Supported by
Citi Foundation

Indian Institute of Management Ahmedabad

# Savings, Borrowings and Remittance Behaviour of Migrant Workers in Urban India

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November 2016

## Acknowledgements

We acknowledge the generous financial support extended by Citi Foundation to undertake the study on savings, borrowings and remittance habits of migrant workers. We thank the Citi foundation staff for their support in carrying out the study and in organizing the workshop.

We acknowledge the diligence of M/s. Dexter Consultancy Private Ltd. in carrying out the field survey. We thank the respondents to the questionnaire for sharing their personal details and details of their financial decisions and transactions generously. We would also like to thank the participants in the focus group discussions held for designing the questionnaire. The image on the cover page is designed by Mrsiraphol/Freepik.

Ms. Stuti Poddar provided excellent research support. We also acknowledge the support extended by several IIM Ahmedabad staff members.

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# Executive Summary

It is well documented that migrants are relatively more adventurous compared to settlers, the people who stay put in their native place. Migrants not only enhance the diversity of customs and social practices but also help in better geographical distribution of benefits of economic progress of a society. Migration from villages to towns and cities is rampant in rapidly urbanizing countries such as India. Study of migrants is key to understanding the changes occurring in such countries. With a view to developing deeper insight into changes taking place in the financial sector, this study is focused on investigating the different aspects of financial behaviour of the migrant workers in India.

The study sought answers to issues that included:

- The nature, frequency and size of financial choices of migrants.
- The demographic attributes that significantly influence the financial choices.
- The possible influence of financial literacy on the financial choices.
- The perceived limitations that dissuade migrants from using the facilities provided by the formal financial system.

The answers to the above issues were sought through data collected from a sample of migrants using detailed questionnaire to understand their savings, borrowing, and remittance behavior. The sample of about 800 individuals was drawn from migrant population in Ahmedabad and Delhi, two cities that represent the Western and Northern region of India respectively. The choice of regions and cities was dictated by the rapid urbanization that has occurred in these regions and the influx of migrants into these cities. The sample was restricted to include only those with monthly income of less than INR 20,000.

The key inferences drawn from the analysis were as follows:

- An overwhelming majority of migrants had a bank account implying that financial inclusion among migrants was far higher than among people in similar economic situation.
- Awareness about different instruments for savings and different sources for borrowing money was high.
- A large majority remitted money regularly to their families in the native place; the dominant reason for remittance was to meet the living expenses of families.
- While banks were used for parking their savings, their use for borrowing and remittance was much less extensive, implying that the full complement of banking services were not used.
- Extensive use of informal channels for remittance was explained by perceived convenience and reliability of these channels; the cost of remittance did not play a decisive role in the choice.
- Despite almost one hundred percent penetration of mobile telephones among migrants and their families, perception about use of mobile phone for money transfer was poor.
- Compared to the available benchmark from the 14-country OECD-INFE study, as observed for other groups in India, the score for financial behavior was higher than for the benchmark, implying thereby greater prudence in financial choices.

- Better financial knowledge and superior financial behavior had positive influence on decision to save; however, the latter was accompanied with greater use of non-formal instruments for parking savings.
- While superior financial knowledge and better education were positively associated with borrowing from formal sources, superior financial attitude positively influenced borrowing from informal sources.
- Superior financial knowledge dissuaded remittance; superior financial attitude encouraged remittance and supported use of informal channels for remitting.

The key recommendations that emerge from the analysis and the inferences are as follows:

- Banks need to address the reluctance on the migrants to borrow from and remit money through them. In view of the growing number of migrants, banks have an opportunity for deepening the financial relationship with this important group.
- There is clearly a case for promoting financial literacy of migrants through targeted training. The diversity of financial facilities needed by this group is much higher than that of settlers with similar economic and demographic attributes. Enhancing their understanding of financial decision making will be of immense benefit to a society that is rapidly urbanizing.
- Being the more enterprising segment of society, migrants ought to be used to bridge the digital divide that exists between the rural and the urban in countries like India. Migrants are the link between these two segments of societies. There is a case to promote use of technology for financial choices among migrants to bring about rapid penetration of technology among rural societies.

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# 1 Introduction

Economic development is invariably accompanied with migration of people from rural to urban locations in search of jobs. People who move, the migrants, typically are relatively more adventurous compared with people who stay behind in their native place, the settlers. As development accelerates, the ever growing migrant population contributes significantly to the economic and social dynamics of a country. The remittances by the migrants to their families reduce regional disparities in expenditure. The migrants add to diversity in customs and social practices as they integrate with the society at their work place. The migrants thus are a key segment of a rapidly urbanizing society resulting from the economic and the social transformation brought about by economic development. This study is an empirical investigation of the financial decision making of this important segment. The context for the study is India.

India is going through a transformation in financial inclusion. The thrust of the incumbent government's Prime Minister's Jan Dhan Yojana (PMJDY) has ensured that almost all adults in India have access to a bank account. If financial inclusion is to be defined as access to formal financial system, India has achieved almost one hundred percent financial inclusion. The issue that however remains to be explored is whether the access is resulting in use of formal financial system. As has been argued by several scholars, true financial inclusion is achieved only when a large proportion of a variety of financial transactions are carried out in the formal financial system. With a view to investigating whether access to banking is indeed resulting in transaction through the banking system, this study is focused on the financial behaviour of migrants in India. In addition to savings and borrowings, a key financial transaction effected by migrant workers is remitting money to their families. This report describes the results of a detailed investigation of savings, borrowings and remittance behaviour of migrant workers in urban India.

The empirical study was carried out in two cities in India - Ahmedabad and Delhi. The two cities represent Western and Northern India that are the more industrialized regions of the country. The two cities attract migrant workers from other parts of the country. Therefore, the study of migrant workers in these two cities would provide insight into the behaviour of migrant workers in India. In addition to the economic and demographic variables, the study collected information on remittance, savings and borrowing behaviour of migrant workers from the two cities. In addition, to investigate the possible influence of financial literacy, the well-established OECD-INFE instrument was administered to the respondents to assess their financial knowledge, financial behaviour and financial attitude. The influence of financial literacy on financial behaviour after controlling for demographic variables was analytically investigated.

# 2 Theoretical Framework

Ernest Ravenstein, the German-English geographer cartographer carried out extensive research on human migration the 1880s. In his pioneering paper (1885)[1] published in the Journal of the Statistical Society of London he proposed as he said 'somewhat presumptuously' seven 'laws of migration'. The fifth and the sixth laws are of particular relevance to our study and are therefore reproduced below verbatim from his paper:

[1]Ravenstein, E. G. (1885). The laws of migration. Journal of the Statistical Society of London, 48(2), 167-235.

“5. Migrants proceeding long distances generally go by preference to one of the great centres of commerce and industry.

6. The natives of towns are less migratory than those of the rural parts of the country.”

Even today the work of Ravenstein serves as the basis for theories on migration.

Following the development of utility theory to explain decision making, Todaro (1969)[2] proposed that migration resulted from an individual’s attempt to maximize his/her expected utility from better economic situation. Subsequently, other researchers including Stark and Levhari (1982)[3] argued that the decision of an individual to migrate is a collective decision of the immediate and extended family. Hence the decision to migrate is influenced by the expected utility maximization of a group of people than just that of the individuals who migrate. With economics as the base reasoning for migration, researchers have studied different aspects of migration including the propensity of migration within a country and across countries, among the rural and urban households, and among the skilled and the unskilled. Researchers have also studied the remittance behaviour of migrants and offered explanation based on an individual’s need to serve his/her self-interest versus engaging in altruism. Researchers have also noted that the initial costs associated with migration are typically provided by the family and the extended family of the migrant. The implicit understanding is that this credit provided in the beginning would be repaid through remittances in the future by the migrant. This unwritten social contract is of particular relevance for cross-country migration as the initial costs of such migration are high.

Studies including those by Banerjee (1984)[4] and Hoddinot (1994)[5], focused on migration within a country, have highlighted that in the case of emerging economies such migration typically occurs from rural areas and smaller towns to large cities in the country. The remittances from the migrants are used for meeting a variety of needs of the family left behind at the native place. The remittance, in general, tends to mitigate the geographical income disparities arising from differences in income generating opportunities. More nuanced researches have proposed that the decision to remit ought to be separately investigated from the quantum of remittance since the factors influencing the two decisions may not be identical. Empirical studies across several developing countries have thrown up a variety of factors that influence the two decisions. Country or region specificity of the importance of these factors is quite evident in the inferences drawn from the studies.

While our study pertained to migrants in general, the specific focus of our investigation was on the financial decisions and the manner of execution of financial transactions by migrants. The key differentiating (from non-migrants) financial transaction by migrants is remittance.

[2]Todaro, M. P. (1969). A model of labour migration and urban unemployment in less developed countries. The American economic review, 59(1), 138-148.

[3]Stark, O., Levhari, D. (1982). On migration and risk in LDCs. Economic development and cultural change, 31(1), 191-196.

[4]Banerjee, B. (1984). The probability, size and uses of remittances from urban to rural areas in India. Journal of Development Economics, 16(3), 293-311.

[5]Hoddinott, J. (1994). A model of migration and remittances applied to Western Kenya. Oxford economic papers, 459-476.

Parker and Sachdev (2015)[6] examined the increasing role of mobile phone penetration that has given rise to mobile banking across the globe. This has provided access to banking and financial services to millions in remote locations who were erstwhile denied access. While initially the mobile phone channel was essentially used for transfer of money, the channel is being increasingly used to provide other banking and financial services. Balakrishnan (2015)[7] examined the development of electronic payment system in India and concludes that despite significant progress made in the last decade, in terms of number of transactions per person per year, India has a long way to go vis-à-vis other countries. The potential for impact is therefore quite high and is waiting to be exploited.

