



Access to Finance in Andhra Pradesh

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*The views expressed in this note are entirely those of the authors and should not be attributed
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Glossary

TERM	MEANING
AIDIS	All India Debt and Investment Survey, a decennial survey conducted by the National Sample Survey Organization to gather quantitative data on debt, assets and expenditures of households throughout India.
Chit Fund	A revolving credit fund in which members contribute a predetermined amount at specified intervals and auction the pool regularly.
DCCB	District Central Co-operative Bank, one level of the short term cooperative credit structure
DWCRA	Development of Women and Children in Rural Areas Program, a program launched in 1982 to promote the wellbeing of women through income-generating activities. A key feature of DWCRA was the formation of groups, through which members would receive a stipend and revolving fund to undertake group economic activities.
JLG	Joint Liability Group, JLGs are generally promoted by private MFIs and consist of fewer members than SHGs (usually 4-5). Members are responsible for repayments of their peers in case of default.
KYC	Know Your Customer norms, due diligence guidelines which must be followed by banks to identify account holders.
MFI	Microfinance Institution, any private organization that provides microfinance loans. MFIs can take many legal forms, including non-profit societies and for-profit NBFCs.
NABARD	National Bank for Agriculture and Rural Development, the apex development bank responsible for regulating credit flow and promoting integrated development in rural areas. Since 1992, NABARD has promoted India’s largest microfinance program, the SHG Bank Linkage Programme.
NBFC	Non-Banking Financial Company, a type of for-profit company which may offer financial products to customers and which is regulated by the RBI. Most of India’s largest MFIs are registered as NBFCs.
No-frills account	A basic savings account that the RBI encouraged banks to provide to unbanked customers with or minimal balance as part of its financial inclusion drive.
NREGA	National Rural Employment Guarantee Act, a centrally-sponsored government scheme enacted in 2005 that ensures a minimum of 100 days of unskilled, minimum-wage employment to all rural households.
PPI	Progress Out of Poverty Index, a simple proxy measure of the likelihood that a household is beneath a given poverty line. See Appendix E for a detailed explanation.
RBI	Reserve Bank of India, the central bank of India that controls monetary policy.
RRB	Regional Rural Bank. RRBs were established in 1972 to provide credit to weaker sections of society of rural areas, such as small and marginal farmers, artisans, and agricultural labourers. RRBs are regulated by NABARD.
SBLP	SHG-Bank Linkage Programme, a program sponsored by NABARD to promote and provide credit to SHGs nationally. Through SBLP, banks provide SHGs with credit after an initial period of saving and internal lending.
SHG	Self Help Group, one of the two major microfinance models in India. SHGs generally consist of 10-20 members that save regularly and extend internal loans through group savings. Groups may also be sanctioned external loans from banks, federations, or NGOs.
SGSY	Swaranjayanti Gram Swarajgar Yojana, a centrally-sponsored program launched in 1999 to support poor families through the provision of subsidies and bank credit distributed via SHGs.

Executive Summary

In this report, we present results from the first ever household survey on access to finance in India which includes information on microfinance, is representative of an entire state's (Andhra Pradesh) rural population, and for which the data is publicly available. The key findings from the survey are as follows:

BORROWING

- A high percentage (93%) of rural households in Andhra Pradesh have a loan from some source, though most of this debt is from informal sources.
- Despite concerns of overborrowing from microfinance institutions (MFIs), only a small share of rural households (11%) had a loan outstanding from an MFI, compared to 54% of households that had a loan outstanding from an SHG, 17% who had loans outstanding from a moneylender and 37% that had bank loans. For all household types, MFI loans represented a small share of overall borrowing and having more than one MFI loan outstanding at a time is quite rare.
- Roughly three quarters (72%) of rural households had a member who belonged to an SHG.

- Multiple borrowing is very common – an estimated 84% of rural households had more than one loan outstanding – but this number is primarily driven by households that have multiple loans from informal sources.
- Of those households that have an MFI loan outstanding 82% have other formal loans outstanding. This figure was 58% for households that have SHG loans and 74% for households that have bank loans.

SAVINGS

- A high percentage (79%) of households in rural Andhra Pradesh have access to a savings account.
- Only a small proportion of savings accounts (14%) were opened for the purpose of savings. Many accounts were instead opened for the purpose of receiving government benefits or to help in receiving a loan.
- Perhaps because they were not opened for the purpose of savings, a large share of savings accounts (approximately 41%) appear to be completely dormant or are used only to receive government benefits. Yet even excluding accounts which appear to be dormant, the percentage of households with an active savings account remains relatively high at 61%.
- Many (36%) unbanked households own a mobile phone and most households who own a mobile use it regularly.

Introduction

Access to finance allows the poor to make investments to increase their income, better smooth consumption, and protect against shocks such as bad weather or illness.¹ The importance of access to finance for reducing poverty and allowing the poor to lead more fulfilling lives has long been recognized by policymakers in India. Indeed, many of the country's key banking policies since independence - from the creation of the cooperative banking sector to the nationalization of private sector banks in 1969 and 1980- were initiated with the aim of increasing access to appropriate financial products. Recently, the government and central bank have set upon the task of increasing financial inclusion with renewed zeal. The central government has formed two high-level committees (the Committee for Financial Inclusion and the Committee for Financial Sector Reforms) with mandates to investigate what can be done to increase financial inclusion;² and the Reserve Bank of India (RBI) has pushed banks to make basic "no frills" accounts available to low income households,³ allowed banks to reach out to customers through agents (or "business correspondents"),⁴ and relaxed restrictions on the placement of new ATMs. In addition, with the rise of microfinance, a large number of non-bank organizations now seek to increase the poor's access to financial services.

Yet despite (and in part because of) this focus on financial inclusion,⁵ many questions about the state of financial inclusion in the country remain unanswered. While several excellent surveys have been conducted in the past,⁶ increases in financial access and the proliferation of new types of financial service providers have rendered much of the information gathered by

these surveys out-of-date. Currently, we do not have accurate estimates of the number of people reached by several types of financial service providers (in particular, microfinance institutions (MFIs)). We do not know how the demographic and economic characteristics of the clients of different financial service providers (as well as those who have not been reached by any financial service provider) vary. Nor do we know the reasons for or the extent of multiple borrowing. This lack of knowledge about the current state of financial inclusion hampers efforts to craft appropriate policies to further increase financial inclusion, makes it more difficult for financial institutions to choose appropriate expansion locations, and introduces the risk that we are ignoring significant distress-induced multiple borrowing.

In this report, we present preliminary findings from a detailed survey of access to finance conducted in rural areas of Andhra Pradesh, the state in which microfinance has achieved its greatest success to date in India. The survey is, to the authors' knowledge, the first survey which includes detailed information on microfinance, which is representative of an entire state's rural population, and for which the data is publicly available.⁷

This report is organized as follows:

We first provide some context for the results by describing the history of microfinance in Andhra Pradesh and the current landscape of financial services providers serving the poor. The subsequent sections contain the main findings from the survey. In the appendices, we provide an overview of the methodology used to conduct the survey and describe how researchers and other interested parties may access and use our data.

1. For a general discussion on the importance of access to finance see Armendáriz and Morduch (2005) and Beck and Demirgüç-Kunt (2008). For more detailed discussion of the specific financial needs of the poor see Collins et al (2009).

2. The reports of these committees are now publicly available. See references section for links to the reports.

3. For more information on the RBI's push to make "no frills" accounts available to low income households see Ramji (2009) and Thyagarajan and Venkatesan (2008).

4. For more information on the RBI's business correspondent model see Kobishyn et al (2009).

5. We use the term "financial inclusion" to mean convenient and affordable access to those financial products needed by a household. As this report seeks only to describe the current situation with regard to access to finance rather than to make statements as to what should be the situation with regard to access to finance, a more precise definition of the term is not necessary.

6. The National Sample Survey Organisation conducts a nationwide survey of access to several types of financial services (the All India Debt and Investment Survey or AIDIS) on a decadal basis which is available for a nominal fee. The AIDIS was last conducted in 2003 and does not contain information related to microfinance borrowings though. A private company, IIMS Dataworks, conducted a nationwide survey of access to several financial services in 2007. The survey, while excellent, does not contain detailed questions related to microfinance.

