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Calling the Shots: Determinants of Financial Decision-making and Behaviour in Domestic Migrant Households in India

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Abstract

This paper explores financial decision-making and behaviour in migrant households. Literature on migration and financial inclusion usually focuses on either migrant workers and their financial needs, or remittance flows and their effects on development, leaving the subject of household decision-making significantly under-researched. Using primary data from two sample surveys, one with migrant workers and one with their household members, we employ descriptive analysis to study financial decision-making processes and outcomes. Our sample is mostly composed of male Indian domestic migrants from Bihar, Jharkhand, and Eastern Uttar Pradesh. Our analysis considers the following migrant typology dimensions: duration of migration cycle, skills, and destination. Key household characteristics explored in our study include household size, the number of financial contributors in the household, the presence of an older male and children below the age of 18, and overall household income. Our results show that household members compete for influence over financial decisions and power balances change significantly whether the migrant is at home or at destination. These dynamics play an important role in determining household financial preferences. This suggests that financial products and interventions targeting specific financial behaviour (for instance, financial literacy programs) need to take these factors into account since different households and different migrant types make these choices differently.

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Introduction

How do individuals and households make financial decisions and what factors influence the financial behaviour of diverse types of households? This paper studies household financial decision-making through the lens of migration, and uses a comparative approach to examine how factors like gender, household composition, migrant typology⁴, risk preferences, financial sophistication and information asymmetry influence financial decision-making and financial behaviour in migrant households. The study uses data collected from CATI surveys administered to migrant and non-migrant members of households.

Researchers have been developing models describing agents' financial choices for many years (Guiso & Sodini, 2013). The branch of *Consumer finance* has been studying these choices at the individual level, but in the last fifteen years, the study of how households use financial instruments and markets to achieve their objectives, i.e., *household finance*, has emerged as a field of considerable interest (Campbell, 2006). Our study focuses on household finance with the aim of contributing to a nascent but growing body of literature on financial decisions and strategies employed by households to meet their financial needs in pursuit of upward mobility. More precisely, our study focuses on a specific kind of household, i.e., the migrant household, by which we mean one where at least one household member is a migrant.

Migration itself constitutes one of the most widely used household financial strategies (Seshan, 2020). The Economic Survey of India (ESI 2017) estimates that the magnitude of inter-state migration in India was close to 9 million annually between 2011 and 2016. Estimates place the size of the domestic remittance market in India at \$24 billion, the second highest in the world.

The importance of understanding the financial decision-making process in migrant households is clear. First, the existing literature reveals the shortcomings of a purely individual-based approach to understand financial decisions, a finding that this study confirms as well. Such an approach does not consider the evolving needs of low-income and marginalized households, and the varying needs and bargaining power of the different members in a household. Second, individuals seldom make financial decisions in isolation. Instead, they normally consult other household members, and often their extended family and social networks. Finally, we recognize that migrants follow different paths, have different skills, and are motivated by different goals. Therefore, our study distinguishes between several types of migrants, which allows us to understand how they differ in their financial relationship with their originating household.

Our study largely focuses on male internal migrants from the Bihar-Jharkhand-eastern Uttar Pradesh to Delhi/NCR migration corridor. This is a well-documented corridor for economic migration among low-income households varying in terms of skill, duration and nature of migration which is conducive to the objectives of this study. Given the remote nature of data collection, we were able to conduct surveys with a significant number of migrants who were from the same source region but worked in destinations other than Delhi/NCR.

The findings of this paper have several implications for further research and policy discourse. First, our empirical findings provide valuable insight about the financial choices and decision-making in migrant households. These insights have significant implications for the development

⁴ For the purpose of this study, we differentiate migrants along three main dimensions: skills of the migrant, duration of migration, destination of migration.

of demand-driven financial products for a large customer segment. Second, an improved understanding of the financial preferences and risk appetites of migrant households can help inform targeted information campaigns and better financial literacy and awareness interventions, for research and practice. Our findings show that the use of formal savings and credit continues to be low, despite high rates of reported awareness. Our paper discusses several interesting findings on how women's decision-making power in migrant households is vary by factors like migration duration and household composition. The findings from our study, in this regard, can not only help inform the work of the aforementioned institutions but also future research on these topics. Existing evidence further supports this argument showing the positive effect of greater collective decision-making in household financial matters on women's agency, their financial literacy, and household allocation on children's education and health, leading to improved long-term financial outcomes for the household (Shwe, Jampaklay, Chamrathirong, & Thaweessit, 2020).