In addition to remittance, we examined the savings and borrowing behaviour of migrants. We collected data on socio-demographic attributes and measured the level of financial literacy of the migrant workers to empirically investigate the relationship of these variables with the financial decisions and the manner of execution of financial transactions by the migrant workers. Yawe and Prabhu (2015)[8] reviewed the developments in the use of mobile telecommunications networks to meet the savings, micro-insurance, payments and other banking services needs of the unbanked and the under-banked. They conclude that mobile network operators are increasingly serving the needs of the underserved that traditional banks have failed to serve. They propose that appropriate changes in the institutional framework are required to recognize this changing paradigm. Citing example from South Africa, Porteus (2015a,b)[9][10] infers that low-balance accounts could be profitable even for large commercial banks if they manage the associated costs innovatively.

## 3 Research Agenda

As a group, migrants would be expected to be more risk taking compared to settlers. Economic development of a country is accompanied with rural to urban migration. India is in the midst of urbanization and consequently such large scale migration. However, the process of development of India has been different from the classical sequence of economic transition from agriculture-manufacturing-service. There has been explosive growth of the service sector without the typical preceding increase in the size of the manufacturing sector. The resulting rural to urban migration has therefore attracted people who are absorbed not by the manufacturing but the service sector. The demographic attributes of this group are different from the typical demographics of migrants at similar stage of development of an economy. Many of these migrants for example are well educated. Besides, the proliferation of mobile telecommunication in the country is spawning newer ways of financial engagement. Migrants are likely to be more open to adopting newer methods of financial engagement.

[6] Parker, A., Sachdev, S. (2015). The commercial viability of financial inclusion. Journal of Payments Strategy Systems, 9(3), 294-304.

[7] Balakrishnan, M. (2015). Indian payment systems and financial inclusion: Current status and next steps. Journal of Payments Strategy Systems, 9(3), 242-293.

[8] Yawe, B., Prabhu, J. (2015). Innovation and financial inclusion: A review of the literature. Journal of Payments Strategy Systems, 9(3), 215-228.

[9] Porteous, D. (2015). Low-balance bank accounts-Part 1: Is there a pathway towards profitability? Journal of Payments Strategy Systems, 9(3), 305-310.

[10] Porteous, D. (2015). Low-balance bank accounts-Part 2: Must banks collaborate to succeed?. Journal of Payments Strategy Systems, 9(3), 311-320.

This study first documents the nature of financial decisions faced by the migrants and then investigates how the choices available for executing those decisions are made by the migrants. The study will also investigate whether the thrust to financial inclusion and financial literacy in the last several years is indeed resulting in greater penetration of formal financial system in serving the needs of migrants. The responses from migrant workers to a variety of issues relating to financial transactions would provide the basis for enunciation of the nature of innovations needed in the organization of the banking and financial services industry to meet their needs as well as the needs of the financially under-served in the society. The findings would complement the understanding that exists on similar issues across other countries and help in shaping elements of universal solution for enhancing financial inclusion of the excluded.

The specific research questions the study seeks answers to are the following:

- What is the nature, frequency and size of financial decisions that the migrants take?
- What is the nature of influence of demographic attributes on the financial decisions of migrants?
- Does financial literacy influence the financial decisions of migrants?
- What are the perceived short-comings that dissuade migrants from using the facilitation offered by the formal financial system?

Answers to the above questions are expected to provide insight into financial behaviour of an important and expanding group of people in a developing economy as well as help in the development of appropriate mechanisms within the formal system to serve their needs. The study would also unravel whether any changes are required in the regulatory framework to facilitate inclusion of migrants in larger numbers in the formal financial system.

## 4 Research Methodology

The data for empirical investigation was collected through administration of a detailed questionnaire to a set of migrants from two major cities in India. The two cities are located in the urbanized Northern and Western region of the country. The two cities attract large number of migrants from the rest of the country and therefore are representative of the migrant population in the country. The data collected pertained to economic, social and demographic attributes; savings, borrowing and remittance behaviour; choice of instruments and channels used for effecting financial transactions by the individuals sampled. A few questions were formulated based on the information obtained through five focused group discussions that were conducted in both the cities. The questionnaire included questions from the OECD-INFE questionnaire (2011[11], 2012[12]) on financial inclusion and financial literacy to measure the level of financial knowledge, and assess their financial behaviour and financial attitude. The OECD-INFE questionnaire has almost become the standard instrument through its use across a large number of studies across countries for evaluation of the financial literacy of the respondents.

[11]OECD INFE (2011). Measuring financial literacy: Core questionnaire in measuring financial literacy: Questionnaire and guidance notes for conducting an internationally comparable survey of financial literacy. Paris: OECD.

[12]OECD INFE (2012). Supplementary questions: Optional survey questions for the OECD INFE financial literacy core questionnaire. Paris: OECD.

The questionnaire was used to collect detailed personal and financial information on each individual in the sample. The survey was carried out by an agency with significant experience of collecting data through such primary surveys. The questionnaire was translated in local language to ensure that investigators conveyed the question correctly to the respondents.

The data collected were analyzed using appropriate statistical analysis tools to summarize and draw inferences to answer the research questions listed in the preceding section. The answers to the research questions would help in framing overall conclusions and recommendations that would arise from the study.

## 5 The Sample

The sample consisted of 801 migrant workers from two cities in India - Ahmedabad (400 workers) and Delhi -NCR (401 workers). As remittance was a key focus of the study, only those workers who remitted some money to their native place were administered the questionnaire. The two cities, Ahmedabad and Delhi, were chosen as they are major industrial hubs in Western and Northern India. They therefore attract significant number of migrant workers from all over the country. Further, in order to ensure that the sample consist of migrant workers who are more likely to be financially underserved, we had restricted the sample to those with monthly income of less than INR 20,000. Almost all (798 out of 801) respondents were males. The median number of years at the current location for the respondents was 6 years.

Table 1 gives the distribution of the sample across various demographic segments along with the average literacy scores of each segment. While 61 respondents had no formal education, 29 respondents were college educated. All other respondents had completed their primary schooling, with 258 of these also completing their secondary schooling or matriculation and another 220 completing their higher secondary schooling or vocational courses after matriculation.

As regards employment, more than half of them were employed by companies, either as permanent employees (28.2%) or under contractual arrangement (15%) or through contractors (13%). The remaining were either day-wage earners (30.1%) or self-employed, mainly as street-vendors (13.7%). The day-wagers essentially worked as unskilled labourers (256 respondents), machine operators (165 respondents), and security guards (52 respondents). The remaining were engaged as supervisors, clerks, salesmen, loaders, drivers and helpers, servants, peons and waiters.

A majority (60%) of the respondents earned their living on a monthly basis while the remaining were paid on a daily basis. The median daily income of the 481 respondents who were day-wagers was Rs. 250 per day and the median number of days for which they were employed during a month was 26 days. About 82.3% respondents earned less than Rs. 10,000 (about $ 160) per month. Almost all respondents (97.8%) received their income in cash.

A total of 559 respondents (69.8%) were married and the spouses of 267 respondents (33.3%) were engaged in some income-earning activities. The spouses were mainly engaged (about 71.5%) as domestic help.

A majority (86.6%) of the respondents had migrated from rural areas. About one half of the respondents were below 30 years of age and just 9% were older than 45 years, implying thereby that a majority of the respondents were young. A total of 246 respondents reported that they were the only member of their family to have ever migrated. About 75% respondents belonged to joint family while the remaining belonged to nuclear family.

In view of the rise in financial transactions using mobile phone, we specifically sought information about ownership of hand phones. Almost all (98.5%) the respondents owned a hand phone at their work place. In addition, almost all (97.5%) the respondents reported that their family members owned hand phones at their native place.

Table 1: Descriptives

| Variable | N | Perc | Avg.FK | Avg.FB | Avg.FA | Avg.FLIT |
|---|---|---|---|---|---|---|
| Education | | | | | | |
| Graduate and Above | 29 | 3.6 | 4.1 | 6.1 | 3.8 | 14.0 |
| HSC/Diploma/ITI | 233 | 29.1 | 3.8 | 5.2 | 3.3 | 12.3 |
| Matriculation and Secondary (7th) | 258 | 32.2 | 3.6 | 5.5 | 3.2 | 12.2 |
| Primary | 220 | 27.5 | 3.3 | 5.8 | 3.0 | 12.0 |
| No Formal Education | 61 | 7.6 | 3.4 | 6.1 | 3.0 | 12.5 |
| Employment | | | | | | |
| Permanent | 226 | 28.2 | 4.0 | 5.6 | 3.5 | 13.0 |
| Contractual | 224 | 28.0 | 3.7 | 5.4 | 3.2 | 12.2 |
| Daily/casual workers | 241 | 30.1 | 3.1 | 5.9 | 2.7 | 11.8 |
| Self employed | 110 | 13.7 | 3.4 | 5.2 | 3.3 | 11.9 |
| Occupation | | | | | | |
| Unskilled | 433 | 54.1 | 3.5 | 5.7 | 3.0 | 12.2 |
| White collar/(Semi-)skilled | 252 | 31.5 | 3.8 | 5.5 | 3.4 | 12.6 |
| Self employed/Vendor | 116 | 14.5 | 3.4 | 5.2 | 3.2 | 11.8 |
| Wage | | | | | | |
| Monthly Wage | 481 | 60.0 | 3.8 | 5.5 | 3.4 | 12.7 |
| Daily wage | 320 | 40.0 | 3.2 | 5.7 | 2.8 | 11.6 |
| Monthly Income | | | | | | |
| Below 6,001 | 184 | 23.0 | 3.1 | 6.2 | 2.6 | 11.9 |
| 6,001- 8,000 | 244 | 30.5 | 3.6 | 5.2 | 3.2 | 12.0 |
| 8,001 - 10,000 | 231 | 28.8 | 3.7 | 5.2 | 3.2 | 12.1 |
| 10,001 - 18,000 | 142 | 17.7 | 3.7 | 5.9 | 3.7 | 13.3 |
| Marital Status | | | | | | |
| Single/separated | 242 | 30.2 | 3.8 | 5.3 | 3.3 | 12.3 |
| Married | 559 | 69.8 | 3.5 | 5.7 | 3.1 | 12.2 |
| Family income | | | | | | |
| Upto 10,000 | 522 | 65.2 | 3.5 | 5.6 | 3.0 | 12.0 |
| Above 10,000 | 279 | 34.8 | 3.7 | 5.5 | 3.5 | 12.7 |
| Nativity | | | | | | |
| Rural | 694 | 86.6 | 3.5 | 5.5 | 3.1 | 12.2 |
| Urban | 107 | 13.4 | 3.8 | 5.7 | 3.2 | 12.7 |
| Age | | | | | | |
| Upto 30 years | 418 | 52.2 | 3.6 | 5.5 | 3.2 | 12.3 |
| Above 30 years | 383 | 47.8 | 3.5 | 5.6 | 3.1 | 12.2 |
| Other family members have migrated | | | | | | |
| Yes | 555 | 69.3 | 3.6 | 5.7 | 3.2 | 12.6 |
| No | 246 | 30.7 | 3.4 | 5.2 | 3.0 | 11.6 |
| Family Type | | | | | | |
| Joint | 601 | 75.0 | 3.6 | 5.5 | 3.2 | 12.2 |
| Nuclear | 200 | 25.0 | 3.6 | 5.9 | 3.1 | 12.5 |
| Location | | | | | | |
| Ahmedabad | 400 | 49.9 | 3.6 | 5.3 | 3.5 | 12.4 |
| Delhi - NCR | 401 | 50.1 | 3.5 | 5.8 | 2.8 | 12.2 |
| Total | 801 | 100.0 | 3.6 | 5.6 | 3.1 | 12.3 |

