	0.071 (0.071)
P-value of F-te	st 0.150	0.932	0.982	0.000	0.666	0.343	0.636	0.778	0.897	0.655	0.302
Migrant sole decider	0.053	-0.027	-0.118	-0.296	0.092	0.056	0.227	0.048	-0.021	-0.265	0.025
	(0.150)	(0.059)	(0.125)	(0.149)*	(0.108)	(0.145)	(0.130)	(0.137)*	(0.146)	(0.137)	(0.112)
Migrant not sole decider	0.156 (0.096)	0.081 (0.033)**	0.125 (0.065)*	0.021 (0.087)	-0.013 (0.064)	-0.015 (0.103)	0.055 (0.092)	0.085 (0.068)	0.086 (0.100)	0.076 (0.085)	0.013 (0.070)
P-value of F-te	st 0.507	0.063	0.044	0.033	0.333	0.645	0.211	0.772	0.484	0.014	0.911
Panel C: Heterogenous Treatment E	<u>fects</u>										
Treatment	-0.121	0.135	-0.012	-0.277	0.066	0.031	-0.031	-0.02	-0.039	0.104	0.17
	(0.170)	(0.072)*	(0.119)	(0.157)*	(0.117)	(0.160)	(0.169)	(0.113)	(0.193)	(0.165)	(0.114)
Treatment * low savings	0.123	-0.107	0.074	-0.038	-0.022	0.128	-0.002	-0.009	-0.102	0.061	-0.019
	(0.154)	(0.065)	(0.118)	(0.146)	(0.117)	(0.143)	(0.141)	(0.113)	(0.156)	(0.141)	(0.109)
Treatment * low years abroad	0.19	0.01	0.145	0.088	-0.118	-0.028	0.103	0.132	0.318	-0.005	-0.178
	(0.152)	(0.061)	(0.115)	(0.144)	(0.118)	(0.145)	(0.133)	(0.121)	(0.153)**	(0.137)	(0.106)*
Treatment * high income	0.193	-0.049	-0.005	0.449	0.019	-0.208	0.068	0.017	-0.048	-0.114	-0.15
	(0.157)	(0.066)	(0.120)	(0.146)***	(0.121)	(0.150)	(0.145)	(0.112)	(0.156)	(0.140)	(0.115)
Treatment * migrant sole decide	er -0.077	-0.095	-0.264	-0.228	0.099	0.212	0.122	0	-0.148	-0.296	0.017
	(0.161)	(0.062)	(0.118)**	(0.141)	(0.124)	(0.153)	(0.144)	(0.132)	(0.158)	(0.144)**	(0.117)
R-squared	0.18	0.21	0.3	0.21	0.21	0.17	0.19	0.29	0.16	0.21	0.28

<sup>\*</sup> significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

Notes: Each regression includes full set of control variables included in Table 1 with robust standard errors. Number of observations in Panel A and C are 200 each. For Panel B, separate regressions are estimated for each subsample to obtain the respective treatment effect. Each p-value reported is for F-test of the equality of the two subsample treatment coefficients directly above. For Panel C, the regression includes additional indicator variables for low savers (at or below median migrant's savings at baseline), low years abroad (at or below median years worked abroad), low income (at or below median migrant's annual income at baseline) and migrant being sole decision-maker on money matters in household, and interaction of the treatment term with those indicators. All dependent variables reported are from the follow-up survey. All dependent variables in the table are indicator variables.