In light of the evolving situation around COVID-19 over the course of this study, we adopted a completely remote data collection strategy. Respondents were surveyed at two stages. We partnered with *Gramvaani*, a social technology solutions provider with an established customer base in our study location, to recruit respondents. The first stage employed an IVR recruitment survey that asked listeners to identify whether they were a migrant or if a member of their household was a migrant, and if they wanted to take part in our study. The IVR recruitment resulted in two pools of respondents, one composed by migrants and one by non-migrating members of a household that has at least one migrant. We followed this up with Computer Assisted Telephonic Interviews (CATI) to conduct quantitative surveys with both sets of respondents and matched responses between the migrant and non-migrant members within the same household.

Our paper is divided into four sections. We present a review of relevant literature and research questions in section I and outline the study methodology in section II. Section III discusses findings from primary quantitative data and section IV concludes.

I. Literature Review

Households, like individuals, rely on a variety of financial products and services: they use cash and credit cards to make payments, they make investments to finance future expenses, buy insurance to manage risks to themselves and their assets, and borrow money to finance large expenses or in times of emergency (Tufano, 2009).

A widely employed household financial strategy is migration⁵ (Singh, Rahman, Srinivas, & Bazaz, 2018), which can be used both as a livelihood strategy to amplify household income, and as a risk diversification strategy (Deshingkar, 2016). Defined in a different way, migration typically entails high up-front costs with the expectation of consistent future benefits, which makes it a form of investment (Banerjee & Duflo, 2011). Most of the existing literature on migration focuses on either the individual migrants or the beneficiaries of their remittances. However, household financial decision-making in the context of migrant households remains a relatively under-explored topic. A vast body of empirical evidence on non-migrant households supports a bargaining power theory of household financial decision-making, which suggests that the

⁵ While recognizing that individuals and households migrate for a wide variety of reasons, this paper focuses on economic migrants.

household member with the highest education, employment and wages assumes the most weight in financial decisions (Bertocchi, Brunetti, & Torricelli, 2014). Still, the relationship between migrants and their households in financial decision-making and the influence of variables like gender and household composition on household finance remain under-researched.

In the case of economic migration, people move in search of steady employment and net positive financial outcomes for their households, outcomes that they deemed unlikely in the *did-not-migrate* scenario. In this narrative, migrants are often reduced to providers of remittance. Moreover, this literature typically treats remittances akin to windfall gains for their beneficiaries, instead of as a household financial strategy or an investment (Clemens & Ogden, 2014). However, migration can also alter the dynamics of decision-making in migrant households (Singh C., 2019). Research in India has shown that in households where the migrating members are male, the impact of migration on agency and labour force participation of both male and female household members depends on the structure of the household itself (Desai & Banerji, 2008). Further, while male migrants are away from their households, the share of resources spent on girls relative to boys, and the decision-making power of spouses shows significant differences (Antman, 2015). A recent paper that uses longitudinal data over an eight-year period to study determinants of financial decision-making found that decision-making power increases proportionally with wages and employment, but results vary with male and female reports of *who* is the decision-maker (Johnston, Kassenboehmer, & Shield, 2016). It is reasonable to expect a similar dynamic in migrant households as well, with financial decision-making power being allocated between various household members based on both their contribution to household income, and the norms around the same. These differences in household decision-making have implications on financial outcomes, such as on the allocations of expenditures (e.g., on health and education), or on the choice of formal or informal financial instruments (Shwe, Jampaklay, Chamrathirong, & Thaweesit, 2020). This is substantiated by evidence drawing on NSSO data: (Mahapatro et al., 2015) show that households that receive remittances spend less on food and more on education and health care (Mahapatro, Bailey, James, & Hutter, 2015).

The effects of migration can also vary with migration type. A study on temporary Filipino migrant workers in Korea found that migration causes large changes in household financial behaviour, as seen in their spending and savings decisions (Clemens & Tiongson, 2017). Moreover, these changes are not merely a result of remittance inflows but also because of migration-induced changes in household decision-making power. The study looked at the effects of migration on households within three to five years and found it did not have any effect on the labour force participation of other household members. However, the study found evidence that the returns to migration include improved financial behaviour. As a result of migration, the household expenditure on health and education increased substantially, while quality-of-life expenses like celebrating festivals saw a nominal increase. Furthermore, no increase was found in consumption expenditure, but in terms of the effect on financial preferences, migration reduced borrowing and increased savings in these households.