# 6 Preliminary Analysis

In this section we discuss the results from basis statistical analysis of various financial inclusion measures including the use of various channels by the respondents for remittance, savings and borrowing purposes. We also discuss the level of financial knowledge of the respondents measured using the OECD-INFE tool.

## 6.1 Financial Inclusion

### 6.1.1 Bank Account at Work Place

A majority of the respondents 91.4% had a bank account at their work place. All the accounts were either in public sector banks (683) or in a regional rural bank/cooperative bank (77). The reasons mentioned for having a bank account are summarized in Table 2.[13] The principal reason was to save money (78.2%). Convenience for keeping funds (59.1%) and being able to remit money to their native place (53.1%) were the next two key reasons for having a bank account. Safety (42.4%) too was an important reason for having a bank account. About 31.8% of bank accounts were opened under the Jan Dhan Yojana (JDY) scheme of the central government that required banks to open bank accounts for the unbanked. Further investigations, however, revealed that most of them (91.8%) already had a bank account. Only 21 respondents opened their first bank account under the JDY scheme. The insignificant role of the employers in opening of bank accounts of migrant workers is reflected in the low number of bank accounts (70) that were arranged by the employers.

Table 2: Reasons for having a bank account

| Reasons | Count | Percentage |
|---|---|---|
| Jan Dhan Yojana | 255 | 31.8 |
| Arranged by employer | 70 | 8.7 |
| To save | 626 | 78.2 |
| Convenience | 473 | 59.1 |
| Remit money to native | 425 | 53.1 |
| Safety | 340 | 42.4 |

Of the 69 respondents who did not have a bank account at their work place, 34 respondents reported that they operated the bank account opened at the native place from their place of work. The variety of reasons cited by the remaining respondents for not having a bank account are presented in Table 3.

Since distance may be an important determinant of use of banking services, we collected information on that attribute. The median distance to the nearest bank/ business correspondent of a bank from their place of work or home was 2 km. A total of 713, 70, 18 respondents reported that the nearest bank branch was within 3 km, between 4-6 km and between 7-10 km from their home or place of work respectively. No one reported the distance to the nearest branch to be more than 10 km. The data therefore suggests that distance was unlikely to be a reason for not using banking services.

[13] The total add to more than 801 as respondents were allowed to select multiple options

Table 3: Reasons for not having a bank account

| Reasons | Count | Percentage |
|---|---|---|
| No knowledge | 12 | 1.5 |
| No need | 6 | 0.7 |
| No banks nearby | 11 | 1.4 |
| No document | 17 | 2.1 |
| Inconvenient (Difficulty filling forms) | 4 | 0.5 |
| Unsuitable banking hours | 1 | 0.1 |
| Behaviour of officials | 2 | 0.2 |

#### 6.1.2 Bank Account at Native Place

A total of 749 respondents reported that their family members at the native place operated a bank account. Almost all the accounts were either at a Public Sector bank (687) or at a RRB (Regional Rural Bank)/ Cooperative Bank (60). Access to bank accounts at the native place was mainly through bank branches (98.3%), with some accounts being accessed through banking correspondents (8.9%) and through bank of wheels (3.9%).[14]

### 6.2 Remittance Behaviour

#### 6.2.1 Amount of Remittance

As stated earlier, our sample consisted only of migrant workers who remitted money to their native place. The distribution of monthly remittance is presented in Figure 1. The median monthly remittance was Rs.1500. A total of 582 respondents (72.7%) reported monthly remittance of less than Rs. 2,000 (about $ 30). A majority (578) of the respondents remitted money to their native place on a monthly basis. Remittance was also effected in response to requirement for money at the native place and during personal visits by self or friends and relatives to the native place.

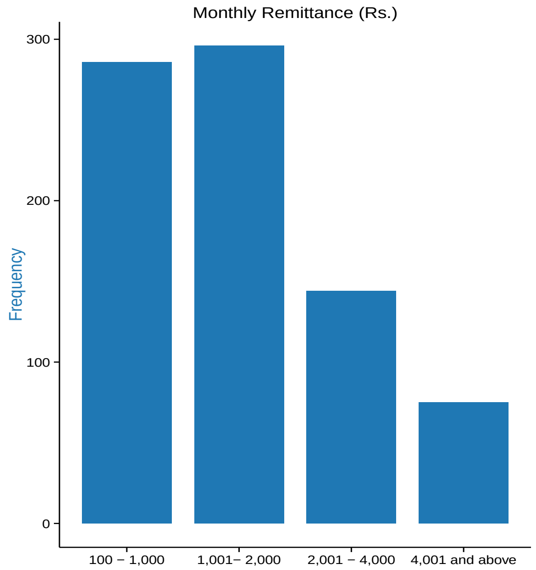
#### 6.2.2 Frequency of Remittance

Out of 578 respondents who remitted money to their native place regularly, 199 respondents remitted a fixed sum every month. The others remitted varying amounts depending on their income (201 respondents) and the need at their native place (178 respondents). The frequencies of transferring money to the native place through personal visits, or through their friends/relatives, and the frequency of transfering money for meeting unplanned requirement are presented in Table 4. In addition to cash, 402 respondents also carried goods (non-cash remittance) for their families alongwith them when they visited their native place. While most respondents (98.4%) remitted money individually, a very small (1.6%) number of respondents preferred to pool their remittances with others from the same native place.

A majority (92.4%) of the respondents sent money directly to their family members while some (8.5%) respondents sent it to a middleman in the village who would give the amount remitted to their families. A small number of respondents (1.2%) remitted money directly to

[14]In 31 cases, the accounts were accessed both through bank branches as well as banking correspondents.

Figure 1: Monthly remittance amount




the lenders from whom they may have borrowed. About one half of the family members to whom the respondents remitted money directly were educated - either graduates (16.4%) or had completed higher secondary schooling or vocational courses after matriculation (34.9%). A small number (6.1%) of family members to whom money was remitted directly, did not have any formal education.

Table 4: Frequency of Remittance

| Frequency | Self-visit | Someone-else visit | Requirement |
|---|---|---|---|
| Once in 1-2 years | 215 | 198 | 88 |
| Once in 10-12 months(Yearly) | 125 | 88 | 68 |
| Once in 7-9 months | 38 | 41 | 40 |
| Once in 4-6 months(Half-yearly) | 81 | 54 | 54 |
| Once in 2-3 months(Quarterly) | 45 | 31 | 39 |
| Every month | 8 | 23 | 67 |

### 6.2.3 Purpose of Remittance

The purposes for which the respondents remitted money in general and in the last one year are summarized in Table 5.[15] Funds were remitted mainly to meet the living and health related expenses of family members at the native place. About one half of the respondents remitted money for the purposes of savings or investments at their native place while some (14.9%) respondents remitted funds to repay old loans. About 65% respondents reported that they did monitor the manner the remitted sum was actually used. Almost all the respondents reported positive effect of remittance on their family welfare. A total of 180, 521 and 78 respondents reported that remittance positively affected their family welfare very much, significantly and moderately respectively. The remaining 22 respondents reported that the remittance hardly

[15]The respondents were allowed to select multiple options.

affected their family welfare.

Table 5: Purpose of remitting money

| Reasons | Generally(N) | Generally(%) | Last year(N) | Last year(%) |
|---|---|---|---|---|
| Living expenses | 752 | 93.9 | 707 | 88.3 |
| Health expenses | 707 | 88.3 | 662 | 82.6 |
| Savings/investments | 418 | 52.2 | 383 | 47.8 |
| Marriage expenses | 258 | 32.2 | 182 | 22.7 |
| Repayment of old loans | 119 | 14.9 | 88 | 11.0 |

The respondents who remitted money during the last one year for savings or investment purpose, invested the remitted funds in vehicles (40.5%), houses (24.8%), in deposits with bank/post office/SHG (21.1%). A lesser number of respondents invested in gold, agricultural land and loans to others. None of the respondents participated in chit funds.