Microfinance in Andhra Pradesh

For good reason, Andhra Pradesh has often been labeled the “Mecca of Microfinance” in India. According to the best estimates available, penetration rates of microfinance in Andhra Pradesh are far higher than in any other state in India;⁸ several of India’s largest MFIs including SKS, Spandana, BASIX, and Share are based in Andhra Pradesh and began operations in the state; and the state is home to India’s largest state-led microfinance initiative – the Velugu program.

The origins of microfinance in Andhra Pradesh can be traced back to government-led attempts to form “Self Help Groups (SHGs),” or groups of 12 to 20 (mostly) women which collect regular savings from members and make loans internally to members. The government first formed SHGs through the Development of Women and Children in Rural Areas (DWCRA) program. Nationally, 2,73,000 groups (2.73 lakhs) were formed under the program until its absorption into the larger Swarnajayanti Gram Swarajgar Yojana (SGSY) program in 1999.⁹ However, the formation of SHGs on a large scale did not take off until the creation of the SHG-Bank Linkage Program (SBLP) in 1992. Under the program, India’s apex agricultural development bank, the National Bank for Agriculture and Rural Development (NABARD) provided a set of incentives for banks to lend to SHGs that adhered to certain guidelines, such as collecting regular savings from group members.¹⁰

In 2000, SHG promotion in Andhra Pradesh was massively expanded with the launch of the 5-year Andhra Pradesh District Poverty Initiatives Project (APDPIP). The program, known locally as Velugu, was modeled after an earlier program led by United Nations Development Program.¹¹ The initiation of this program marked a watershed for microfinance in the state. The formation of SHGs increased immensely and, as a result, close to half of all bank-linked SHGs were originally located in Andhra Pradesh.

As the SHG movement was being scaled up in the late 1990s, private microfinance institutions also began entering the state. In 1996, Vijay Mahajan created the MFI BASIX, with funding from the Ford Foundation, the Swiss Agency for Development and Cooperation and the Sri Ratan Tata Trust.¹² BASIX’s for-profit model and reliance on loans and equity rather than grants for financing marked a first not just for Andhra Pradesh, but for India as well.¹³ Other major MFIs, including SHARE, Spandana, and SKS soon followed suit, converting from non-profit societies to for-profit Non-Banking Finance Companies (NBFCs).

Since 2000, the outreach of private MFIs in Andhra Pradesh has grown at a frenetic pace, with the total number of borrowers more than doubling each year. In 2005, several of the fastest growing MFIs in the world were based in Andhra Pradesh.¹⁴ At times, this explosive growth has led to tension between MFIs, the clients they serve, and government officials. In 2006, Andhra Pradesh was the site of the first large-scale confrontation between microfinance borrowers and MFIs in the country. Borrowers in two districts of Eastern Andhra Pradesh (Krishna and Guntur) protested against what they claimed were exorbitant interest rates and unfair business practices. Local bureaucrats quickly intervened, shuttering several MFI offices and publicly stating that borrowers need not repay loans. While the crisis was eventually resolved and an agreement was reached between the MFIs and local government officials, the MFIs in the area suffered a huge write-off as a result of the crisis.¹⁵ Since this first crisis, the microfinance sector in Andhra Pradesh has continued to grow at a rapid pace. At the time of publication of this report, Andhra Pradesh was in the midst of its second crisis, fueled by stories that over-indebtedness and coercive collection practices have led to borrower suicides.

7. Due to difficulties in surveying in one area of Andhra Pradesh, the survey results are representative of the entire rural population excluding Krishna district in which surveying proved impossible. See appendix A for more details on the sampling methodology and the reasons for this exclusion.

8. Making comparisons of microfinance penetration between areas is difficult due to the lack of comprehensive information on the outreach of private MFIs. Yet based on outreach figures from the largest MFIs and official statistics on SHGs, microfinance penetration in Andhra Pradesh is far higher than in other parts of the country. (See the Centre for Micro Finance’s Map of Microfinance, located at <http://ifmr.ac.in/map>, for more information.)

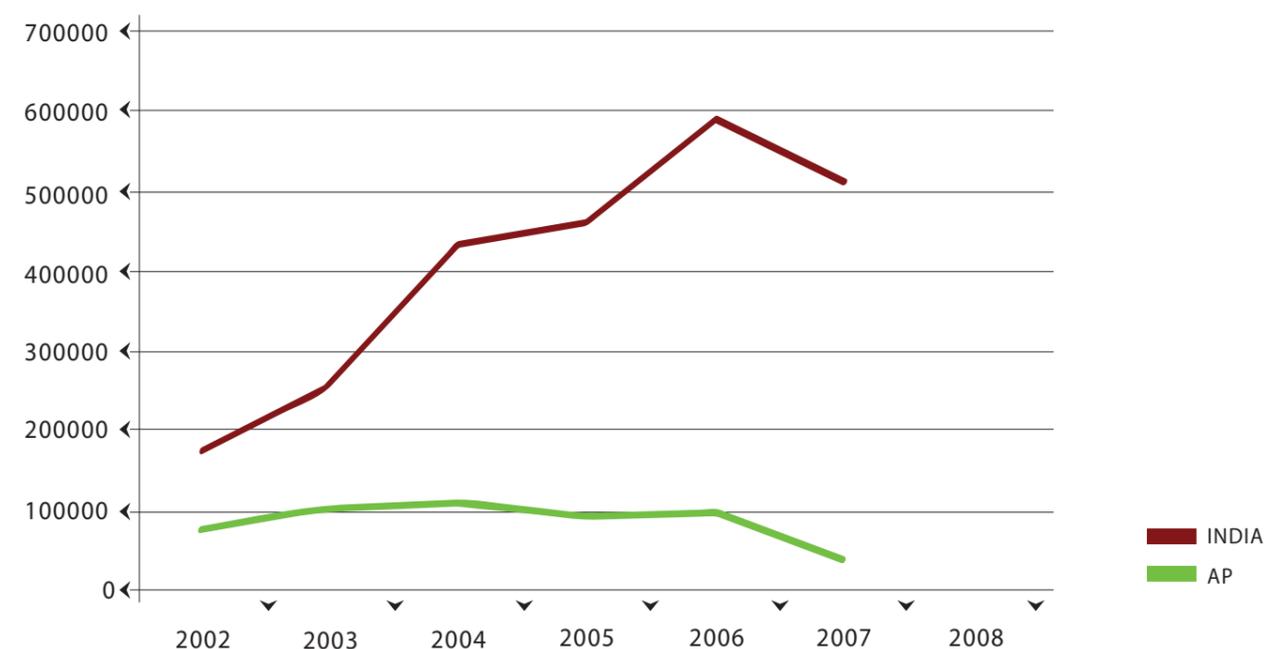
9. Department of Rural Employment and Poverty Alleviation. “Annual Report: 1998-1999.” Ministry of Rural Development, New Delhi: 1999.

10. Fernandez, Aloysius P. “History and Spread of the Self-Help Affinity Movement in India: the Role Played by IFAD.” Occasional Paper Series, IFAD, July 2007. < <http://www.ifad.org/operations/projects/regions/pi/paper/3.pdf>>

11. Deininger, Klaus and Yanyan Liu. “Economic and Social Impacts of Self-Help Groups in India.” Policy Research Working Paper 4884, World Bank, March 2009.

12. Sriram, MS. “Commercialisation of Microfinance in India: A Discussion on the Emperor’s Apparel.” Working Paper No 2010-03-04, Indian Institute of Management, Ahmedabad, March 2010.

Growth of SBLP in India versus AP



Source: NABARD

Note: The India numbers exclude groups linked in Andhra Pradesh. In addition, these numbers only reflect new group linkages provided by banks refinanced by NABARD - in reality, the number of SHGs in India and Andhra Pradesh will be much higher, including SHGs that have instead received funding from NGOs, banks that did not require refinancing, SHGs and SHG federations that extended loans directly, and groups that have received repeat linkages.