These findings substantiate a more general body of evidence which suggests that migration leads to greater financial inclusion (Agarwalla, Barua, Jacob, & R., 2016), and that migrants exhibit a higher risk appetite, which reflects in their financial preferences (Balaz & Williams, 2011). A study with transnational migrants in which the migrants were exposed to motivational workshops on improving financial habits and joint decision-making with their spouses at home

found that the spouses of migrants that received the treatment improved their financial habits and became more likely to enrol in financial education. These households were also found to be more likely to make joint financial decisions (Seshan & Yang, 2014).

While these themes have featured prominently in literature on international migration, understanding financial decision-making in domestic migrant households is a topic that has been hitherto understudied. In India, internal migration is far greater than international migration in absolute numbers; Census 2011 data pegs the total number of migrants who moved within the last one year for economic reasons at 3.5 million. More recently, the Economic Survey of India (ESI 2017) estimates that the magnitude of flow of domestic, inter-state migration (for employment or education) in India was close to 9 million annually between 2011 and 2016. Internal migration has had significant impacts at both an individual and household level, such as higher incomes, consumption smoothening, lower poverty, and non-farm diversification (Shrivastava & Sutradhar, 2016). However, the outcomes of migration are not uniform across different types of migrant worker groups. (Srivastava R., 2019) shows that there exists significant informalization, segmentation and social discrimination, which has a disproportionate effect on workers at the lower end of the labour market, resulting in welfare disparities for them and their households. Seasonal and circular migrants, and poor and low-caste workers constitute a major proportion of such labour, with the former typically forming the lowest rung at organized sector worksites (Srivastava R. , 2019). There is little other evidence that systematically examines and explains the differences in migration returns to different migrant typologies represents a gap in literature. The differences between different migrant groups, defined in terms of duration or skill, on a variety of demographic, household, financial, and decision-making variables constitutes an important contribution of our paper to the existing body of literature.

Given the size of internal migration in India, the importance of bringing migrants and migrant households under the ambit of the formal financial system is substantial. Estimates place the domestic remittance market in India as the second largest in the world (Tumbe, 2011). However, these estimates indicate that only 30% of the total domestic remittance flows in India is routed through formal channels. This is in contrast, for example, with China, where 75% of the remittances are formally routed. These estimates, however, are a decade old and may need to be updated. With improvements in financial inclusion and the advent of schemes like the PMJDY, our data shows that a considerably higher proportion of domestic remittances in India are sent via bank transfers. In the context of household finance, studying household financial decision-making in general, and remittance allocation in particular through the lens of migration presents us with a unique opportunity to not only improve our understanding of migrant households' financial strategies but also of the differences in financial preferences between different types of migrants.

It is, therefore, evident that the decision to migrate and the act of migration influences household financial decision-making and behaviour in several ways. Against this backdrop, this study attempts to address three gaps in literature which also serve as the key research questions for our study:

Research questions: How does financial decision-making unfold in migrant households?

- 1) What does their financial portfolio of products and services look like and what are their preferences in terms of formal and informal instruments?

- 2) Who is the primary decision-maker in these households, and how does that vary when the migrant is at home versus at destination?
- 3) How does decision-making in migrant households vary by type of migration and different financial decisions?

II. Research Design and Methodology

Research Framework and Sampling Strategy

Our study uses primary quantitative data. We conduct surveys with migrant workers, *as well as* a non-migrant member of their households. Our study location is the Bihar-Jharkhand-eastern Uttar Pradesh to Delhi/NCR migration corridor, a well-documented corridor for economic migration in northern India.

We partnered with *Gramvaani*, a social technology solutions provider with an established customer base in our study location, to recruit respondents. To this end, we used several Interactive Voice Response (IVR) platforms hosted by Gramvaani, especially *Saajha Manch*, their dedicated platform for migrant listeners, as well as their state based IVR blasts that are active in our source states. We first sent out an IVR recruitment survey that asked listeners whether they were a migrant or if a member of their household was a migrant, and if they wanted to take part in our study. The IVR recruitment resulted in two pools of respondents, one composed by migrants and one by non-migrants. After completing the survey with a respondent, we would collect contact information for the correspondent migrant or non-migrating member within the same household⁶. Consequently, we obtained three datasets for our analysis: a migrant dataset, a non-migrant dataset, and a matched dataset that contains responses for those households where we were able to survey both a migrant and non-migrant member. Table 1 below presents a summary of our three datasets.

⁶ Please see Appendix A, Table A.1 for a section on IVR statistics, including total IVR sample, response rates, and best practices.