### 6.2.4 Awareness and Use of Remittance Channels

The distributions of the respondents who were aware of and used the various remittance channels ever and in the last two years are presented in Table 6[16]. All the respondents were aware of and a very high percentage of respondents had used banks for remitting funds. Despite postal services being available across the country, it was surprising that post offices attracted small and decreasing percentage of customers for remitting funds. The two informal channels - money transfer agents (MTA) and hawala/courier services were far more frequently used as compared to post offices for remitting funds. The use of mobile phones for remittance was very low. This may change with government granting licenses for payments banks as they are supposed to leverage the use of technology in order to service high volume and low value transactions at competitive rates. As expected, sending funds through friends or carrying funds with self while visiting one's native place are both quite common methods of transferring funds.

Table 6: Awareness and use of remittance channel

| Channel | Aware | | Used (Ever) | | Used (last 2 yrs) | |
|---|---|---|---|---|---|---|
| | (N) | (%) | (N) | (%) | (N) | (%) |
| Bank | 801 | 100.0 | 740 | 92.4 | 695 | 86.8 |
| Post office | 610 | 76.2 | 103 | 12.9 | 31 | 3.9 |
| Mobile phone | 451 | 56.3 | 17 | 2.1 | 8 | 1.0 |
| MTA | 596 | 74.4 | 372 | 46.4 | 256 | 32.0 |
| Hawala/Couriers | 596 | 74.4 | 186 | 23.2 | 83 | 10.4 |
| Friend | 796 | 99.4 | 742 | 92.6 | 651 | 81.3 |
| Self | 795 | 99.3 | 772 | 96.4 | 759 | 94.8 |

The various factors that were considered by the respondents while selecting a remittance channel is summarized in Table 7.[17] The fact that larger number of respondents rank convenience, reliability and speed over cost to some extent implies that respondents are willing to pay more

[16] The respondents were allowed to select multiple options.

[17] The respondents were allowed to select multiple options.

to get quality service. This ought to be good news for payment banks as they gear up to enter money transfer business.

Table 7: Factors influencing choice of remittance channel

| Factor | Count | Percentage |
|---|---|---|
| Convenience | 777 | 97.0 |
| Reliability | 690 | 86.1 |
| Speed | 637 | 79.5 |
| Cost | 583 | 72.8 |
| Peer influence | 542 | 67.7 |

### 6.2.5 Evaluation of Remittance Channels

**Banks:** Out of the 740 respondents who had used banks for remitting money at least once, 401 (54.2%) respondents reported having paid some commission for remitting funds. Most of them reported that the bank had charged them either a slab-wise flat rate (56.6%) or slab-wise percentage of the amount remitted (37.2%). A total of 524 respondents reported that they had faced difficulty in remitting money through banks. The frequency distribution of the problems faced in remitting funds through banks is presented in Table 8. The distance to the bank branch, unsuitable working hours, long waiting time at counters and behaviour of bank officials are the four most commonly cited difficulties faced by respondents in remitting funds through banks.

Table 8: Problem faced while remitting through bank

| Problem | Count | Percentage |
|---|---|---|
| Distance | 298 | 37.2 |
| Working hours | 279 | 34.8 |
| Waiting time | 238 | 29.7 |
| Behavior of officials | 206 | 25.7 |
| Filling forms | 110 | 13.7 |
| Wrong account number | 89 | 11.1 |
| No account at native | 16 | 2.0 |

**Other remittance channels:** Almost all users of the other remittance channels paid some commission. The basis for the commissions paid as reported and the number of respondents who paid the commissions are summarized in Table 9.

Table 9: Payment of brokerage charges for remittance

| | Brokerage Paid | | | Brokerage calculation | | |
|---|---|---|---|---|---|---|
| Channel | Yes | No | %age | Slabwise | Slabwise-% | Fixed-% |
| Hawala/Courier | 145 | 7 | 95.4 | 103 | 17 | 24 |
| Money transfer agent | 339 | 23 | 93.7 | 242 | 60 | 37 |
| Post office | 81 | 19 | 81.0 | 68 | 4 | 9 |

The distributions of the time taken to remit money using channels other than banks, as reported by the respondents, are presented in Table 10. The informal channels are quick in remitting funds. Money transfer agents (MTAs) are able to transfer funds instantaneously or within a day in almost all the cases. The hawala/courier agencies are able to transfer funds in most cases within two days. The post offices are the slowest among the three channels.

Table 10: Time taken for remitting money

| Days | Post office | Money Transfer Agents | Hawala/Courier |
|---|---|---|---|
| 0 | 0 | 208 | 0 |
| 1 | 17 | 139 | 73 |
| 2 | 60 | 15 | 62 |
| 3 | 17 | 0 | 16 |
| 4 | 3 | 0 | 0 |
| 5 | 2 | 0 | 0 |
| 8 | 1 | 0 | 0 |

The problems faced by the respondents in using other channels for remittance are summarized in Table 11. As regards the informal channels like money transfer agents and hawala/courier services, lack of knowledge [[should this be 'absence of awareness'?]] appears to be the main reason for perceived problem. This is not surprising as these channels depend mainly on word of mouth to attract new customers. Waiting time and distance appeared to be the difficulties faced in using post offices for remittance.

Table 11: Problems faced in various channels

| Problems | Post office | Money transfer agents | Hawala/courier |
|---|---|---|---|
| Lack of knowledge | 16 | 172 | 37 |
| Lack of services at native | 9 | 33 | 19 |
| Waiting time | 43 | 43 | 12 |
| Distance to the place | 11 | 23 | 10 |

### 6.2.6 Ranking of Remittance Channels

The respondents were asked to rank the three best channels on each of the four key attributes of the process for remitting funds, namely convenience, reliability, speed and cost. The rankings of the various channels on the attributes are presented in Figure 2. Overall, banks were the most preferred channel, followed by money transfer agents and hawala/courier services. MTA was rated as more convenient and faster than effecting remittance through carrying cash during visit to native place by self or friends. Post offices and mobile phones ranked poorly with mobile phones being the least preferred channel compared to post offices under all criteria except speed. The responses also indicated that many were comfortable in effecting remittance through carrying cash during visit to native place by self or friends.

The perception about improvement in remittance service in the last 2/3 years across various dimension is summarized in Figure 3. Most of the respondents reported an improvement in service levels across all the dimensions. However, a majority of the respondents also reported a perceived increase in the cost of remitting funds.

Figure 2: Ranking of Remittance Channels

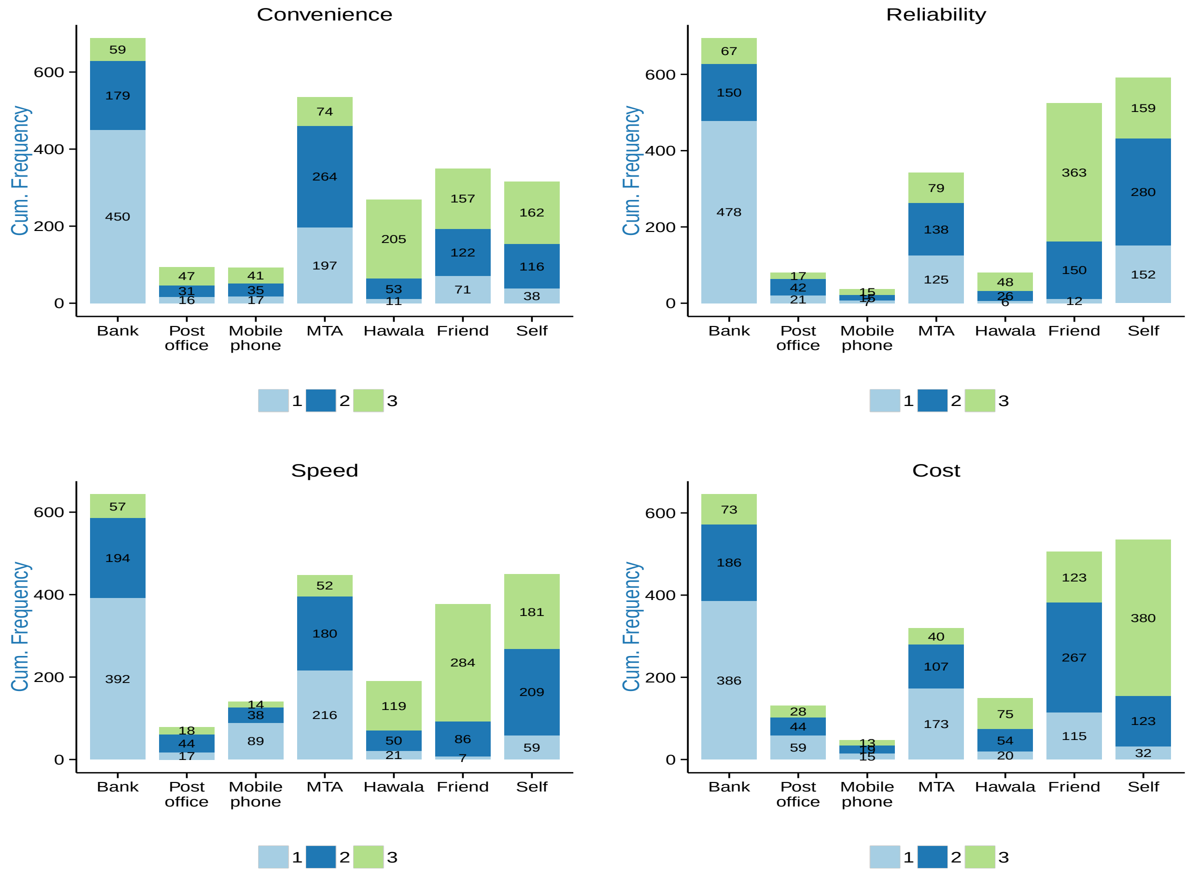
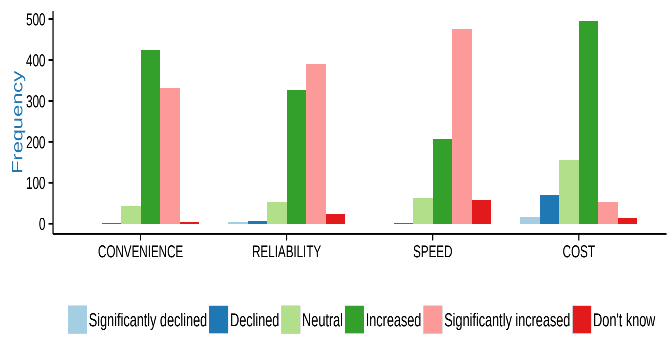



Figure 3: Improvement in remittance services during the last 3 years



### 6.3 Savings Behaviour

#### 6.3.1 Awareness and Usage of Savings Products

The information on awareness and use of various savings products ever and in the last two years are presented in Table 12. All the respondents were aware of savings accounts with banks and most (719) had used banks to save in the last two years.