Appendix Table 3: Intent-to-Treat Estimates for Financial Practices of Wife

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Dependent varia	able: Made a	Made a Always or very often								
	budget plan	review financial goals	keep record of expenses	make sure that expenses do not exceed income	save on a regular basis	elsewhere	make sure that expenses do not exceed budget	list anticipate d expenses in advance	encourage family in Kerala to follow budget	remind family of planned spending or savings
Panel A										
Treatment	0.119 (0.049)**	0.003 (0.058)	0.004 (0.073)	0.025 (0.050)	0.197 (0.073)***	0.068 (0.064)	0.091 (0.059)	0.176 (0.075)**	0.159 (0.062)**	0.000 (0.062)
R-squared Mean dep.var. in control grou	0.20 up 0.121	0.24 0.197	0.06 0.697	0.13 0.864	0.17 0.500	0.19 0.242	0.12 0.152	0.11 0.348	0.19 0.182	0.08 0.197
Panel B: Treatment Effects in Sub	samples									
Low savings	0.086 (0.056)	0.023 (0.088)	-0.087 (0.104)	0.015 (0.088)	0.278 (0.114)**	0.130 (0.090)	0.116 (0.086)	0.111 (0.116)	0.171 (0.071)**	-0.040 (0.102)
High savings P-value of F	0.148 (0.090) <i>I-test</i> 0.511	-0.045 (0.085) 0.529	0.053 (0.110) 0.303	0.025 (0.060) 0.918	0.165 (0.104) 0.410	-0.004 (0.108) 0.283	0.091 (0.102) 0.832	0.236 (0.110)** 0.378	0.089 (0.110) 0.484	0.068 (0.091) 0.374
Low years abroad	0.107 (0.079)	-0.001 (0.084)	0.122 (0.104)	0.022 (0.064)	0.196 (0.098)**	0.064 (0.093)	0.108 (0.088)	0.180 (0.112)	0.151 (0.089)*	-0.033 (0.089)
High years abroad	0.114 (0.065)*	-0.025 (0.090)	-0.052 (0.105)	0.037 (0.084)	0.282 (0.109)**	0.075 (0.102)	0.143 (0.083)*	0.205 (0.103)**	0.163 (0.096)*	0.086 (0.093)
P-value of F	7-test 0.934	0.825	0.189	0.867	0.509	0.927	0.743	0.853	0.919	0.300
High income	0.148 (0.068)*	0.015 (0.093)	0.079 (0.114)	0.066 (0.083)	0.235 (0.100)**	-0.037 (0.096)	0.179 (0.085)**	0.206 (0.107)*	0.207 (0.091)**	0.105 (0.100)
Low income P-value of F	0.040 (0.085) <i>F-test</i> 0.267	-0.042 (0.083)	-0.078 (0.112)	-0.004 (0.072)	0.068 (0.114)	0.177 (0.098)*	0.001 (0.089)	0.223 (0.110)**	0.034 (0.092)	-0.124 (0.081)
Migrant sole decider	-0.024 (0.083)	0.607 -0.142 (0.099)	0.272 0.095 (0.137)	0.471 0.127 (0.089)	0.217 0.275 (0.123)**	0.080 0.045 (0.097)	0.102 -0.013 (0.103)	0.900 0.199 (0.141)	0.131 0.032 (0.111)	0.047 -0.043 (0.138)
Migrant not sole decider	0.218 (0.064)***	0.108	0.010 (0.096)	-0.051 (0.059)	0.125 (0.104)	0.088 (0.086)	0.195 (0.076)**	0.158 (0.099)	0.242 (0.080)***	0.108 (0.068)
P-value of F	7-test 0.008	0.021	0.557	0.054	0.285	0.703	0.060	0.782	0.077	0.251
Panel C: Heterogenous Treatment	t Effects									
Treatment	0.2 (0.112)*	0.044 (0.119)	0.003 (0.174)	-0.072 (0.112)	0.061 (0.178)	0.169 (0.146)	0.025 (0.152)	0.196 (0.180)	0.121 (0.147)	0.1 (0.124)
Treatment * low savings	-0.057 (0.100)	-0.016 (0.113)	-0.174 (0.152)	0.032 (0.105)	0.178 (0.150)	0.098 (0.131)	0.015 (0.127)	-0.091 (0.160)	0.075 (0.129)	-0.089 (0.125)
Treatment * low years abroad	d -0.007 (0.100)	0.049 (0.110)	0.179 (0.146)	-0.086 (0.101)	-0.148 (0.146)	-0.025 (0.137)	0.028 (0.125)	-0.013 (0.152)	0.049 (0.121)	-0.099 (0.127)
Treatment * high income	0.055 (0.103)	0.07 (0.110)	0.062 (0.158)	0.111 (0.104)	0.083 (0.154)	-0.232 (0.136)*	0.247 (0.129)*	0.047 (0.163)	0.072 (0.129)	0.118 (0.125)
Treatment * migrant sole dec	-0.224 (0.099)**	-0.238 (0.116)**	-0.063 (0.157)	0.189 (0.105)*	0.232 (0.146)	-0.091 (0.132)	-0.235 (0.126)*	0.023 (0.161)	-0.178 (0.129)	-0.169 (0.138)
R-squared	0.25	0.28	0.12	0.17	0.21	0.23	0.16	0.14	0.23	0.14