Table 1: Sample Description

Survey Data Statistics	Surveys Completed	No. of Variables
Surveys with Migrants as Respondents	649	1062
Surveys with Non-Migrant Household Members as Respondents	494	800
Households with both Migrant and Non-Migrant Member Surveys Completed	384	1861
Total Surveys Completed	1143	-

Given the challenges with in-person data collection in 2020, we used Computer Assisted Telephonic Interviews (CATI) to conduct quantitative surveys with both sets of respondents. The two sets of surveys were structured similarly but administered differently. The *migrant survey* asked the respondent direct questions about their migration history, financial preferences, and the intra-HH dynamics of decision-making, while the *non-migrant survey* asked the respondent the same questions about their migrant relative. We first analyse both datasets separately, and then match respondents from the same household to construct a *matched dataset* for our key variable transformations and regression analysis. We used an approach of collecting matched responses from migrant and non-migrant members of the same household, similar to (Seshan & Yang, Motivating migrants: A field experiment on financial decision-making in transnational households., 2014) Findings from these analyses are presented in the next section.

Comparability of Measurements

Another notable aspect of our quantitative survey is our focus on making our data as comparable as possible with that of other researchers. As a result, we have drawn upon well-recognized literature to standardize the measurement of indicators that can be used across studies. Appendix A, Table A.2 presents the different sections of our survey, the variables measured in each section, literature where this is drawn from and how we ensure external validity. We draw extensively. Mapping the financial decision-making process in migrant households is a key component of our data collection exercise. We adapt a decision-making matrix developed by Peterman et al. (2015) and identify the decision-maker across seven decision types when the migrant is at home or at destination.

III. Findings

In the following sections, we will describe both our migrant and non-migrant survey samples, followed by a descriptive analysis of migrant and household financial portfolios and primary decision-makers across a variety of household financial decisions.

Demographic data

As shown in Table 2, most migrants have some level of high school education, are, on average, in their early thirties and tend to belong to the “Other Backward Caste” (OBC) category⁷.

Migration is explored along three dimensions, which are commonly employed in the literature: duration, skill, and destination.

In terms of duration, 57% of the migrants in our sample are classified as temporary or seasonal, while over a third as semi-permanent. Following definitions provided in the latest Indian Census (2011), migration cycles up to 6 months are considered to be temporary/seasonal, and over 6 months as semi-permanent. Finally, we classify migrants that are at their destination for over a year as permanent migrants.

The majority of our sample (80%) is low skilled, falling under Level 1 of ILO’s International Standard Classification of Occupation⁸ (ISCO-08), and reporting to be construction site workers and factory labour. This is consistent with existing literature on prevalent occupations in the study locations (Srivastava & Sutradhar, 2016).

Table 2: Migrants Demographic Information

Migrant Survey Demographic Information (mean values; n=649)			
Age of Migrant	31.4 years	Type of Migration	
Educational Status (%)		Temporary/ Seasonal	57.0%
No Formal Education	4.5%	Semi-Permanent	35.0%
Primary education (class 1-5)	12.3%	Permanent	8.0%
Middle school (class 6-8)	18.5%	Skill Level (ISCO-08)	
High school (class 9-12)	47.8%	Level 1	80.0%
Diploma certificate	1.4%	Level 2	20.0%
Graduate and Above	15.6%	Destination of Migration	
Social Category (%)		Within Source States	19.0%
OBC	59.6%	NCR	19.9%
SC	19.4%	North	14.2%
ST	6.8%	South	16.3%
		East	11.7%
		West	19.0%

Household composition and income

Table 3 presents information on household composition in our sample, from both the migrant and non-migrant survey. In our sample, average household size is 6.5 people, and most

⁷ As do their households, which is not reported in Table XXX for brevity.

⁸ This classification ranges from 1 (low skill) to 4 (high skill).

households have children and live with the parents of either the migrant or his spouse. A third of the surveyed migrants self-identified as the household's head, which is higher than what was observed in the non-migrant survey (25%). Aside from the migrant, 50% of all respondents reported that the migrant's father was the head of the household. From a gender perspective, over three-fourths of the sample in both surveys reported a male head of household.

Over 70% of the respondents reported that remittances are the primary source of income of their households, which is, on average, INR 11,110.8 (USD 150)⁹ per month in the migrant survey and INR 10,308.3 (USD 139) in the non-migrant survey.