A significant number of respondents were aware of insurance products (738) but only 49.6% respondents had actually bought any insurance products in the last two years. The respondents perceived that the new central government-backed insurance schemes - Pradhan Mantri Suraksha Bima Yojana (PMSBY) and Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY) would increase the coverage of accident insurance and life insurance products by providing them at relatively low premia.

The use of PPF and pension products was poor. The respondents were appreciative of introduction of the new central government backed pension scheme, Atal Pension Yojna (APY), that aims to increase the use of pension products by people in the unorganized sector. Further, very few respondents had invested in chit funds, shares , mutual funds and bonds in the last two years. Post office savings account and savings with self-help groups (SHGs) were more popular channels for investment.

Table 12: Awareness and use of savings channels

| Channel | Aware | | Used (Ever) | | Used (last 2 yrs) | |
|---|---|---|---|---|---|---|
| | (N) | (%) | (N) | (%) | (N) | (%) |
| Savings acc | 801 | 100.0 | 733 | 91.5 | 719 | 89.8 |
| Insurance | 738 | 92.1 | 548 | 68.4 | 397 | 49.6 |
| SHGs | 543 | 67.8 | 261 | 32.6 | 172 | 21.5 |
| Post office savings | 585 | 73.0 | 174 | 21.7 | 93 | 11.6 |
| NSC/KVP | 438 | 54.7 | 72 | 9.0 | 50 | 6.2 |
| Microfin loan | 547 | 68.3 | 101 | 12.6 | 37 | 4.6 |
| Fixed/recurring dep | 392 | 48.9 | 81 | 10.1 | 22 | 2.7 |
| Chit funds | 323 | 40.3 | 57 | 7.1 | 20 | 2.5 |
| PPF | 403 | 50.3 | 41 | 5.1 | 13 | 1.6 |
| Shares | 435 | 54.3 | 24 | 3.0 | 9 | 1.1 |
| Pension | 486 | 60.7 | 28 | 3.5 | 8 | 1.0 |
| Mutual funds | 293 | 36.6 | 10 | 1.2 | 4 | 0.5 |
| Bonds/debentures | 263 | 32.8 | 3 | 0.4 | 0 | 0.0 |

#### 6.3.2 Savings at Work Place

A total of 692 respondents reported that they had some amount left to save, after remitting to their native place. Out of these, 98 respondents were able to save a fixed sum every month/year, 400 respondents saved irregular amounts every year and the remaining 194 respondents were unable to save every year. The distribution of average annual savings by the respondents at their work place is presented in Table 13.

Table 13: Savings during the last year

| Annual savings | Frequency | Percent |
|---|---|---|
| Below 6,001 | 254 | 31.7 |
| 6,001 - 12,000 | 338 | 42.2 |
| 12,001 - 24,000 | 68 | 8.5 |
| 24,000 and above | 32 | 4.0 |
| NA's | 109 | 13.6 |
| Total | 801 | 100.0 |

The various savings/investment options availed of by the respondents at their work place during the last one year is presented in table Table 14.[18] Only 57.2% respondents had used formal savings instruments. The large number of respondents who preferred to keep cash at home (19.7%) or lent money without interest (10.1%) is indicative of the manner in which uncertainty in the need for funds in managed.

Table 14: Savings during the last year

| Saving options | Count | Percentage |
|---|---|---|
| Formal saving instruments | 458 | 57.2 |
| Land | 47 | 5.9 |
| Gold | 130 | 16.2 |
| Loan with interest | 36 | 4.5 |
| Loan without interest | 81 | 10.1 |
| Family member | 49 | 6.1 |
| Cash at home | 158 | 19.7 |

## 6.4 Borrowing Behaviour

### 6.4.1 Awareness and Use of Borrowing Products

The information on awareness and use of various borrowing products ever and in the last two years are presented in the Table 15. At over 50%, the awareness about all sources for borrowing was quite high among the respondents. The awareness about banks as a source for borrowing was the highest. Banks were also the dominant source of actual borrowing. Of all the sources, the use of Kisan Credit Cards was the lowest.

Table 15: Awareness and use of borrowings products

| Channel | Aware | | Used (Ever) | | Used (last 2 yrs) | |
|---|---|---|---|---|---|---|
| | (N) | (%) | (N) | (%) | (N) | (%) |
| Bank loan | 708 | 88.4 | 371 | 46.3 | 249 | 31.1 |
| General credit card | 446 | 55.7 | 66 | 8.2 | 56 | 7.0 |
| Microfinance loan | 542 | 67.7 | 95 | 11.9 | 52 | 6.5 |
| Bank overdraft | 495 | 61.8 | 37 | 4.6 | 16 | 2.0 |
| Kisan credit card | 462 | 57.7 | 27 | 3.4 | 7 | 0.9 |

[18] The respondents were allowed to select multiple options.

### 6.4.2 Borrowing at Work Place

A total of 422 respondents (52.7%) reported to have borrowed money at their place of work. The distributions pertaining to various factors relating to borrowing behaviour at the work place are presented in Table 16. The main reasons for borrowing at work place were to meet the needs for consumption, healthcare and one-time expenditure. Being less predictable, the last two reasons gave rise to borrowing due to low levels of savings at the workplace. Despite resorting to extensive borrowing, only a few (1.5%) respondents recycled their loans (that is borrowed fresh to repay their existing loans).

Most of the respondents borrowed from friends and relatives. Only 9.2% respondents borrowed from banks. Other sources of borrowing were money lenders (6.6%), employers (4.4%), and self-help groups (2.4%).

Out of the 422 respondents who borrowed money at the workplace, 72 respondents needed a guarantor 13 and another 24 respondents were required to provide assets as collateral for borrowing. The distribution of amount borrowed at work place and the distribution of the duration of loans taken at the work place is also shown in the table.

### 6.4.3 Borrowing at Native Place

A total of 209 respondents (26.1%) reported borrowing at their native place. The distibutions pertaining to various factors relating to the borrowing behaviour at the work place are presented in Table 17. It is evident that the main reasons for borrowing are similar to those at the work place, namely to meet the needs for consumption, healthcare and one-time expenditure. Borrowing for healthcare and one-time expenses is not surprising as the families back home may be dependent mainly on remittances which are not adequate to create savings that can take care of unpredictable requirement. The pattern of sources borrowed from was very similar to the pattern observed for borrwing at the work place. Only a small number of respondents (0.7%) recycled their loans (borrowed fresh to repay existing loans) at the native place.

The various sources of borrowing at the native place is also presented in the table. Most of the respondents borrowed from friends and relatives. Only 8% of respondents borrowed from banks. Other sources of borrowings were money lenders (3.6%), employers (0%), and self-help groups (0.5%)

Out of the 209 respondents who borrowed money at the native place, 80 respondents had to offer security (41) or needed a guarantor (39). At 38.3% this was higher than 25.3% of loans that required such an arrangement at the work place. This is not surprising as lenders at the work place may feel more secure given the (known) monthly income stream for repayments at work place compared to uncertain remittance to the native place. Further, the respondents too may be able to offer acceptable assets at the native place as guarantee for the borrowing.

The distribution of amount borrowed and the loan duration at the native place is also presented in the table. Most of the loans at the native place were for higher amounts and for longer durations as compared to loans at the work place. These factors could also be the reasons for larger percentage of loans requiring security at the native place.

Table 16: Borrowings at work place

| Particulars | Count | Perc | Perc. (of borrowers) |
|---|---|---|---|
| Reasons | | | |
| Consumption | 323 | 40.3 | 76.5 |
| Healthcare | 134 | 16.7 | 31.8 |
| One-time exp | 49 | 6.1 | 11.6 |
| Education | 28 | 3.5 | 6.6 |
| House | 21 | 2.6 | 5.0 |
| Land | 19 | 2.4 | 4.5 |
| Agricultural inv | 17 | 2.1 | 4.0 |
| Vehicle | 13 | 1.6 | 3.1 |
| Pay off loans | 12 | 1.5 | 2.8 |
| Source | | | |
| Friends/relatives | 300 | 37.5 | 71.1 |
| Bank | 74 | 9.2 | 17.5 |
| Money lenders | 53 | 6.6 | 12.6 |
| Employer | 35 | 4.4 | 8.3 |
| SHGs | 19 | 2.4 | 4.5 |
| Chit funds | 3 | 0.4 | 0.7 |
| Govt. schemes | 2 | 0.2 | 0.5 |
| Amount | | | |
| Below 6,001 | 194 | 24.2 | 46.0 |
| 6,001 - 12,000 | 126 | 15.7 | 29.9 |
| 12,001 - 24,000 | 52 | 6.5 | 12.3 |
| 24,001 - 60,000 | 40 | 5.0 | 9.5 |
| 60,001 and above | 8 | 1.0 | 1.9 |
| Duration | | | |
| Less than 6m | 235 | 29.3 | 55.7 |
| 6m - <1yr | 100 | 12.5 | 23.7 |
| 1 yr - 2 yr | 51 | 6.4 | 12.1 |
| 2 years and more | 29 | 3.6 | 6.9 |

## 6.5 Financial Literacy

### 6.5.1 Measurement of Financial Literacy

As described in the methodology section, the financial literacy related data were collected using the OECD-INFE questionnaires. The method of scoring and categorization of the response variables are based on the method used by Atkinson and Messy (2012) for the OECD-INFE study.[19] The methodology allows a comparison of the results for India with the results for 14 countries reported in the OECD-INFE study.