<sup>\*</sup> significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

Notes: Each regression includes full set of control variables included in Table 1 with robust standard errors. Number of observations in Panel A and C are 200 each. For Panel B, separate regressions are estimated for each subsample to obtain the respective treatment effect. Each p-value reported is for F-test of the equality of the two subsample treatment coefficients directly above. For Panel C, the regression includes additional indicator variables for low savers (at or below median migrant's savings at baseline), low years abroad (at or below median years worked abroad), low income (at or below median migrant's annual income at baseline) and migrant being sole decision-maker on money matters in household, and interaction of the treatment term with those indicators. All dependent variables reported are from the follow-up survey. All dependent variables in the table are indicator variables.

Appendix Table 4:Intent-to-Treat Estimates for Savings Goals of Migrant

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dependent variable	e: Satisfied	Interested in						
		commitment savings	to buy land or buy/build a home	to pay for children's education	Purpose of s to pay marriage expenses	to pay medical expenses or emergencies	for retirement	to start or expand a business
Panel A								
Treatment	-0.015	0.109	0.031	-0.05	0.042	0.011	-0.118	0.061
	(0.056)	(0.054)**	(0.068)	(0.075)	(0.047)	(0.023)	(0.044)***	(0.045)
R-squared	0.16	0.16	0.19	0.09	0.26	0.05	0.29	0.21
Mean dep.var., cont. group	0.864	0.121	0.348	0.636	0.106	0.015	0.121	0.091
Panel B: Treatment Effects in Subsample	<u>25</u>							
Low savings  High savings	-0.051	0.073	0.049	0.020	0.025	-0.009	-0.187	-0.003
	(0.096)	(0.075)	(0.105)	(0.122)	(0.072)	(0.040)	(0.062)***	(0.069)
	-0.003	0.141	0.027	-0.135	0.065	0.006	-0.072	0.086
P-value of F-te	(0.065)	(0.090) 0.520	(0.099) 0.864	(0.115) 0.299	(0.073) 0.660	(0.012) 0.689	(0.056) 0.121	(0.068) 0.304
Low years abroad	-0.045	0.211	-0.055	-0.010	0.054	-0.001	-0.085	0.058
	(0.070)	(0.081)***	(0.114)	(0.108)	(0.070)	(0.043)	(0.051)*	(0.067)
High years abroad	0.073	0.005	0.159	-0.122	-0.004	0.006	-0.116	0.076
	(0.097)	(0.068)	(0.074)**	(0.093)	(0.074)	(0.010)	(0.076)	(0.065)
P-value of F-te	est 0.272	0.030	0.076	0.380	0.517	0.865	0.700	0.828
High income  Low income	0.030	0.166	0.031	0.019	-0.040	-0.002	-0.128	0.046
	(0.078)	(0.083)**	(0.092)	(0.111)	(0.081)	(0.036)	(0.060)**	(0.064)
	-0.096	0.056	0.043	-0.192	0.178	0.048	-0.115	0.074
	(0.082)	(0.086)	(0.120)	(0.116)	(0.058)***	(0.036)	(0.063)*	(0.070)
P-value of F-te	est 0.208	0.300	0.926	0.140	0.014	0.271	0.869	0.741
Migrant sole decider	0.051	0.190	0.008	-0.042	-0.038	0.055	-0.056	0.169
	(0.110)	(0.094)	(0.137)	(0.124)	(0.091)	(0.045)	(0.070)	(0.077)**
Migrant not sole decider	0.000	0.073	0.034	-0.049	0.078	-0.016	-0.178	0.034
	(0.068)	(0.076)	(0.085)	(0.100)	(0.057)	(0.030)	(0.067)***	(0.066)
P-value of F-te		0.266	0.848	0.960	0.211	0.128	0.151	0.130
Panel C: Heterogenous Treatment Effect	<u>s</u>							
Treatment	0.011	-0.017	0.152	-0.326	0.235	0.028	-0.154	0.099
	(0.124)	(0.130)	(0.142)	(0.151)**	(0.100)**	(0.041)	(0.089)*	(0.109)
Treatment * low savings	-0.042	-0.068	0.056	0.113	-0.116	-0.006	-0.043	-0.1
	(0.111)	(0.113)	(0.142)	(0.160)	(0.095)	(0.038)	(0.083)	(0.092)
Treatment * low years abroad	-0.126	0.186	-0.215	0.135	0.036	-0.026	-0.012	0.004
	(0.105)	(0.112)*	(0.136)	(0.150)	(0.087)	(0.048)	(0.086)	(0.086)
Treatment * high income	0.022	0.087	-0.08	0.257	-0.241	-0.046	0.017	-0.002
	(0.109)	(0.117)	(0.149)	(0.158)	(0.098)**	(0.050)	(0.075)	(0.095)
Treatment * migrant sole decider	0.146	0.043	0.044	-0.003	-0.082	0.061	0.173	0.049
	(0.112)	(0.112)	(0.153)	(0.161)	(0.093)	(0.044)	(0.089)*	(0.098)
R-squared	0.19	0.2	0.22	0.14	0.29	0.08	0.32	0.22