13. Interview with Vijay Mahajan, Access Development Services, Contribution to the Sector Award, 2009. <http://www.microfinanceindia.org/download_reports/awards_brochure_2009_mahajan.pdf>

14. www.themix.org

15. The Andhra Pradesh crisis is often portrayed as either the natural outcome of the immoral behavior of overly profit-seeking MFIs or, alternatively, as the product of bureaucrat’s jealousy over MFIs’ success compared to the state-led SHG program. The reality is much more subtle and complex. For an excellent account of the crisis, see Prabhu Ghatge’s analysis in the Microfinance India State of the Sector Report, 2006. < http://www.microfinanceindia.org/download_reports/state_of_the_sector_06.pdf>

Catalogue of Financial Services Providers

The poor in India access financial services from a variety of different providers. We briefly describe the most important of these providers and how they are regulated (if at all), the types of products they offer, and their overall size and market penetration below. We have loosely categorized financial service providers into the groups “formal,” “semi-formal,” and “informal” below based on whether the entities are (typically) regulated by the RBI, regulated by some other agency, or not

regulated at all. In many cases though, the distinction between these categories is blurred. (For example, a few microfinance institutions such as SEWA and BASIX own registered banks. Some chit funds and even a few moneylenders are registered as formal institutions. And the cooperative banking sector and regional rural banks are supervised by NABARD rather than by the RBI directly.)

Table 1: Formal Financial Service Providers in India

ENTITY	DESCRIPTION	EXAMPLES OF PRODUCTS OFFERED	EXAMPLES	PENETRATION ¹⁶
Public sector commercial banks	Commercial banks in which the government owns a majority stake.	Various	State Bank of India - State Bank of Hyderabad - State Bank of India	- 27 banks - 55,921 total branches
Private sector commercial banks	Commercial banks in which the government does not have a majority stake.	Various	- ICICI - Axis Bank - HDFC	- 22 banks - 8,965 total branches
Regional Rural Banks (RRBs)	Special type of commercial bank with an explicit mandate to focus on rural operations. All RRBs are owned in part by the central government, in part by the government of the state in which they operate, and in part by a single commercial bank. RRBs may only conduct operations in a single state and are supervised by NABARD.	Various, with focus on loans for agricultural purposes	- Andhra Pradesh Grameena Vikas Bank - Andhra Pragathi Grameena Bank	- 86 banks - 15,144 total branches
District Central Cooperative Banks (DCCBs)	Second tier in the rural cooperative banking structure. In addition to serving as a source of financing for PACs (see below) by borrowing from State Cooperative Banks and on-lending to PACs, DCCBs also directly offer one product, Kisan Credit Cards, to farmers. DCCBs are supervised by NABARD.	DCCBs' only product directly offered to customers is the Kisan Credit Card, a line of credit which allows farmers to purchase agricultural inputs, such as seeds and fertilizers, in a timely manner.		-371 banks (March 2008)
Primary Agricultural Cooperative Societies (PACs)	Bottommost tier of the rural cooperative banking system. PACs focus primarily on providing credit for agricultural purposes and are regulated by NABARD.	- Crop loans		- 94,942 total (end March 2008) - Average of 7 villages covered by each PAC - 131 million members (79 million borrowers)

16. All statistics taken from the Reserve Bank of India's "Report on Trend and Progress of Banking in India 2008-2009" unless otherwise specified.

17. India Post Annual Report, 2008-2009

18. Reserve Bank of India, "List of Deposit Taking Companies Cat 'A'"

19. Statistics taken from "Microfinance India State of the Sector Report 2009" unless otherwise cited

ENTITY	DESCRIPTION	EXAMPLES OF PRODUCTS OFFERED	EXAMPLES	PENETRATION
Post office ¹⁷	In addition to delivering mail, India Post offers a variety of financial services such as money transfers and recurring deposit accounts. India Post is regulated and supervised by the Ministry of Finance rather than the RBI.	- Small Savings schemes— basic, recurring, time deposit, monthly income, national savings certificate, etc. - National Rural Employment Guarantee Act (NREGA) wage disbursement - Old-age pension disbursement - Money Transfer		- 154,000 branches - 174 million savings accounts - Rs. 5.64 trillion outstanding - 21 million NREGA accounts (Dec 2008)
Insurance companies	Public and private insurance companies offer a variety of insurance products. Insurance companies are regulated and supervised by the Insurance Regulatory and Development Authority (IRDA).	- Various insurance products - health, life, accident, home, motor, travel - Pension plans	- Life Insurance Corporation of India - ICICI Prudential	
Central and state governments	In some instances, central and state government directly provide financial services to citizens.	- Health insurance	- Rajiv Gandhi Aarogyasri Community Health Insurance for BPL card holders	- As of January 2010, 27,00,000 (27 lakh) screenings have been conducted and 5,00,000 (5 lakh) treatments have been provided under the Rajiv Gandhi Aarogyasri health insurance program
Deposit taking Non-Bank Finance Companies	In addition to formal banks and the post office, non-banking finance companies which satisfy certain regulatory requirements such as maintaining a 200 lakh net owned fund may accept deposits from the public.	- Fixed deposits minimum 12 months at a max interest rate of 12.5% - Recurring deposits	- Sahara - Peerless	- 314 such institutions as of January 2010 ¹⁸ - Of these, 8 are registered in Andhra Pradesh

Table 2: Semi-Formal Financial Service Providers in India¹⁹

ENTITY	DESCRIPTION	EXAMPLES OF PRODUCTS OFFERED	EXAMPLES	PENETRATION
Microfinance Institutions (MFIs)	Private providers of microfinance loans. May take a variety of institutional forms, but the largest MFIs are typically registered as NBFCs and as such are regulated by the RBI.	- Joint liability group loans – Group loans in which all members of a group (typically 5 members in size) are jointly responsible for all group members' repayments. Tenure of loan is typically one year and repayments are most often weekly	- SKS - Spandana - Share	- Approximately 250 MFIs - 20 million clients in India (25 %, or nearly 5 million in Andhra Pradesh) - Rs. 117 million outstanding (2009) - Rs. 5200 average per capita outstanding
Self Help Groups (SHGs)	Groups of 10-15 which borrow from (typically) a bank or (less commonly) other lender and lend internally to members. The SHG model of microfinance differs from the MFI model in that SHGs typically borrow from banks and lending decisions are made internally by the group itself. NABARD provides financial incentives to banks to support SHG lending.	- Various types of loans		- 2.8 million SHGs - Rs. 241.9 million outstanding (as of March 2009) - 54.3 million clients in India (29 %, or 15.8 million in Andhra Pradesh)

Table 3: Informal Financial Service Providers in India

ENTITY	DESCRIPTION	EXAMPLES OF PRODUCTS OFFERED	EXAMPLES	PENETRATION
Money-lenders	Any informal lender. There are a variety of types of moneylenders active in India – shopkeepers who lend in kind, crop traders who lend against purchase of harvest, landowners who lend to tenants, and jewellery merchants who lend against jewellery as collateral are just a few of the better known types of moneylenders	- Traditional cash loans - Agricultural input loans (direct provision of seeds, fertilizers, etc.)		
Chit funds	A type of revolving credit fund in which members contribute a pre-determined amount at specified intervals and auction the entire amount each meeting to one member. ²⁰ Large chit funds are typically formally registered while smaller chit funds often operate without any formal registration.	- Chit loan	- Shriram Chits	As of November 2009, 100 chit funds are registered under the Madras Chit Funds Act and another 70 under the 1982 Chit Funds Act. ²¹

Overview of Saving

A large proportion of households have a formal savings account.

Over the past several years, the RBI has launched several initiatives to increase access to savings accounts throughout the country. First, in 2005 the RBI instructed banks to make basic “no frills” accounts with low or minimal balance requirements and usage fees available to the poor. Second, the RBI relaxed the Know-Your-Customers (KYC) requirements for these no frill accounts to make it easier for poor customers, who often lack identity documents, to open accounts (The other goal of the initiative was to reduce the burden of paperwork for banks.) Third, in 2006 the RBI launched a “100% financial inclusion drive” in which at least one district in each state was targeted for 100% financial inclusion.²² Under the drive, banks were assigned responsibility for opening at least one basic savings account for each financially-excluded household in a given area in each district selected for the drive. Civil society and the media were engaged to create awareness of the program and to highlight the benefits of having a bank account to the poor.²³ Recently, the state government has also played a major role in increasing access to formal savings accounts in Andhra Pradesh. Over the past three years, the state government has made a concerted effort to deliver all wages to participants in NREGA (a national workfare program)

through a formal savings account (typically a post office account).²⁴ While the primary motivation for using formal savings accounts to deliver NREGA wages was to reduce corruption, the policy also had a substantial impact on access to savings accounts because many NREGA participants lacked a formal savings account prior to adoption of the policy.