The level of financial knowledge was measured using a set of eight questions on basic numeracy, understanding of inflation and the computation of simple interest and compound interest (time value of money), relationship between inflation and return, inflation and prices, risk and return,

[19] Atkinson, A. and Messy, F. (2012). Measuring financial literacy: Results of the OECD / International Network on Financial Education (INFE) pilot study. OECD Working Papers on Finance, Insurance and Private Pensions No. 15, OECD Publishing. This article is referred to as "OECD-INFE study" in this report.

Table 17: Borrowings at native place

| Particulars | Count | Perc | Perc. (of borrowers) |
|---|---|---|---|
| Reasons | | | |
| Consumption | 103 | 12.9 | 49.3 |
| Healthcare | 44 | 5.5 | 21.1 |
| One-time exp | 29 | 3.6 | 13.9 |
| Agricultural inv | 24 | 3.0 | 11.5 |
| House | 21 | 2.6 | 10.0 |
| Education | 18 | 2.2 | 8.6 |
| Land | 17 | 2.1 | 8.1 |
| Vehicle | 12 | 1.5 | 5.7 |
| Pay off loans | 6 | 0.7 | 2.9 |
| Source | | | |
| Friends/relatives | 132 | 16.5 | 63.2 |
| Bank | 64 | 8.0 | 30.6 |
| Money lenders | 29 | 3.6 | 13.9 |
| SHGs | 4 | 0.5 | 1.9 |
| Chit funds | 2 | 0.2 | 1.0 |
| Govt. schemes | 2 | 0.2 | 1.0 |
| Amount | | | |
| Below 6,000 | 47 | 5.9 | 22.5 |
| 6,001- 12,000 | 47 | 5.9 | 22.5 |
| 12,001 - 24,000 | 30 | 3.7 | 14.4 |
| 24,001 - 60,000 | 59 | 7.4 | 28.2 |
| 60,001 and above | 26 | 3.2 | 12.4 |
| Duration | | | |
| Less than 6m | 50 | 6.2 | 23.9 |
| 6m - <1yr | 42 | 5.2 | 20.1 |
| 1 yr - 2 yr | 50 | 6.2 | 23.9 |
| 2 years and more | 65 | 8.1 | 31.1 |

and the role of diversification in risk reduction. Each correct answer was given a score of one. Respondents with scores of six and above were categorized as individuals with high financial knowledge; respondents with scores of four and five were categorized as individuals with average financial knowledge; the rest were categorized as possessing poor financial knowledge.

Financial behaviour was measured through response to questions that pertained to how respondents dealt with money in their daily lives. A total of eight items were used to unravel whether the respondents assess affordability of products and expenditures, made timely payment of bills, practiced long-term financial planning and monitor household budget and financial affairs, made efforts to evaluate financial products and habitually engaged in the act of saving and borrowing. The response to each question was given a score of one if it indicated desirable financial behaviour and zero otherwise. Respondents with scores of six and above were categorized as those with positive financial behaviour; respondents with scores of four and five were classified as those demonstrating average financial behaviour; the rest were categorized as having indifferent financial behaviour.

It may be argued that attitude towards money and finance affects behaviour towards savings, borrowings and risk-taking of an individual. Financial attitude of respondents was measured using three items to capture the extent of respondents' belief in planning, propensity to save and propensity to consume. The responses were measured using a scale ranging from one to five, with five indicating the highest positive financial attitude. Respondents with an average score of three or above across the three items were categorized as those with positive financial attitude; respondents with scores of two or less were categorized as possessing indifferent financial attitude; the rest were categorized as having average financial attitude.

It is indeed true that functionally, financial knowledge, financial behaviour and financial attitude are three independent dimensions representing three different aspects of financial literacy. The OECD-INFE study measures financial literacy as sum of the scores in the three dimensions. This study too uses such a composite score for measuring financial literacy in India. The maximum possible score for financial literacy is 21 (eight for financial behaviour, eight for financial knowledge, and five for financial attitude) and the minimum is zero.

### 6.5.2 Components of Financial Literacy

The distributions of score for financial literacy and scores for the three components of financial literacy are presented in Figure 4. The classification of the scores into the three categories for financial literacy and its three components are provided in Table 18. The percentage of correct responses to the various questions used to compute the financial literacy scores is presented in Table 19. A comparison of scores for the respondents for this study with those for the fourteen-country study undertaken by Atkinson and Messy (2012) [the OECD-INFE study] and those for the working young in Urban India[20] is also shown.

### 6.5.3 Financial knowledge

The distribution of the scores for financial knowledge is presented in Figure 4a. At 3.6, the average financial knowledge score was found to be considerably lower than the fourteen country average score of 5.2 in the OECD-INFE study. No respondent in the study received a full score of 8 points. As can be inferred from Table 18 only 6.1% of the respondents had high financial knowledge. This is significantly lower than that reported for the fourteen countries that were part of the OECD-INFE study where more than half of the respondents had high financial knowledge. The comparison of the individual components of financial knowledge is presented in Table 19. Compared to the results of the OECD-INFE study, the respondents performed poorly in all the aspects of financial knowledge except their understanding of the relationship between risk and return. Compared with the working young in urban India, the respondents of this study were poorly endowed in all aspects of financial knowledge except their understanding of compound interest and division.

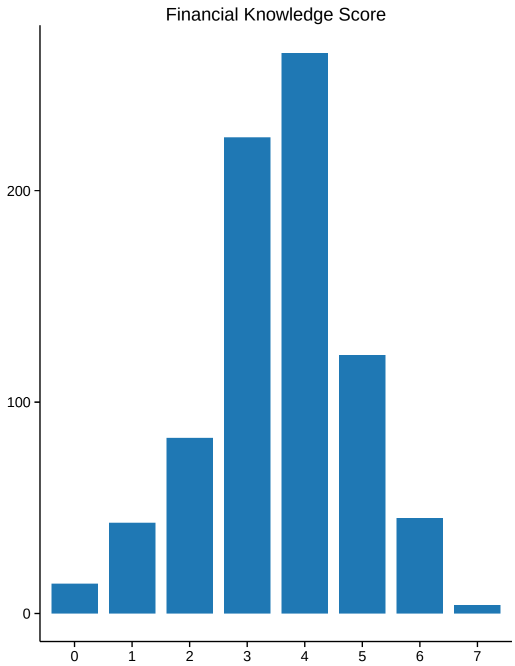
### 6.5.4 Financial behaviour

At 5.6, the average financial behaviour score was better than the average score of 4.75 for the OECD-INFE study. The distribution of the scores for financial behaviour is shown in

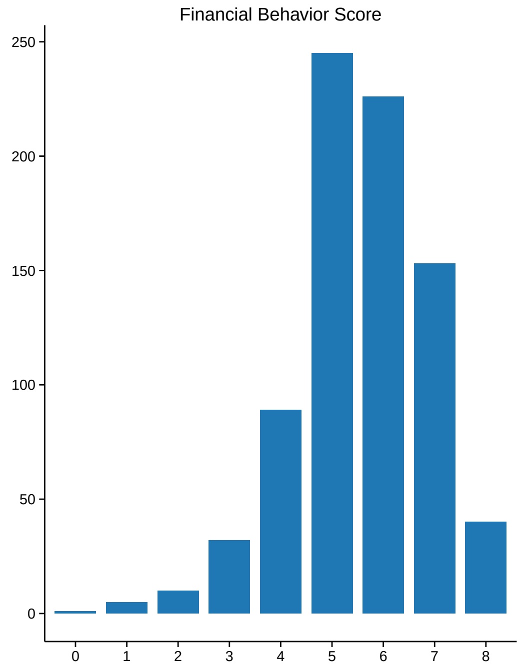
[20] Agarwalla, S. K., Barua, S. K., Jacob, J. and Varma, J. R. 2015. Financial literacy among working young in urban India. World Development, 67: 101-109.

Figure 4: Financial Literacy Scores

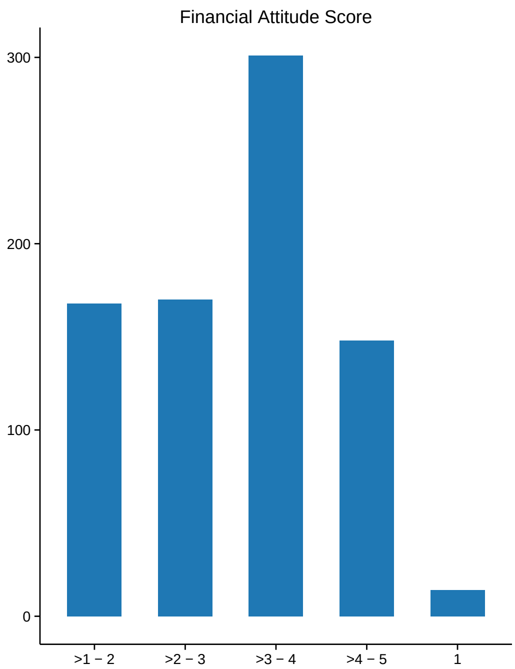
(a) Financial knowledge




(b) Financial behaviour




(c) Financial attitude




(d) Financial literacy

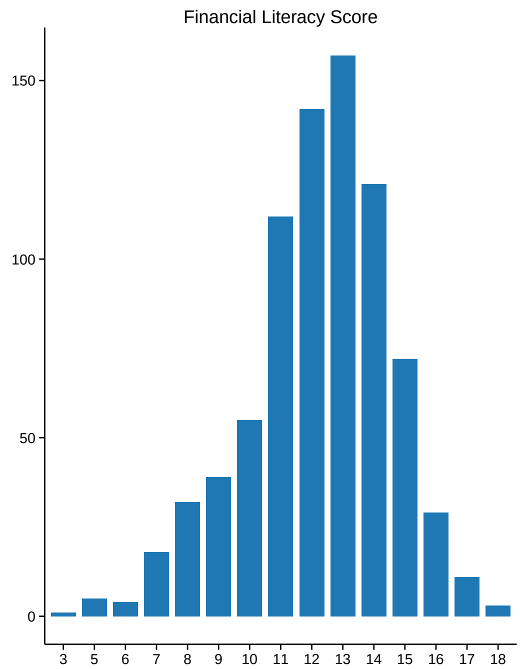


Figure 4b. The majority of the respondents (58.8%) received a score of 5 or 6. As can be inferred from Table 18, the respondents seemed to fare well on financial behaviour. Only 6% of respondents exhibited indifferent financial behaviour. A comparison of the individual components of financial behaviour with scores for the INFE Study and study of working young in urban India is presented in Table 19. The respondents of this study exhibited superior financial behaviour compared to the INFE Study in all the aspects except financial monitoring, long-term planning and borrowing. The respondents of this study also showed better than the working young in urban India, in one half the components of financial behaviour.