<sup>\*</sup> significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

Notes: Each regression includes full set of control variables included in Table 1 with robust standard errors. Number of observations in Panel A and C are 200 each. For Panel B, separate regressions are estimated for each subsample to obtain the respective treatment effect. Each p-value reported is for F-test of the equality of the two subsample treatment coefficients directly above. For Panel C, the regression includes additional indicator variables for low savers (at or below median migrant's savings at baseline), low years abroad (at or below median years worked abroad), low income (at or below median migrant's annual income at baseline) and migrant being sole decision-maker on money matters in household, and interaction of the treatment term with those indicators. All dependent variables reported are from the follow-up survey. All dependent variables in the table are indicator variables.

Appendix Table 5: Intent-to-Treat Estimates for Savings Goals of Wife

		(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Dependent variable:	Satisfied	Interested in		Purpos	S		
		with level of savings	commitment savings	to buy land or buy/build a home	to pay for children's education	to pay marriage expenses	for retirement	to start or expand a business
Panel A								
Treatment		-0.054	-0.045	-0.015	-0.009	-0.039	-0.084	0.085
		(0.052)	(0.051)	(0.068)	(0.076)	(0.051)	(0.038)**	(0.034)**
R-squared		0.10	0.08	0.22	0.08	0.28	0.21	0.16
Mean dep.var., o	cont. group	0.924	0.152	0.379	0.591	0.167	0.076	0.030
Panel B: Treatment E	Effects in Subsamples							
Low savings		-0.096	-0.004	0.086	-0.044	-0.099	-0.030	0.066
· ·		(0.088)	(0.061)	(0.101)	(0.113)	(0.080)	(0.033)	(0.054)
High savings		-0.010	-0.058	-0.045	-0.034	0.018	-0.123	0.097
		(0.052)	(0.082)	(0.100)	(0.118)	(0.066)	(0.068)*	(0.053)*
	P-value of F-test	0.348	0.558	0.303	0.947	0.203	0.172	0.648
Low years abro	ad	-0.148	-0.120	-0.151	0.075	-0.081	-0.061	0.114
non years aorot		(0.058)**	(0.074)**	(0.112)	(0.120)	(0.068)	(0.042)	(0.053)**
High years abro	oad	0.084	0.078	0.127	-0.116	-0.033	-0.091	0.076
0 ,		(0.105)	(0.055)	(0.088)	(0.107)	(0.087)	(0.071)	(0.043)*
	P-value of F-test	0.030	0.017	0.029	0.181	0.630	0.685	0.538
High income		0.064	-0.073	-0.080	0.013	-0.031	-0.050	0.080