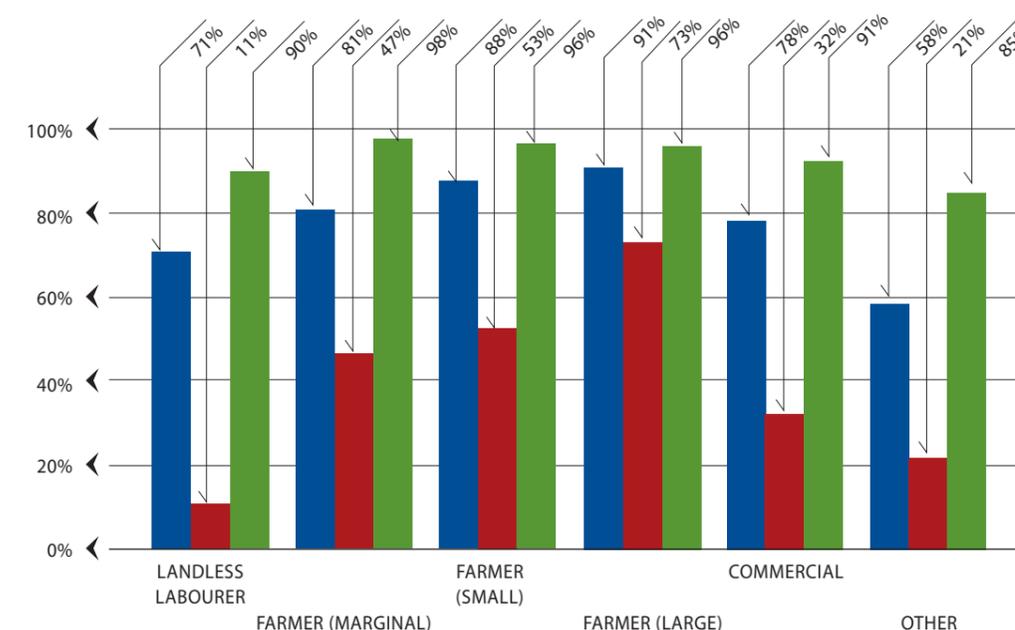
Results from the survey show that the cumulative effect of these policies has been a large increase in the share of rural households with a formal savings account. Table 4 shows the penetration rate of formal savings accounts by bank type. Overall, a staggering 78% of rural households now have access to a formal savings account. While earlier estimates of the share of rural households in Andhra Pradesh that have access to a formal savings account are not available, a similar study by the World Bank and NCAER in 2003 found that only 41% of rural households in both Andhra Pradesh and Uttar Pradesh had access to a savings account (Basu and Srivastava, 2005). Further, this same study found that access to savings accounts was concentrated in the hands of the relatively well-off: only 30% of marginal farmers and landless labourers in rural Andhra Pradesh and Uttar Pradesh had a formal savings account. In contrast, our survey finds that at the time of the survey over 70% of landless labourers and marginal farmers in rural Andhra Pradesh had access to a savings account.²⁵

Table 4: Share of Rural Andhra Pradesh Households with a Savings Account by Bank Type

BANK TYPE	SHARE OF HOUSEHOLDS WITH SAVINGS ACCOUNT	SHARE OF HOUSEHOLDS WITH SAVINGS ACCOUNT (EXCLUDING 0 AND RS 50 BALANCE ACCTS)*
Private Sector Bank	1%	1%
Public Sector Bank	41%	36%
Regional Rural Bank	14%	13%
Cooperative Bank	14%	12%
Post Office	42%	11%
Any of the above	79%	61%

*Source: Centre for Micro Finance, IFMR Research. “Access to Finance in Rural Andhra Pradesh 2010.”

Figure 2: Financial Inclusion by Occupational Category



SHARE WITH SAVING ACCOUNT

SHARE WITH LOAN FROM FORMAL SOURCE

SHARE WITH LOAN FROM ANY SOURCE

Source: Centre for Micro Finance, IFMR Research. “Access to Finance in Rural Andhra Pradesh 2010.”

20. An example may serve to make the concept clearer: 20 members join a “chittie” and agree to pool Rs. 200 monthly. Each month, an auction is held in which members bid for the pool. The highest bid will translate to a percentage deduction from the entire amount (example a bid of 20%). The winner will receive the pool minus the deduction amount (Rs. 8000), while the remaining members will receive an equal percentage of the deduction amount (Rs. 2000). This would continue for 20 months, and the final member would receive the entire pool without penalty of deduction.

21. Department of Chit Funds. (2009). “List of Chit Fund Companies Working Under the Chit Funds Act, 1982.”

22. While initially only one district in each state, selected by the State Level Bankers’ Committees, was to be included in 100% financial inclusion drive later the drive was expanding to include many more districts. See Thyagarajan, S and Jayaram Venkatesan (2009).

23. The following districts in Andhra Pradesh have claimed to have achieved 100% financial inclusion under the drive: Srikakulam, Nizamabad, Rangareddy, Chittoor, Warangal, Kadapa, Nellore, Prakasam, Kurnool and Ananthapur. Out of these districts, three (Nizamabad, Kadapa and Prakasam) were included in this survey.

24. While all state are technically required to deliver NREGA wages via a formal account by the Ministry of Rural Development the extent to which states have adhered to this mandate has varied greatly.

A large portion of savings accounts are not used for saving.

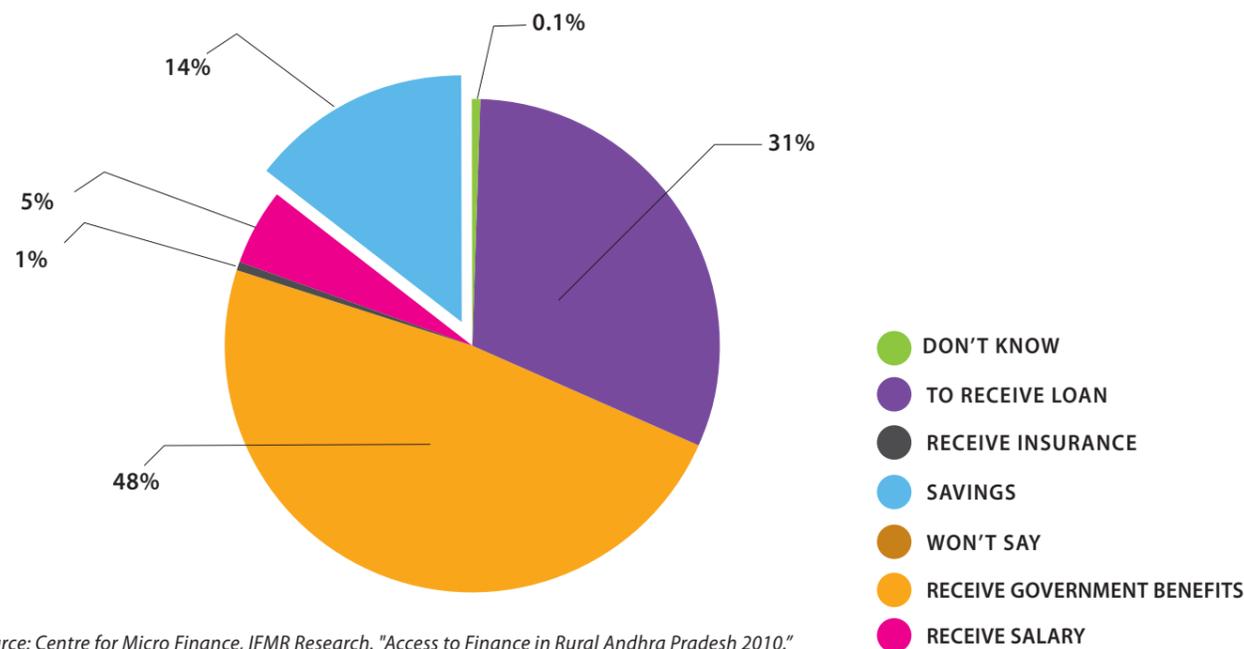
While the share of rural households with access to a savings account is high, only a small minority of these accounts (14%) were opened for the purpose of savings. The vast majority of accounts (79%) were opened either to receive government benefits or to increase the chances of receiving a loan. This is especially so in the case of post office savings accounts, most of which were opened for the purpose of receiving government benefits, and savings accounts at co-operative banks, most of which were opened for the purpose of obtaining a loan.