Table 3: Household Demographic Characteristics and Income

	Migrant Survey (N=649)	Non-Migrant Member Survey (N=494)
Household Composition	mean	mean
<i>HH Size</i>	6.4	6.5
% HH with child below 18 years	80.4%	80.6%
% HH with Spouse of Migrant	67.3%	65.6%
% HH with Older Male	67.2%	64.0%
% HH with Older Female	73.3%	71.1%
<i>Head of Household</i>		
Migrant	32.0%	25.7%
Father / Father-in-Law	49.6%	50.0%
Other Members	18.4%	24.3%
<i>No. of Members Contributing Financially</i>		
None Other than Migrant	27.6%	26.3%
<i>Average HH Income</i>	11110.8	10308.3
<i>Primary Source of HH Income</i>		
Remittance from Migrant	73.7%	70.9%
Agricultural Activities	17.8%	18.2%
Others	8.5%	10.9%

Migrant Income and Remittances

Focusing on financial decisions and behaviours, we notice that migrants, on average, earn a monthly income of INR 11,743 (USD 158) and send around 56% of that back home as remittances. Furthermore, our data suggests that, on average, semi-permanent migrants earn and remit marginally higher amounts than temporary migrants. Predictably, we find that migrants in higher-skilled jobs earn and remit more than migrants in lower-skilled jobs. Finally, we find that

⁹ Calculated at USD 1 = Rupees 74, the average exchange rate for 2020.

<https://www.exchangerates.org.uk/USD-INR-spot-exchange-rates-history-2020.html#:~:text=Average%20exchange%20rate%20in%202020%3A%2074.1322%20INR.>

migrants that travel further away, which in our sample means to southern and western states, both earn and remit more. A potential interpretation of this result could be that migrants are motivated to travel far from home by higher paying jobs. Interestingly, migrants to the NCR reported higher incomes than their peers in other northern destinations, but lower remittance sizes. This can be explained by the higher incomes and higher costs of living respectively in the NCR. These results are summarised in Table 4.

Table 4: Migrant Income and Remittances

	Migrant Average Monthly Income			Average Size of Remittance		
	<i>mean</i>	<i>median</i>	<i>N</i>	<i>mean</i>	<i>median</i>	<i>N</i>
Overall Sample	11,742.3	12,000	649	6,635.90	6,000	622
Duration of Migration						
Temporary/Seasonal	11,426.2	10,500	370	6,596.64	6,000	357
Semi-Permanent	12,161.5	12,000	279	6,688.68	6,000	265
Migrant Skill Level						
Level 1	11,521.5	11,000	519	6,519.96	6,000	501
Level 2	12,623.9	12,000	130	7,115.70	6,000	121
Migration Destination						
Source States	11,313.0	10,000	123	6,415.25	6,000	118
North	11,111.6	10,250	92	6,810.35	6,000	87
South	12,646.2	12,000	106	7,219.05	7,000	105
West	12,203.3	12,000	123	7,056.03	6,000	116
East	10,750.0	10,000	76	6,200.00	5,000	70
NCR	12,003.9	12,000	129	6,091.27	5,000	126

We also find that less than one-third (29.9%) of our sample receives payments in their bank account, but, interestingly most migrants (close to 80%) submit remittances via formal channels transfer, with bank-to-bank transfers being the most popular choice (70%). This is in contrast to a vast array of literature that alludes to the persistence of informal channels among migrants and their households. A plausible explanation for this discrepancy is that much of this literature is more than a decade old. Given the advancements in financial inclusion in India, particularly with the advent of the JAM trinity, migrant preferences have shifted towards formal modes like bank transfers with increased access. However, these results need to be confirmed by surveys with larger samples. In both surveys, we find that remittances are received by the migrant's father or spouse in over 70% of our sample, with the father being on average the most likely receiver.

Table 5: Remittances

	Migrant Survey (N=649)		Non-Migrant Member Survey (N=494)	
Remittance Behaviour	mean	median	mean	median
<i>Who Receives Remittance in the HH</i>				
Father	41.0%		42.5%	
Spouse	32.9%		30.1%	
Mother	14.2%		12.9%	
Others	11.9%		14.5%	
<i>Mode of Sending Remittance</i>				
Bank Transfer	70.9%			
Other Formal Channels	9.4%			
Informal Channels	19.6%			
<i>Average Size of Remittance</i>	6,635.6	6,000	6535.2	6,000
<i>Allocation of Remittances (Reported)</i>				
	% of HHs		% of HHs	
General HH Consumption	90.7%		94.2%	
Healthcare	71.5%		73.4%	
Education	58.9%		61.0%	
Utility/ Bill Payments	33.5%		44.0%	

Financial behaviour

Next, we examine financial behaviours and preferences of both migrants and their households on savings, expenditure, borrowing, and bank account ownership, in line with the Reserve Bank of India's basic criteria for financial inclusion (RBI, 2019).

Examining migrant's financial behaviours at destination we notice that most migrants spend¹⁰ whatever they do not remit, with only 30% of our sample reporting any savings, which is consistent with both the existing literature and our qualitative interviews. Those who do save, on the other hand, tend to save, on average, 18% of their income.