### 6.5.5 Financial attitude

The distribution of the scores for financial attitude is shown in Figure 4c. At 3.1, the average score for financial attitude for the respondents was close to the average score of 3.25 for the OECD-INFE. As can be inferred from Table 19, 61.2% respondents exhibited good financial attitude. The respondents for this study fared well in all the questions as compared to those for the working young in urban India and the OECD-INFE study, except for the short-term planning where they scored lower than the average for 14-countries (in the OECD-INFE Study).

### 6.5.6 Financial literacy

At 12.3, the average score for financial literacy of the respondents was lower than the average score of 13.8 for the OECD-INFE Study. As can be inferred from Table 18, at 81.6% a significant majority of the respondents exhibited average financial literacy.

Table 18: Ranking - financial literacy

| Response variable | Frequency | Percentage |
|---|---|---|
| *Financial knowledge* | | |
| Low Financial Knowledge | 365 | 45.6 |
| Average Financial Knowledge | 387 | 48.3 |
| High Financial Knowledge | 49 | 6.1 |
| | | |
| *Financial behaviour* | | |
| Indifferent Financial Behavior | 48 | 6.0 |
| Average Financial Behavior | 334 | 41.7 |
| Good Financial Behavior | 419 | 52.3 |
| | | |
| *Financial attitude* | | |
| Low Financial Attitude | 182 | 22.7 |
| Average Financial Attitude | 129 | 16.1 |
| High Financial Attitude | 490 | 61.2 |
| | | |
| *Financial literacy* | | |
| Low Financial Literacy (<=8/21) | 50 | 6.2 |
| Average Financial Literacy | 654 | 81.6 |
| Good Financial Literacy (>=15/21) | 97 | 12.1 |

Table 19: Comparison between India and other countries on financial literacy

| Question | 14-country average (%) | India (%) | Sample (%) |
|---|---|---|---|
| *Panel A: Financial knowledge (% correct answer)* | | | |
| Division | 86 | 68 | 77.2 |
| Time value of money | 70 | 19 | 10.2 |
| Interest paid on loan | 82 | 72 | 51.6 |
| Interest plus principal | 58 | 41 | 33.3 |
| Compound Interest | 30 | 25 | 26.7 |
| Risk and return | 71 | 80 | 78.5 |
| Diversification | 53 | 47 | 27.8 |
| Definition of inflation | 80 | 68 | 50.7 |
| *Panel B: Financial behaviour (% correct answer)* | | | |
| Affordability | 82 | 90 | 93.9 |
| Bill payment | 82 | 73 | 86.1 |
| Financial monitoring | 79 | 58 | 62.8 |
| Long-term planning | 53 | 51 | 51.4 |
| Responsible and has household budget | 44 | 84 | 65.9 |
| Savings | 60 | 100 | 86.4 |
| Evaluate financial products | 44 | 87 | 81.3 |
| Borrowing | 81 | 66 | 27.6 |
| *Panel C: Financial attitude (% indicating positive attitude)* | | | |
| Short-term plan (live for today) | 60 | 35 | 45.8 |
| Spend than save | 45 | 34 | 56.1 |
| Money is there to be spent | 29 | 34 | 40.4 |

# 7 Statistical Analysis of Savings, Borrowings and Remittance Behaviour

The analysis of savings, borrowings and remittance behaviour of migrant workers was carried out using logistic regression. The socio-demographic explanatory variables used in the regression comprised marital status, age, education level, city, type of origin (rural/urban), nature of occupation, type of compensation pattern (day versus monthly wages), family income, from families with no other working member. In addition, the number of years since first migration and the scores of the respondents on financial literacy, financial knowledge, financial behaviour and financial attitude were also included in the set of explanatory variables used for analysis. The base case for the regression analysis comprised migrant workers who were unmarried, aged up to 30 years, educated up to primary school or below, working in Ahmedabad, migrants from rural areas, unskilled, monthly-wagers, with monthly family income of up to Rs. 10,000 per month.

## 7.1 Influencers of Savings Behaviour

### 7.1.1 Savings

Out of the 801 respondents, 692 reported saving money at their work place. The dependent variable was a binary variable representing saving and not-saving. The results are presented in Table 20(1). The propensity to save at work place was lower for the married (at p=0.01), the day-wagers (at p=0.01), and for those who had completed schooling (at p=0.05). It was higher for the self-employed (at p=0.01), for respondents from Delhi (at p=0.05), and for those who had other working family members (at p=0.05). The number of years since first migration lowered (at p=0.01) the propensity to save at work place. As regards financial literacy, financial knowledge as well as financial behaviour had positive influence (at p=0.01) on the propensity to save.

### 7.1.2 Savings Using Formal Instruments

The formal avenues for savings consisted of banks, post office and chit funds. Out of the 692 respondents, 458 respondents reported saving money using formal avenues. The dependent variable was binary variable representing saving and not-saving using formal avenues. The results are presented in Table 20(2). The propensity to save through formal avenues was lower among the married (at p=0.01) and for the day-wagers (at p=0.01). It was higher among those above the age of 30 years (at p=0.05), for those who had completed schooling (at p=0.01), among the white collar (at p=0.05) as well as the self-employed (at p=0.01), and among the respondents from Delhi (at p=0.01). As regards financial literacy, financial behaviour had negative influence (at p=0.01) on the propensity to save through formal avenues.

## 7.2 Influencers of Borrowing Behaviour

### 7.2.1 Borrowing

Out of the 801 respondents, 529 respondents reported borrowing money either at their work place or at their native place. The dependent variable was binary variable representing use and non-use of borrowing. The results are presented in Table 21(1). Borrowing is higher (at p=0.01)

Table 20: Logistic regression: influencers of savings behaviour

| | *Dependent variable:* | |
|---|---|---|
| | Savers at work | Savers-Formal |
| | (1) | (2) |
| Marital status: *Married* | -0.97*** | -1.23*** |
| Age: *Above 30 years* | 0.24 | 0.61** |
| Education: *College incl. technical/vocational* | 0.11 | 0.59 |
| Education: *Secondary school and above* | -0.68** | 1.13*** |
| Location: *Delhi-NCR* | 0.61** | 1.21*** |
| Nativity: *Urban* | -0.52 | 0.08 |
| Occupation: *White collar/Semi-skilled* | 0.23 | 0.54** |
| Occupation: *Self-employed/vendor* | 1.75*** | 1.11*** |
| Wage: *Daily wage* | -1.04*** | -1.00*** |
| Family income: *Above 10,000* | -0.17 | 0.48* |
| Years since first migrated | -0.05*** | -0.03* |
| Other family member working at work place | 0.78** | 0.41 |
| Financial knowledge | 0.41*** | 0.04 |
| Financial behaviour | 0.58*** | -0.33*** |
| Financial Attitude | -0.21* | 0.03 |
| Intercept | -0.57 | 1.74*** |
| Observations | 801 | 692 |
| Log Likelihood | -248.04 | -342.64 |
| Akaike Inf. Crit. | 528.08 | 717.28 |
| *Note:* | *p<0.1; **p<0.05; ***p<0.01 | |

among respondents from Delhi. None of the other socio-demographic variables significantly influenced the chance of borrowing. As regards financial literacy, financial knowledge had a positive influence (at p=0.05) on borrowing.

### 7.2.2 Borrowing from Formal Sources

The formal sources of borrowing include banks, SHGs, chit funds and government schemes. Out of the 529 respondents who had borrowed money either at their work or native place, 78 respondents reported borrowing only from formal sources. The dependent variable was binary variable representing borrowing or not borrowing only from formal sources. The results are presented in Table 21(2). The propensity to borrow only from formal sources was positively influenced (at p=0.05) by college education; it was negatively influenced (at p=0.05) by the number of years since the first migration. As regards financial literacy, while financial knowledge had a positive influence (at p=0.01), financial attitude had negative influence (at p=0.01) on borrowing only from formal sources.

### 7.2.3 Borrowing from Informal Sources

The informal sources of borrowing include friends, relatives, money lenders and employers. Out of the 529 respondents who had borrowed money either at their work or native place, 368 respondents reported borrowing only from informal sources. The dependent variable was binary variable representing borrowing or not borrowing only from informal sources. The results are presented in Table 21(3). The propensity to borrow only from informal sources was significantly negatively influenced (at p=0.05) by college education. As regards financial literacy, while financial knowledge had a negative influence (at p=0.01), financial attitude had positive influence (at p=0.01) on borrowing only from informal sources.