In light of the policy initiatives described earlier, these results are hardly surprising. Most post office savings accounts were likely opened for the express purpose of receiving NREGA wages while many bank accounts were likely opened as part of the 100% financial inclusion drive, not due to a customer directly requesting an account. These findings do not necessarily imply that the account holders do not use their accounts for savings. An account opened for a purpose

other than savings may still be used for saving at a later date. Indeed, instilling savings behaviour in beneficiaries is a much cited reason for delivering government benefits through formal savings accounts.²⁶

Yet a closer look at savings account balances reveals that a large percentage of savings accounts held by rural households remain dormant: 13% have a balance of 0 rupees and 29% have a balance of 50 rupees.²⁷ The high rate of account dormancy is driven primarily by accounts opened for the purpose of receiving government benefits – 76% of accounts opened to receive government benefits had a balance of Rs. 0 or Rs. 50. Column 3 of Table 4 displays the share of households that hold a savings account with a balance not equal to Rs.0 or Rs. 50 from each type of bank, the post office, and overall. While the overall rate of access to a formal savings account, at 61%, is still very high when dormant accounts are excluded, it is significantly lower than the unadjusted figure which includes dormant accounts.

Figure 3: Stated Reasons for Opening Savings Account



Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."

25. An explanation of how households were assigned occupational categories may be found in Appendix C. Please note that the methodology for assigning occupational categories used in this report differs slightly from that used by Basu and Srivastava (2005).

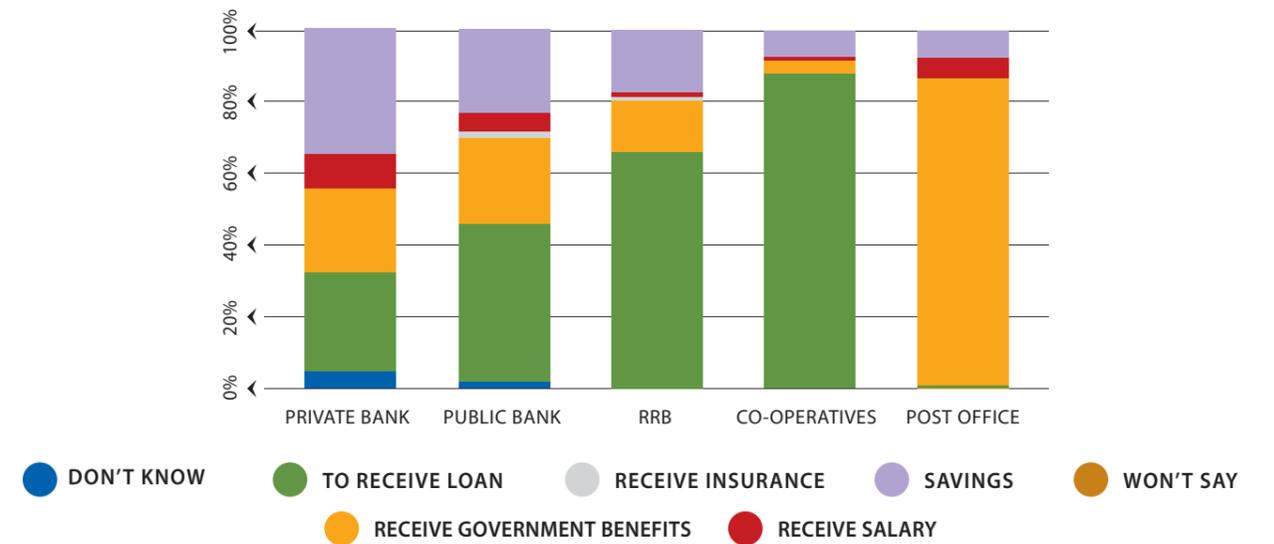
26. See, for example, comments made by PC Jaffer, former district program coordinator for NREGA in Gulbarga District of Karnataka, available at <http://www.solutionexchange-un.net.in/NREGA/documents/NREGA-Gulbarga.pdf>

27. "No frills" accounts commonly have either zero balance or a Rs. 50 minimum balance requirement.

28. For an explanation of how occupational categories of households are determined please see Appendix C.

29. The Progress out of Poverty Index (PPI) is a simple poverty scorecard developed by the Grameen Foundation. A household's score on the PPI may be used to determine the likelihood that the household falls below various poverty lines with lower scores corresponding to a higher likelihood that the household falls below a poverty line. PPI scores may be averaged across households to arrive at a poverty rate for the entire group. For more information on the progress out of poverty index see www.progressoutofpoverty.org.

Figure 4: Stated Reasons for Opening Savings Account by Bank Type



Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."

Cooperative banks perform relatively well in reaching out to marginal farmers while public banks and the post office perform well in reaching out to landless labourers.

Figures 5 and 6 display the proportion of clients from each broad occupational category by bank type.²⁸ The average score of clients of different bank types on the Progress out of Poverty Index (PPI) is shown in Figures 7 and 8.²⁹

The graphs reveal that cooperative banks, true to their mandate, have a disproportionately large share of marginal

farmers among their clients compared to other types of banks. Likewise, public sector banks and the post office count a relatively large share of landless labourers among account holders. This finding does not change when zero balance accounts are excluded from the analysis, indicating that the policy of opening post office accounts for NREGA workers is not the primary driver of these results.

Financial Exclusion

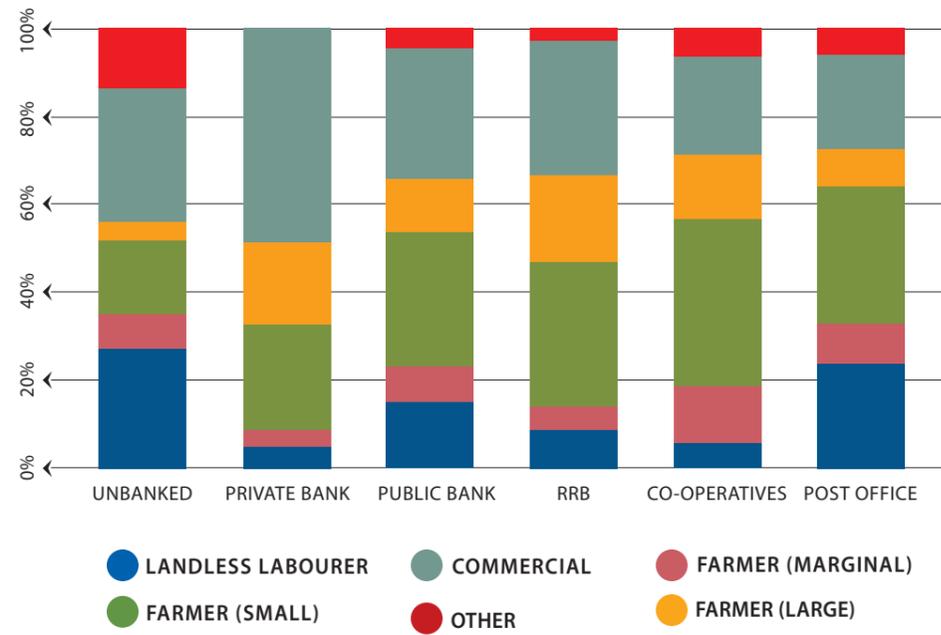
Given the importance of financial exclusion, our report investigates the nature of financial exclusion and major reasons leading to the financial exclusion of the households. Financial exclusion is often characterized as an outcome of poverty fueled by unavailability of appropriate service providers catering to the need of the poor. Unsurprisingly, unbanked households tend to be poorer than the banked and clients of private banks tend to be richer than clients of other banks, regardless of whether zero balance accounts are

included. This is demonstrated visually in the box plots below. In addition, the difference between the mean PPI of unbanked households and the mean PPI of banked households is statistically significant,³⁰ regardless of whether zero-balance accounts are included. Similarly, the difference between the mean PPI of households that have an account at a private bank and the mean PPI of households without an account at a private bank is also statistically significant,³¹ regardless of whether zero-balance accounts are included.