A third (28%) of migrant respondents reported to have borrowed in the last 18 months, with the average number of loans subscribed being 3. However, we find that only 3% of all respondents reported having borrowed from financial institutions. While we observe a shift towards formal channels for remittances, migrants seem to still rely on informal sources for credit. As the data was collected 9 months after the COVID-19 pandemic breakout, it is possible that this result might be caused by formal credit being harder to obtain in this period compounded by other factors such a lack of adequate collateral and less flexible terms associated with formal credit, also highlighted by the (RBI Household Finance Committee, 2017). Finally, we also find that bank account ownership is nearly universal in our migrant sample (92%) and that over three-fourths of the sample reported having their bank accounts at their destination.

¹⁰ The primary expenditures categories for migrants at destination are housing, food, fuel, and utilities.

Table 6: Migrant Financial Behaviour

Financial Behaviour	Migrant Survey (N=649)	
	mean	median
<i>Migrant Savings at Destination</i>		
% of Migrants having Savings	28.0%	
Avg. Monthly Savings (N=182)	2148.6	2000
<i>Migrant Expenditure at Destination¹¹</i>		
Housing Expenses	74.1%	
Food Expenses	84.8%	
Utilities/ Bill Payments	67.0%	
Fuel Expenses	41.3%	
Avg. Monthly Expenses (N=649)	3793.6	3399
Prop. of expenses on productive consumption	1.3%	
<i>Migrant Borrowing at Destination</i>		
% of Migrants Borrowed in last 18 months	28.0%	
Avg. No. of Borrowings in last 18 months	2.8	2
<i>Sources of Borrowing (N=182)</i>		
Borrow from Friends	63.2%	
Borrow from Moneylender	12.1%	
Borrow from local shop/ business	9.3%	
Borrow from Employer/ Contractor	8.2%	
Borrow from Other Migrants	8.2%	
Borrow from Financial Institution	2.8%	
Avg. Borrowing Amount (N=182)	20654	6000
<i>Has Bank Account Ownership</i>	92.3%	
<i>Location of Bank Account (N=599)</i>		
Account at Source	17.4%	
Account at Destination	78.5%	
Accounts at both Locations	4.2%	

At source, we find that, on average, migrant households save INR 2,629 (USD 35) per month, with a relatively high degree of variability (median savings are INR 2,000 with a standard deviation of INR 2,133) among the households that reported savings. However, this accounts for less than one-third of our sample that reports any savings at all, which, unlike the migrants' saving behaviour, is harder to explain. One plausible explanation is that savings are under-reported in our data. In order to validate this assumption, we look at their expenditures.

The average monthly expenses at source in the non-migrant data amounts to INR 6,107 (USD 83), which accounts for nearly 60% of the average monthly household income. The median difference between average monthly household income and average monthly household expenditure comes to INR 3,000 (USD 41). However, this money is unaccounted for in their monthly allocation,

¹¹ Please note that these are multi-choice responses and do not aggregate to 100%

despite accounting for all expenses and documenting allocations to informal savings and other financial instruments. Thus, it may be concluded that there is an opportunity to promote formal savings behaviours, perhaps through financial products tailored to the needs and characteristics of migrant households.

With regards to borrowing, we see that similar to our migrant data, 28% of the non-migrant sample reported having borrowed in the last 18 months, with the average and median number of loans in this period being 2. However, we see that a relatively higher percentage of respondents have borrowed formally (17%). Furthermore, we observe nearly universal bank account ownership in the non-migrant data as well. Last, but not least, over 70% of the sample reported having received some kind of government payments or social entitlements in the last 12 months.

Measuring Household Financial Decision-making

We argue that the financial decision-making process in migrant households changes depending on whether the migrant is at source or at destination. Adapting the decision-making matrix developed by Peterman et al. (2015), we identify the decision-maker across seven decision types when the migrant is at home or at destination. Results from this analysis are presented in Table 7.