		(0.075)	(0.078)	(0.094)	(0.109)	(0.091)	(0.049)	(0.050)
Low income		-0.235	-0.047	0.122	-0.081	-0.071	-0.112	0.073
		(0.069)***	(0.082)	(0.109)	(0.138)	(0.078)	(0.061)*	(0.046)
	P-value of F-test	0.001	0.797	0.114	0.548	0.709	0.372	0.910
Migrant sole de	cider	-0.062	-0.184	-0.089	0.015	-0.010	-0.058	0.160
		(0.109)	(0.123)	(0.134)	(0.151)	(0.083)	(0.056)	(0.076)**
Migrant not sole	e decider	-0.037	0.017	-0.081	0.015	0.006	-0.105	0.081
		(0.073)	(0.053)	(0.084)	(0.102)	(0.065)	(0.054)*	(0.043)*
	P-value of F-test	0.827	0.078	0.951	0.999	0.857	0.492	0.295
Panel C: Heterogeno	ous Treatment Effects							
Treatment		0.027	0.183	0.126	-0.141	0.063	-0.193	0.059
		(0.103)	(0.097)*	(0.140)	(0.181)	(0.117)	(0.101)*	(0.084)
Treatment * low	/ savings	-0.059	0.001	0.078	0.023	-0.092	0.078	-0.002
		(0.090)	(0.099)	(0.139)	(0.162)	(0.105)	(0.070)	(0.067)
Treatment * low	vears abroad	-0.229	-0.209	-0.3	0.198	-0.014	0.008	0.013
	, , , , , , , , , , , , , , , , , , , ,	(0.098)**	(0.092)**	(0.147)**	(0.166)	(0.093)	(0.075)	(0.065)
Treatment * hig	h income	0.170	-0.079	-0.143	0.076	-0.02	0.084	0.016
		(0.089)*	(0.103)	(0.142)	(0.165)	(0.107)	(0.069)	(0.069)
Treatment * mig	grant sole decider	-0.019	-0.209	0.133	-0.09	-0.091	0.054	0.04
		(0.097)	(0.114)*	(0.150)	(0.167)	(0.102)	(0.070)	(0.080)
R-squared		0.19	0.16	0.3	0.11	0.29	0.24	0.21

<sup>\*</sup> significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

Notes: Each regression includes full set of control variables included in Table 1 with robust standard errors. Number of observations in Panel A and C are 200 each. For Panel B, separate regressions are estimated for each subsample to obtain the respective treatment effect. Each p-value reported is for F-test of the equality of the two subsample treatment coefficients directly above. For Panel C, the regression includes additional indicator variables for low savers (at or below median migrant's savings at baseline), low years abroad (at or below median years worked abroad), low income (at or below median migrant's annual income at baseline) and migrant being sole decision-maker on money matters in household, and interaction of the treatment term with those indicators. All dependent variables reported are from the follow-up survey. All dependent variables in the table are indicator variables.