30. At the 1% level of significance based on a two way t-test.

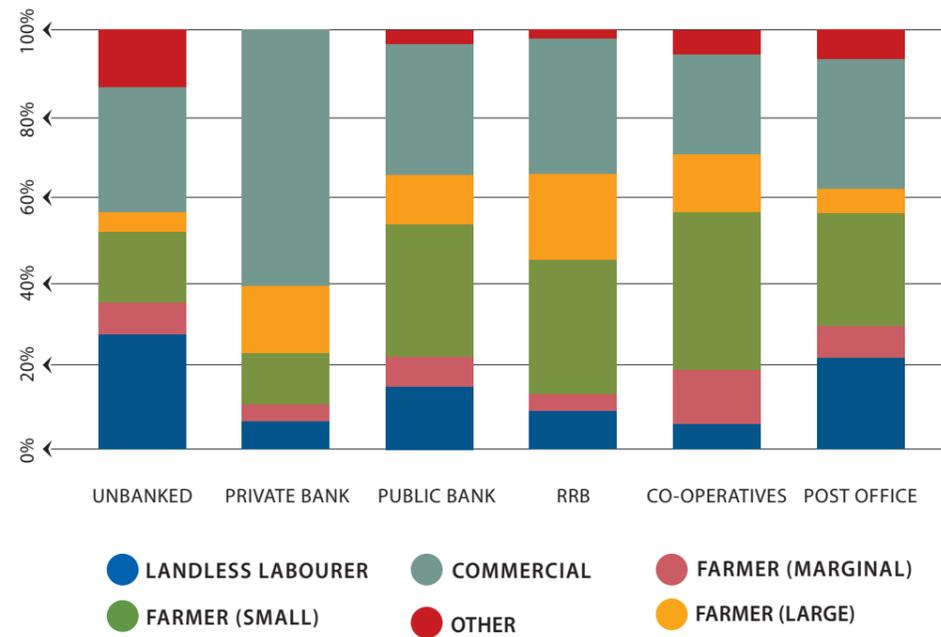
31. At the 5% level of significance based on a two way t-test.

Figure 5: Client Profile by Bank Type



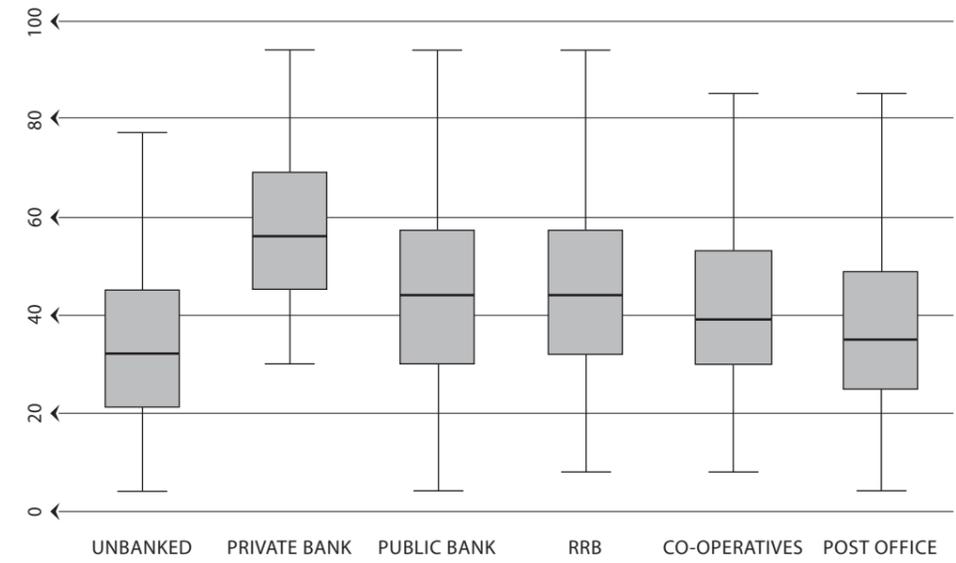
Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."

Figure 6: Client Profile by Bank Type (excluding 0 balance accounts)*



Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."

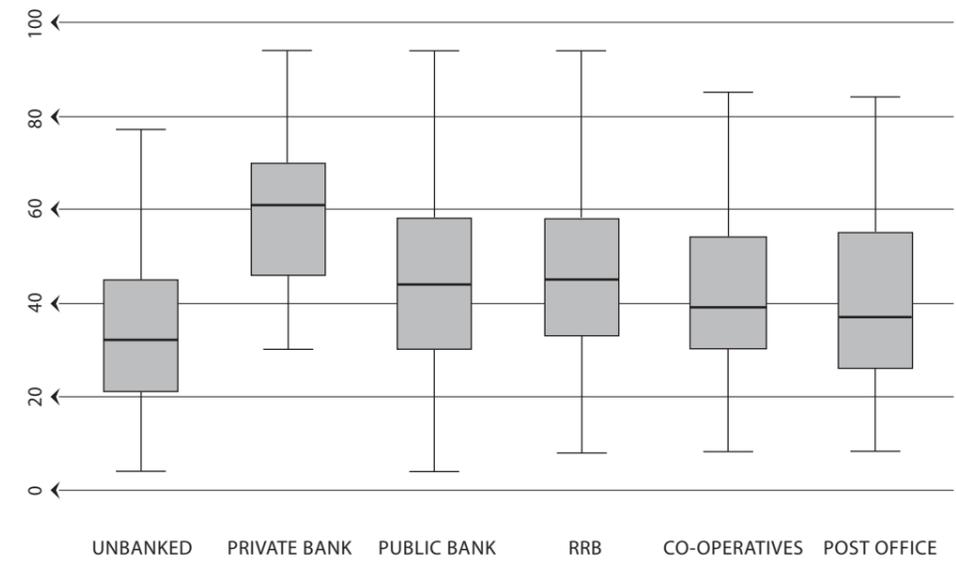
Figure 7: PPI of Account Holders by Bank Type*



*Middle lines within boxes correspond to median PPIs for respective bank type. Lower edges of boxes correspond to median PPIs for respective bank type. Lower edges of boxes correspond to 25th percentile and upper edges of boxes correspond to 75th percentile PPI value for respective bank type.

Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."

Figure 8: PPI of Account Holders by Bank Type (excluding 0 balance accounts)*^



* Accounts with Rs.50 balance also excluded.

^Middle lines within boxes correspond to median PPIs for respective bank type. Lower edges of boxes correspond to median PPIs for respective bank type. Lower edges of boxes correspond to 25th percentile and upper edges of boxes correspond to 75th percentile PPI value for respective bank type.

Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."

Households without a savings account cite insufficient savings, lack of awareness of savings products, and lack of need as their primary reasons for not opening an account.

Investigating the reasons leading to financial exclusion, we found interesting results that show while 37% of the excluded households cited the insufficiency of funds as a reason for not having a savings account, almost half of the excluded households (49%) cited a reason related to banks or the procedure of opening an account (such as having little knowledge about banks/their products, not having proper

documentation required for opening an account, fees/expenses etc.). A large percentage (28%) cited lack of awareness of the banks and their products as their reason for not opening an account while 16% cited lack of required documentation. Surprisingly, very few unbanked households cited distance to a bank branch, trustworthiness of the bank, or the attitude of bank employees as reasons for not opening an account.

Table 5: Stated Reasons for Not Availing Savings Account among Financially Excluded

REASON	PERCENTAGE OF HOUSEHOLDS CITING REASON
No or not enough savings for bank account	37
Don't want/need	24
Save through other means	1
Bank / Procedure related	49
• Have no idea about banks or bank products	28
• Don't have proper documentation	16
• Fees/expenses	5
• Applied but rejected	3
• Procedures/application too difficult to understand	2
• Takes too much time	1
• Banks not trustworthy	1
• Branch officials not friendly/courteous	0.5
• Branch too far	0.2
Other reasons	2

Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."

Many unbanked households own mobile phones.

Over half (51%) of rural households have mobile phones. Almost all households who own a mobile use the phone regularly. Interestingly, 36% of households with no savings account own at least one mobile phone. (If Rs. 0 and Rs. 50 balance accounts are excluded, this figure does not change.) These figures suggest that mobile banking may hold significant potential as a method of providing financial services to the unbanked.

Overview of Borrowing

The overall rate of indebtedness is extremely high.