Table 7: Primary Decision Maker When the Migrant is at Home

Primary Decision Maker when Migrant is at Home (Non-Migrant Member Survey N=494)					
Type of Decision	Migrant	Spouse	Older Male	Older Female	Other HH Member
Small Daily Purchases	32.6%	15.2%	31.4%	12.6%	8.3%
Large Financial Purchases	49.4%	5.3%	29.8%	5.5%	10.1%
Expenditure on Education	44.7%	5.9%	33.4%	5.9%	10.1%
Choosing where to keep HH Savings	40.3%	7.3%	33.8%	9.1%	9.5%
How to Spend Remittances	37.9%	6.9%	37.5%	8.1%	9.7%
Emergency Borrowing (ex. medical expenses)	41.1%	4.5%	37.7%	5.5%	11.3%
Non-Emergency Borrowing (ex. marriage)	39.3%	4.3%	40.3%	5.9%	10.3%

Primary Decision Maker when Migrant is at Away (Non-Migrant Member Survey N=494)					
Type of Decision	Migrant	Spouse	Older Male	Older Female	Other HH Member
Small Daily Purchases	1.6%	30.0%	41.5%	17.0%	9.9%
Large Financial Purchases	18.4%	18.4%	42.5%	8.5%	12.2%
Expenditure on Education	10.9%	23.3%	43.5%	9.5%	12.8%
Choosing where to keep HH Savings	10.9%	23.7%	42.1%	12.2%	11.1%
How to Spend Remittances	11.5%	22.9%	42.9%	11.5%	11.1%
Emergency Borrowing (ex. medical expenses)	14.8%	19.8%	45.8%	7.5%	12.2%
Non-Emergency Borrowing (ex. marriage)	17.8%	16.0%	48.0%	7.3%	10.9%

We find that when the migrant is at home, the migrant himself tends to be the primary decision-maker for most decisions. Aside from the migrant, the older male is found to be the other member of the household with decision-making power, indicating that decision-making power is concentrated in the hands of the male members of the household. Overall, there is relatively little variation in how decision-making power is shared when the migrant is at home.

When the migrant is away, we notice that the older male emerges as the primary decision-maker for all decisions. This validates our finding that decision-making power is concentrated among male members of the household.

However, we see more variation in how decision-making is shared. We find that the spouse is identified as the primary decision-maker in 30% of the sample for decisions on small daily purchases, and in a quarter of the sample for decisions on education expenditure, household savings, and remittance allocations.

While migrants lose decision-making power when they are away, they are identified as the primary decision-makers in nearly 20% of the sample for decisions on large financial purchases and non-emergency borrowing, which suggests that migrants maintain influence on important financial decisions even when they are away.

Additionally, with regards to other household members being consulted in decision making, we find that decisions involving higher financial outlays and those that are made less frequently, such as large financial purchases (91.5%) and non-emergency borrowings (91.5%), are taken in consultation with other household members. In contrast, decisions involving low financial outlays and decisions made more frequently such as daily purchases of smaller ticket sizes (75%) and household savings (81%) are the least consultative. However, it is over decisions where there is greater consultation that we find that male members of the household (i.e., the migrant or the older male) retains final control, in the event of a disagreement.

IV. Conclusions

This paper explored financial portfolios and decision-making in migrant households. First, our data shows that the incomes of migrant households in the sample are heavily reliant on remittances. Interestingly, we observe that remittances are mostly submitted and received through formal channels, showing a notable departure from previously observed data and literature. This formalization process, however, has not translated to other financial products yet. It can be observed, in fact, that both savings and borrowing still occur mostly through informal channels. This suggests that there is an opportunity to tailor financial products for migrants and their households that could capture this market gap.

In terms of financial decision making, we observe that migrants have the greatest control over most financial decisions, especially when living at home. This could be due to the importance that remittances play in the financial portfolios of migrant households: as migrants bring the most significant contribution to household income, it is intuitive that they have the greatest influence on financial decisions. The allocation of financial decisions is more complex when the migrant is away. First of all, it is interesting to notice that migrants retain control on large, important financial decisions. Second, we observe that the “older men” in the household assumes control over most financial decisions when the migrant is away, unearthing a clear gendered power dynamic. In fact, we observe that spouses, who in our sample are all women, become the principal

financial decision makers only on a handful of choices, mostly related with the day-to-day management of household expenses and the education of children. Finally, it is worth noting that in terms of shared financial decision making, large financial decisions are the most consultative. However, in case of a disagreement, it is a male member of the household (either the migrant or the older male) that has the final say, confirming the gendered power-dynamics outlined above.

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Appendix

Table A.1: IVRS Statistics, Sample size & Response Rates

IVRS Statistics	Respondents Contacted	Surveys Completed	Completion Rate
Migrant contacted directly through IVR (65%)	1101	554	50%
Migrant contacted after Non-Migrant Member Survey (51%)	146	95	65%
Non-Migrant contacted directly through IVR (40%)	542	215	40%
Non-Migrant contacted after Migrant Survey (66%)	428	279	65%

- Twice as many migrants responded to the Graam Vaani IVR Survey as non-migrant HH Members.
- Incidence of Unreachable Phone Numbers was much higher among non-migrant respondent contacts.
- Survey Conversion Rate (IVR to CATI) for migrants was higher than non-migrant respondents.
- Nearly two-third of non-migrant respondents, where the migrant member from their household had already been surveyed, successfully completed the survey.