Appendix Table 6: Intent-to-Treat Estimates for Other Financial Outcomes (Expenditures and Loans)

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable:	Own expenses in Qatar (annual)	Number of new loans taken out (in Qatar or India)	Total owed on loans outstanding (in Qatar and India)	Household expenses in India (annual)	Number of new loans taken out (in India)	Total owed on loans outstanding (in India)
Respondent:	Migrant	Migrant	Migrant	Wife	Wife	Wife
Panel A						
Treatment	-5,077	0.024	-21,893	-53	0.008	-17,782
	(7,430)	(0.057)	(31,695)	(7,448)	(0.063)	(31,307)
R-squared	0.23	0.04	0.13	0.28	0.08	0.13
Mean dep.var., cont. group	116,622	0.136	67,348	124,293	0.212	75,606
Panel B: Treatment Effects in Subsample	<u>25</u>					
Low savings	1,234	0.034	12,043	-1,786	-0.047	1,686
Ü	(9,678)	(0.075)	(18,152)	(10,123)	(0.096)	(20,094)
High savings	-10,029	0.006	-38,676	4,720	0.040	-22,347
	(12,324)	(0.094)	(65,512)	(13,153)	(0.096)	(64,145)
Equality test (p-value)	0.420	0.792	0.402	0.660	0.475	0.688
Low years abroad	-16,776	-0.016	-22,063	2,608	-0.013	-14,920
zon years deredd	(11,025)	(0.085)	(42,337)	(10,794)	(0.094)	(43,970)
High years abroad	11,931	0.125	2,651	-4,103	0.079	4,555
	(12,021)	(0.074)*	(46,952)	(11,033)	(0.092)	(43,193)
Equality test (p-value)	0.048	0.158	0.661	0.626	0.434	0.723
High income	-14,231	0.068	5,134	13,972	0.017	11,094
5	(12,263)	(0.077)	(55,795)	(11,114)	(0.089)	(53,043)
Low income	3,295	0.018	-52,026	-13,296	0.074	-53,461
	(9,735)	(0.090)	(40,938)	(9,829)	(0.100)	(41,868)
Equality test (p-value)	0.209	0.634	0.355	0.039	0.630	0.284
Migrant sole decider	-4,834	0.132	2,910	4,580	0.100	4,871
	(14,766)	(0.110)	(45,029)	(12,614)	(0.124)	(46,975)
Migrant not sole decider	-8,589	0.007	-20,149	486	0.011	-13,283
	(8,968)	(0.078)	(43,083)	(10,197)	(0.086)	(40,276)
Equality test (p-value)	0.801	0.286	0.674	0.772	0.500	0.737
Panel C: Heterogenous Treatment Effect	<u>s</u>					
Treatment	8,526	-0.040	-79,384	-7,539	0.071	-58,491
	(16,966)	(0.125)	(62,593)	(17,272)	(0.131)	(61,194)
Treatment * low savings	12,234	0.072	58,014	-15,282	-0.037	33,345
5	(15,839)	(0.112)	(62,118)	(16,588)	(0.135)	(62,003)
Treatment * low years abroad	-27,681	-0.106	-17,601	10,705	-0.075	-8,111
, and the second	(16,575)*	(0.110)	(51,516)	(14,457)	(0.139)	(51,989)
Treatment * high income	-13,698	0.055	48,836	16,053	-0.046	45,630
	(16,735)	(0.118)	(60,887)	(15,248)	(0.141)	(60,467)
Treatment * migrant sole decider	7,923	0.165	41,758	3,985	0.050	21,001
-	(17,619)	(0.119)	(54,737)	(14,681)	(0.139)	(54,681)
R-squared	0.26	0.07	0.17	0.33	0.09	0.16

<sup>\*</sup> significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

Notes: Each regression includes full set of control variables included in Table 1 with robust standard errors. Number of observations in Panel A and C are 200 each. For Panel B, separate regressions are estimated for each subsample to obtain the respective treatment effect. The equality test compares the treatment coefficients for high and low values of the baseline characteristic of interest. The final pair compares the treatment effect on the subsample of migrants who prior to treatment were sole deciders on financial matters within their household to those who were not. For Panel C, the regression includes additional indicator variables for low savers (at or below median migrant's savings at baseline), low years abroad (at or below median years worked abroad), low income (at or below median migrant's annual income at baseline) and migrant being sole decision-maker on money matters in household, and interaction of the treatment term with those indicators. All dependent variables reported are from the follow-up survey. Variables in money terms are in Indian rupees.