Our survey reveals that overall rates of indebtedness, from virtually all sources, are much higher than previously estimated. According to the 2003 round of the All India Debt and Investment Survey (AIDIS) conducted by the National Sample Survey Organization, 33% of rural households in Andhra Pradesh had a loan outstanding from any source, 11% had a loan from a formal source, and 25% had a loan from an informal source at the time of the survey (2003). Data from our Access to Finance survey shows that the current overall rate of indebtedness in rural Andhra Pradesh (to any source), at 93%, is much higher than previously estimated. Additionally, we find that 37% of households have a loan from a formal source, 82% have a loan from an informal source, and over half have a loan from either a MFI or an SHG – a loan category that was so negligible at the time of the AIDIS that it was not included in the survey.

It is unclear how much of the discrepancy between our estimates and that of the NSSO is due to differences in survey methodology and how much is due to actual changes in rates of indebtedness between the survey periods.³² Nevertheless, our data indicate that actual rates of indebtedness are much higher than previously estimated.

The average and median amounts of total outstanding loans from all sources (formal, semi-formal, and informal) were also relatively high. Table 8 displays these amounts, broken down by household occupational profile as well as by religious/caste affiliation (scheduled caste, scheduled tribe, and Muslim households). Notably, large farmers borrowed an average of well over Rs. 1,00,000 (1 lakh).

Table 6: Percentage of Rural Andhra Pradesh Households Indebted by Source

MAJOR SOURCE	SUB-SOURCE	ESTIMATED SHARE OF HOUSEHOLDS WITH LOAN FROM SOURCE BASED ON ACCESS TO FINANCE SURVEY
Banks	Private	1%
	Public	20%
	RRB	9%
	Coop	10%
	Government Program	0.1%
	All Banks	38%
SHG		54%
MFI		11%
Informal	Moneylender	17%
	Friends (with interest)	57%
	Friends (no interest)	9%
	Employer	3%
	Landlord	21%
	Unknown sub-source	1%
	All informal sources	82%
Any loan source		93%

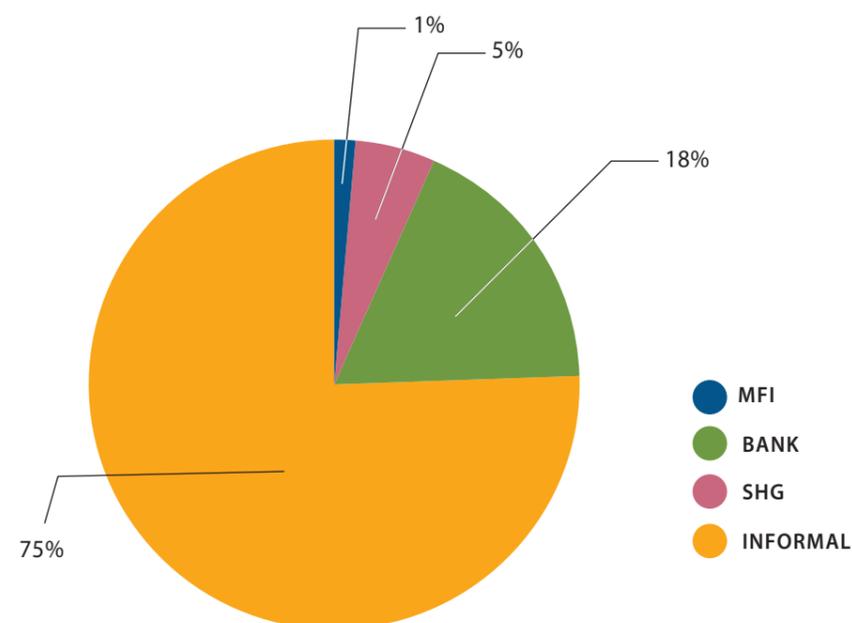
Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."

32. Despite significant effort by the authors to identify substantive differences in the methodologies of the two surveys (e.g. – a definition of what constitutes a loan), we were unable to uncover any differences significant enough to account for these discrepancies.

Table 7: Percentage of Rural Andhra Pradesh Households Indebted, other sources

MAJOR SOURCE	SUB-SOURCE	SHARE OF HOUSEHOLDS WITH LOAN FROM SOURCE
Credit card		1 %
Overdraft		0.1 %
In kind agriculture input loan		12 %
	Without commitment	6 %
	With commitment - portion of harvest must be sold at fixed price to lender	7 %
Routinely purchases from shop on credit		37 %
Member of chit fund		8 %

Figure 9: Total Loan Amount Outstanding by Source



Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."

Table 8: Loan Outstanding per Household by Occupational Category

HOUSEHOLD PROFILE	% WITH OUTSTANDING LOAN	MEAN OUTSTANDING	MEDIAN OUTSTANDING
Landless Laborer	89%	INR 36,933	INR 21,600
Commercial	90%	INR 57,948	INR 33,680
Farmer - Marginal	97%	INR 54,446	INR 37,450
Farmer - Small	96%	INR 77,728	INR 53,000
Farmer - Large	95%	INR 110,534	INR 82,000
Other	85%	INR 48,412	INR 29,500
Scheduled Caste	94%	INR 49,861	INR 31,220
Scheduled Tribe	91%	INR 65,026	INR 30,100
Muslim	84%	INR 55,794	INR 40,200

Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."

Over half of rural households borrow from SHGs, but only around 11% have an MFI Loan.³³

Since the crisis in Krishna and Guntur in 2006 (see section "Microfinance in Andhra Pradesh" above for more information), many in the microfinance community have expressed concern that several areas in South India, the state of Andhra Pradesh in particular, have become oversaturated with microfinance and that borrowers are taking on more debt than they can handle (See, for example, Rozas and Sinha (2009)). While data from this survey does not permit us to assess the truth of this statement as we are unable to determine absolute borrowing capacity, it does

allow us to compare rates of indebtedness to microfinance lenders with indebtedness to other types of lenders.

Data from the survey show that indebtedness to SHGs is indeed quite high at 53%. Indebtedness to MFIs, at 11%, is significant but relatively modest when compared to indebtedness to other major loan providers. (See section "Borrowing by Household Type and Source" below for more detail on indebtedness to MFIs by household type.)

Non-routine expenditures are common and are typically due to a need for medical treatment or festivals. Non-routine expenditures are overwhelmingly financed through savings or informal sources.

A majority (64%) of rural households were forced to make a non-routine expenditure of some type during the six months prior to the survey. By far, the most common reason for incurring a non-routine expenditure was to pay for medical treatment.³⁴ Table 10 shows that households relied almost exclusively on

informal sources to finance these non-routine expenditures. This may be due to a reluctance on the part of formal lenders to lend for non-productive purposes or alternatively, the increased speed or flexibility of informal lenders.

Table 9: Top 5 Non-routine Expenditures

NON-ROUTINE EXPENDITURE	SHARE OF HOUSEHOLDS WHICH INCURRED MAJOR EXPENDITURE ON GIVEN ITEM IN PAST 6 MONTHS
Health	36%
Festival or special event aside from marriage	11%
Marriage	11%
Buy agricultural machinery or inputs	10%
Home improvement/repair/construction	7%
Any non-routine expenditure	64%

Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."

Table 10: Top 5 Sources of Financing for Non-routine Expenditures

SOURCE	SHARE OF NON-ROUTINE EXPENDITURES FINANCED THROUGH A GIVEN SOURCE IN THE PAST 6 MONTHS
Loan from friends/relatives	43%
Own income or savings	29%
Loan from moneylender	13%
Loan from landlord	11%
Loan from MFI/SHG	6%

33. In the Access to Finance survey and in this report, microfinance lending is divided into two primary categories: Self Help Groups (SHGs) and Microfinance Institutions (MFIs). Given the sometimes subtle distinction between these two forms of microfinance, surveyors were given extensive training on how to distinguish between MFI groups and SHGs. If the categorization was not immediately clear from the name and description of the group and organizing entity (which sometimes respondents did not know), surveyors probed further to understand the number of members of the group, management of any group savings, and process for managing and distributing credit. It should also be noted that this distinction between MFIs and SHGs slightly oversimplifies the ground reality of microfinance in India in that MFIs also occasionally lend to SHGs. In cases where a household was a member of an SHG that was created and lent to by an MFI we have classified the loan as an SHG loan. Also, any loan that is received through an SHG is categorized as "SHG" and not as "Bank," although SHG loans themselves frequently originate from banks through the SHG Bank-Linkage Programme.