Table 21: Logistic regression: influencers of borrowings behaviour

| | *Dependent variable:* | | |
|---|---|---|---|
| | Borrowed | Formal only | Informal only |
| | (1) | (2) | (3) |
| Marital status: *Married* | 0.33 | -0.16 | 0.05 |
| Age: *Above 30 years* | -0.001 | 0.14 | -0.22 |
| Education: *College incl. technical/vocational* | -0.48 | 1.30** | -1.12** |
| Education: *Secondary school and above* | -0.02 | 0.28 | -0.21 |
| Location: *Delhi-NCR* | 0.81*** | 0.13 | -0.49* |
| Nativity: *Urban* | -0.33 | -0.15 | 0.41 |
| Occupation: *White collar/Semi-skilled* | -0.21 | 0.38 | -0.40 |
| Occupation: *Self-employed/vendor* | 0.08 | 0.27 | -0.03 |
| Wage: *Daily wage* | 0.02 | 0.34 | -0.09 |
| Family income: *Above 10,000* | 0.07 | -0.21 | 0.34 |
| Years since first migrated | -0.01 | -0.07** | 0.02 |
| Other family member working at work place | -0.27 | 0.22 | -0.30 |
| Financial knowledge | 0.15** | 0.29*** | -0.26*** |
| Financial behaviour | 0.09 | 0.19 | -0.03 |
| Financial Attitude | -0.05 | -0.45*** | 0.32*** |
| Intercept | -0.46 | -2.71*** | 1.56** |
| Observations | 801 | 529 | 529 |
| *Note:* | *p<0.1; **p<0.05; ***p<0.01 | | |

## 7.3 Influencers of Remittance Behaviour

### 7.3.1 Use of Banks

Out of the 801 respondents, 695 respondents reported using banks for remitting money to their native place. The dependent variable was binary variable representing use and non-use of banks. The results are presented in Table 22(1). The chance of using banks for remittance was lower (at p=0.01) for those migrating from urban areas; it was higher (at p=0.01) for respondents from Delhi; it was higher (at p=0.05) for those with college education; it was higher (at p=0.05) for the self-employed; it was lower (at p=0.05) for daily wagers. As regards financial literacy, financial knowledge had a negative influence (at p=0.05) on remittance through banks.

### 7.3.2 Use of Informal Channels

Out of the 801 respondents, 305 respondents reported using informal channels, that is, hawala and MTAs, for remitting money to their native place. The dependent variable was binary variable representing use and non-use of informal channels. The results are presented in Table 22(2). The chance of using informal channels for remittance is significantly negatively impacted if the respondent is unskilled (at p=0.01) or self-employed (at p = 0.10). Use of informal channels for remittance is significantly higher for Delhi compared to Ahmedabad (at p=0.01) and for respondents above 30 years (at p=0.10). Financial knowledge has a significant negative influence on use of informal channels (at p=0.01).

Table 22: Logistic regression: influencers of remittance behaviour

| | *Dependent variable:* | |
|---|---|---|
| | Remm:bank | Remm:MTA/Hawala |
| | (1) | (2) |
| Marital status: *Married* | -0.01 | -0.28 |
| Age: *Above 30 years* | -0.18 | 0.40** |
| Education: *College incl. technical/vocational* | 1.89** | -0.14 |
| Education: *Secondary school and above* | -0.02 | 0.14 |
| Location: *Delhi-NCR* | 1.75*** | 1.49*** |
| Nativity: *Urban* | -0.88*** | -0.19 |
| Occupation: *White collar/Semi-skilled* | 0.48* | 0.71*** |
| Occupation: *Self-employed/vendor* | 0.90** | 0.10 |
| Wage: *Daily wage* | -0.68** | 0.08 |
| Family income: *Above 10,000* | 0.37 | -0.41* |
| Years since first migrated | 0.01 | -0.02 |
| Other family member working at work place | 0.004 | 0.44* |
| Financial knowledge | 0.23** | 0.13** |
| Financial behaviour | -0.03 | -0.26*** |
| Financial Attitude | -0.13 | -0.09 |
| Intercept | 0.87 | -0.21 |
| Observations | 801 | 801 |
| *Note:* | *p<0.1; **p<0.05; ***p<0.01 | |

## 8 Influencers of Percentage of Income Saved, Borrowed and Remitted

The parameters of distribution of the percentage of family income saved, borrowed and remitted are presented in Table 23. We used OLS regression to identify the variables that influence the extent of saving, borrowing and remitting. Step-wise regression was used to identify the relevant set of smaller number of attributes that influence these percentages. The starting set of variables for initiating the step-wise regression were: age, education, nativity of the respondent (urban/rural), whether any other family member was working at the work place, occupation, whether wages were received on a daily basis or monthly basis, family income, marital status, years since first migration and family category (nuclear/joint).

Table 23: Percentage of family income saved, borrowed and remitted

| Variable | N | Mean | Stdev | Median | Range |
|---|---|---|---|---|---|
| Savings/Family income | 692 | 0.08 | 0.05 | 0.07 | 0.38 |
| Borrowings/Family income | 527 | 3.13 | 6.43 | 1.22 | 62.48 |
| Remmitance/Family income | 801 | 0.21 | 0.11 | 0.19 | 0.58 |

Of the three step-wise regressions estimated, the only significant result was that for percentage remitted. The estimated values of the coefficients are presented in Table 24.

The percentage of income remitted was positively influenced by income, number of years since first migration. The percentage was higher for those with urban nativity and lower for those who were either self-employed or held white-collar jobs as well as for those with other working family members.

Table 24: OLS regression: percentage of family income at work place remitted

| | *Dependent variable:* |
|---|---|
| | Remm/Family inc |
| Education: *College incl. technical/vocational* | 0.021 |
| Education: *Secondary school and above* | -0.011 |
| Nativity: *Urban* | 0.031*** |
| Other family member working at work place | -0.083*** |
| Occupation: *White collar/Semi-skilled* | -0.046*** |
| Occupation: *Self-employed/vendor* | -0.044*** |
| Family income: *Above 10,000* | 0.009*** |
| Years since first migrated | 0.002*** |
| Intercept | 0.153*** |
| Observations | 801 |
| Adjusted $R^2$ | 0.118 |
| *Note:* | *p<0.1; **p<0.05; ***p<0.01 |

## 9 Conclusions and Recommendations

The key conclusions and recommendations that emanate from the analysis in the preceding sections are as follows:

- An overwhelming majority had a bank account. Therefore, the extent of financial inclusion among migrants was far higher than it is among people in similar economic situation. The families of a large percentage of migrants also had bank account in their native place. Therefore, migrants helped in proliferation of banking and consequent financial inclusion in the country.
- At over 78%, the main reason for maintaining a bank account was use of banks for parking their savings. Just a little over one-half regarded the ability to remit money as a reason for maintaining a bank account. Borrowing was not given as a reason for maintaining a bank account. This clearly implied that banks had failed to make themselves indispensable as regards full complement of services they offer.
- A large majority remitted money regularly to their families. The purpose of remittance was essentially to meet living expenses of the family at the native place. The observed behaviour supported the conclusions reached by several other studies that the initial cost of migration incurred by the immediate family was repaid through remittances by migrants later in life.
- While banks were used extensively for remitting money, there was significantly high use of informal channels for transferring resources to native place. The noteworthy feature of the response was low use of post-offices for remitting money despite awareness of such service being available in post-offices. Carrying cash by the individual himself or sending cash through a friend were also much in vogue, despite the obvious risk of loss inherent in such manner of remitting money.

- Convenience and reliability were the dominant attributes in the choice of channel for remitting money. What was noteworthy was that cost was not even close to being as important as these two attributes in the reasons for the choice of channel. This response coupled with the extensive use of non-banking channels implied that banks needed to put in efforts to change the perception on these two attributes.

- There was predominant perception that the service provided by almost all channels for remitting money as regards convenience, reliability, speed and cost had improved in the last few years. The noteworthy outcome was the poor perception about use of mobile phone for money transfer. Given almost one hundred percent ownership of mobile phone among the respondents, there was clearly an opportunity for telecom service providers to convince this group to use mobile phone for remitting money.

- The awareness about different instruments for savings and different sources for borrowing money was extensive. While use of banks for parking savings as well as for borrowing was dominant, large scale use of other instruments for savings and other channels for borrowing implied there was scope for much deeper engagement with the formal financial sector in terms of usage.

- The average financial literacy of the group was below that average for the 14-country OECD-INFE study. However, while the average score for financial knowledge for the group was well below, the average score for financial behaviour was higher than the corresponding scores for the OECD-INFE study. The score on financial attitude was comparable to the score on the same dimension for the OECD-INFE study.

- The decision to save and save through use of formal avenues appeared to be influenced differently by a range of factors with no discernible pattern. Financial knowledge had positive influence on decision to save. Financial behaviour too had positive influence on decision to save; however, it had a negative influence on use of formal avenues for savings, implying that good financial behaviour was accompanied with deployment of savings to non-formal instruments.

- As regards borrowing, education clearly promoted borrowing from formal sources and dissuaded borrowing from informal sources. Financial knowledge too promoted borrowing from formal sources and dissuaded borrowing from informal sources. Financial attitude on the other hand positively influenced borrowing from informal sources and negatively influenced borrowing from formal sources.

- The decision to remit through use of formal or informal avenues appeared to be influenced differently by a range of factors with no discernible pattern. Financial knowledge had negative influence on the decision to remit and financial behaviour had positive influence on decision to remit using informal channels.

The results demonstrate that there is considerable scope for formal financial sector, beginning with banking, to serve the requirements of migrants in India. As with acceleration of economic development and concomitant rise in urbanization the size of migrant population will grow over time. Therefore, the segment provides a rapidly growing opportunity for the formal financial sector. As migrants also serve a very useful purpose of equalizing the spatial spread of spending through remittances, by serving the needs of migrants, the formal financial sector would also start spreading their services to the hinterland in the country.

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