Table A.2: Survey Instrument Data Collection Modules

No.	Data Collection Module	Indicators Collected
1	<i>Migrant Profile & Migration History</i>	• Demographics: Gender, Age, Education Status, Social Category • <i>Migrant Profile: Duration of Migration, Geography of Migration, Primary Occupation, Income, Reasons for migration, Mode of Receiving Payments</i> • Cost of Migration, Sources of Financing Migration
2	<i>Household Profile</i>	• Size of HH, Head of HH, Composition of Household in terms of gender, age and number of financial contributors and dependents (adapted from the Africa Migration Surveys). • Average HH Income, Primary source/ activity of HH income, Primary income earner, Ownership of assets.
3	<i>Financial Preferences & Behaviour</i>	• <i>Remittance:</i> average amount size, frequency, awareness and usage of modes of sending remittance, recipient of remittance at source, allocation and usage of remittances in HH finances.

		• Savings: Channels of Saving (formal v/s informal sources), amount and frequency of savings by migrant at destination and HH at source, reasons for saving/ not saving • Expenditures: Allocation of expenses across different categories (productive v/s other categories of expenditures by migrant at destination and HH at source, consultation (Y/N) during decision making • Borrowing: Presence of current HH debt, Channel of Borrowing (Formal v/s Informal), Purpose and use of borrowing amounts. • Use of Financial Instruments: Bank Account Ownership and usage, awareness and usage of other financial products and services (adapted from NABARD NAFIS), participation of other HH members in usage of financial products and services (or lack thereof). • Migrant Risk Preference: Captured using risk-reward choices on prospective employment opportunities (adapted from Ding, Hartog, & Sun, 2010) • Information Asymmetry b/w Migrant and HH: Responses to allocation of remittances through windfall gains in a) winning a lottery; b) incentive/ bonus earned from work. (Adapted from Ambler, 2015) Additionally we match the responses of migrant and non-migrant members on a set of questions to determine the degree of information asymmetry.
4	Financial Decision Making	Types of Financial Decisions Covered: 1 Small, Daily HH Expenses (ex. grocery) 2 Large Purchases (ex. consumer durables) 3 Healthcare & Education Spending 4 Decisions on HH savings 5 Usage of Remittances 6 Emergency Borrowing (ex. medical expenses) 7 Non-Emergency Large Borrowing (ex. marriage) For each decision we capture information on the primary Decision Maker when migrant is at home v/s when emigrating for work, presence of consultation and disagreements in decision making process, and the decision maker in case of disagreements. (Adapted from Peterman, 2018)

Table A.4: Survey Module on Decision Making

Section E: Financial Decision-Making Matrix						
Read Out: Now, we will be asking you some questions about how certain types of financial decisions are made within the household. Please listen to the questions carefully.						
Q. No.	Type of Decision	O. Are you aware of/informed about what decision is made?	A. Who in your HH has a say on this decision (List based on HH roster) when you are migrating for work and not at home?	B. Who in your HH has a say on this decision when you are at home?	C. Are other members in the household consulted when this decision is usually made?	D. In general, if there is a disagreement, whose decision is taken as final (Skip if C is No)
E1	How much money to spend for purchasing small daily items such as grocery or toiletries etc.?	1. Yes 2. No	Display List from (HH Roster). Include 1. Self and -888 Others Specify as options (Only Single Option Allowed)	Display List from (HH Roster). Include 1. Self and -888 Others Specify as options (Only Single Option Allowed)	1. Yes 2. No	Display List from C3. Include 1. Self and -888 Others Specify as options (Only Single Option Allowed)

E2	If your household had to make large expenses such as furniture or land or two-wheeler? <i>(Note to Surveyors: Adapt example based on Household's financial condition)</i>					
E3	How to spend money on healthcare or education for HH members? (ex. when to visit a doctor or what school to send children to?)					
E4	Where to keep Household Savings? (ex. Whether to keep the savings at home or to put the money in a bank account or in chit funds etc.)					
E5	How to spend remittances that you send back home? (ex. whether to use this money to pay existing loans, or for general consumption or to save etc.)					
E6	If your household needed to borrow money for a medical emergency, where to borrow this money					

	from and how much money to borrow?					
E7	Where to borrow money from, if there was a large non-emergency expense such as wedding or any other occasion such as a festival in your household or to build a house. (ex. How much money should be spent, what expenses should be made such as purchasing gold or new clothes?)					