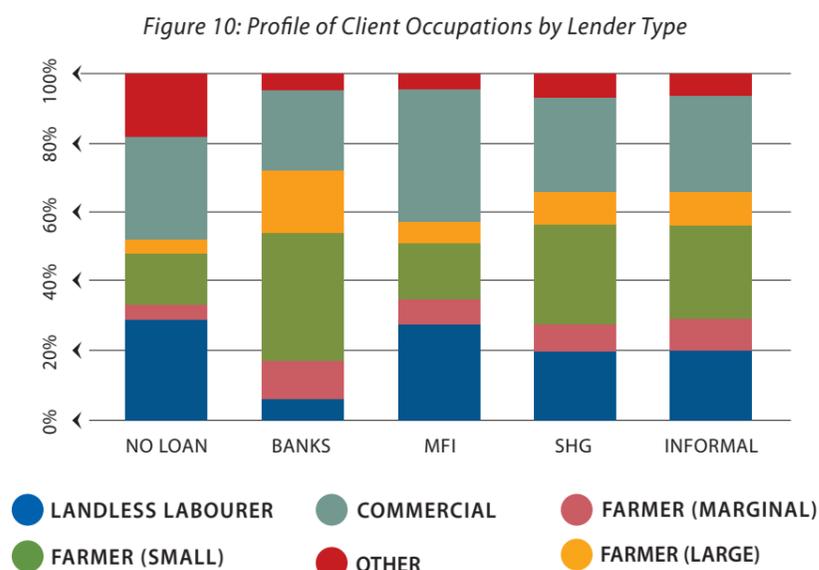
34. This result is especially salient in light of the state government's generous health insurance program which allows any BPL household to receive treatment for a variety of ailments for free at a wide range of both public and private hospitals. See the section on the Arogyasri Health Insurance Scheme below for more details.

Borrowing by Household Type and Source

MFIs reach relatively more landless labourers and fewer farmers than other lenders.

Microfinance lenders, especially MFIs, reach significantly fewer farming households and significantly more landless labourer households than banks. Figure 10 displays the share of households of each occupational type by lender type. The graph

shows that farming households of all types (marginal, small, and large) are not as well represented among MFI or SHG borrowers group but these households make up a relatively larger percentage of households borrowing from banks.



Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."

For all household types, MFI loans make up a very small share of total debt.

Shortly before the publication of this report, the government of Andhra Pradesh passed an ordinance requiring that, among other things all MFIs: register with the state government, submit a list of all borrowers with outstanding loans, and obtain approval in writing before lending to SHG members with loans outstanding from the SHG (Andhra Pradesh State Government, 2010). The ordinance was prompted, in part, by news reports suggesting that levels of indebtedness to MFIs are unsustainable. Many of these reports also claimed that MFIs charge usurious interest rates and employ immoral collection techniques.³⁵

While this survey is unable to shed light on the latter two claims, the data clearly shows that MFI loans, for all household types, make up only a small portion of overall debt. The figures in Appendix F display levels of indebtedness by source and household type along with the average and median outstanding for households of each type by source (provided that households

have at least one loan outstanding from that source). For example, column 1 in Figure 19 displays the mean outstanding from banks for all landless labourer households who have at least one loan from a formal source. Figure 18 shows that the share of the poorest households – landless labourer households – with at least one MFI loan is only slightly higher than the share of these same households with a loan from a bank. Further, Figures 19 and 20 show that the average (median) outstanding in MFI loans for these households is relatively modest compared to the total outstanding from other sources. Similarly, Figures 21, 22 and 23 reveal that MFI loans make up only a modest share of the total borrowing for marginal farmer households. For both of these household types, as well as for the other wealthier household types, overall borrowing, both in terms of the share of households with at least one loan from the source, as well as total amount outstanding, continues to be dominated by loans from informal sources.

Average poverty levels of clients reached by different types of lenders are relatively similar.

Microfinance institutions are widely perceived to reach out to households which are poorer than those reached by banks or other formal lending sources (Morduch, 1999). Yet surprisingly, we find almost no difference in the mean PPIs of clients of different types of lending institutions. While the mean PPI of households with no loan from any source is statistically significantly lower than the mean PPI of households with a loan, there is no statistically significant difference between the PPIs of the set of households borrowing from different lender types.

Due to the limitations of the data on which the index is based, the PPI score is not as accurate an indicator of poverty as measures based on detailed consumption surveys. Further, a simple test of means may hide interesting differences in the distribution of the poverty scores of households which borrow from different sources. Nevertheless, this result shows that the difference in the poverty profiles of borrowers of different lender types may not be as large as many believe.

Households abstain from borrowing for a variety of different reasons.

Appendix D lists the top five reasons households cited for not taking a loan from a specific source. In the case of bank loans, households often cited external factors such as lack of land, lack of a guarantor, a rejected application, and lack of documents,

responses which suggest that there is high pent-up demand for loans from banks.³⁶ A large majority of households with no loans from MFIs cited the inability to make regular payments or to save regularly as a key reason for not taking an MFI loan. Many households that abstained from joining SHGs also cited an inability to save regularly as a barrier, though they did so far less frequently than those who abstained from MFI loans. Several households with no loan from an SHG also cited potential for group conflict and an inability to find a group willing to accept them. Interestingly, these reasons are nearly absent from the list of reasons for not taking a loan from an MFI.

The fact that respondents cited an inability to make regular payments as a reason for not taking a microfinance loan is hardly surprising. Microfinance loans, especially MFI loans, often have rigid and frequent repayment schedules. More surprising is the fact that households without a loan from an informal source also cited an inability to make regular repayments as a major reason for not taking such a loan nearly as frequently as households without loans from MFIs, and more frequently than those without loans from SHGs. This suggests that we should be cautious in inferring that inflexibility of repayment schedules is a major hurdle to households joining SHGs.

A similar pattern emerges in the responses of those who did not participate in a chit fund. This group did not cite lack of trust in chit fund operators, who have been frequently labelled dishonest in the press, as a major reason for their non-participation.

35. Lack of documents was the sixth most common reason for not taking a loan from a bank. An estimated 9.7% of rural households without a loan from a bank did not take a bank loan for this reason.

36. For a detailed account, please refer to the "India Microfinance State of the Sector Report, 2009."

How Do Borrowers use their Loan Money?

Loans from different sources are used for different purposes.

Data on loan usage reveals that loans from different sources are used for different purposes. For example, bank loans are used to finance the purchase of agricultural inputs to a much greater extent than loans from other sources. Loans from informal sources are used for health and marriage-related expenses much more than loans from other sources. And SHG loans are disproportionately used to finance consumption.

The data also reveals that a large percentage of loans are used to repay old debt. While this finding may appear alarming (since it could suggest that households are entering a vicious debt cycle), it may also be the case that households are simply using new loans with lower interest rates or better terms to pay off older loans. (Unfortunately, the survey did not include a question on why the new loan was used to repay the old and thus we are unable to distinguish between these two cases.)

Table 11: Usage of Loan Money by Lender Type

	BANK	MFI	SHG	INFORMAL
Start New Business	2%	3%	2%	1%
Buy agricultural inputs	58%	13%	19%	20%
Purchase stock	3%	10%	4%	3%
Repay old debt	15%	25%	20%	7%
Health	11%	11%	19%	25%
Marriage	4%	5%	2%	12%
Funeral	0.1%	0.2%	0.5%	2%
Other festival	1%	4%	4%	5%
Home improvement	10%	22%	13%	14%
Unemployment	0.0%	0.0%	0.1%	0.8%
Purchase land	1%	1%	1%	1%
Education	4%	4%	6%	5%
Purchase jewellery	1%	1%	2%	0.4%
Consumption	27%	32%	50%	25%
Buy livestock	3%	6%	6%	2%

Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010." Note: Totals may be greater than 100% as loans may be used for more than one purpose

Multiple Borrowing

In January 2009, microfinance operations in Karnataka were disrupted when the Muslim clergy in Kolar district called for a halt in microfinance repayments.³⁷ The resulting Kolar crisis sent the microfinance community in India and abroad abuzz with talk of debt fatigue and over-borrowing. A Wall Street Journal article declared India to be facing an imminent "credit crisis," implying that the sector was approaching bubble conditions (Ghokale 2009). The Kolar crisis was highly reminiscent of the Andhra Pradesh crises, and these events raise serious questions about whether microfinance clients are taking on more debt than they can handle and about the extent of multiple borrowing.

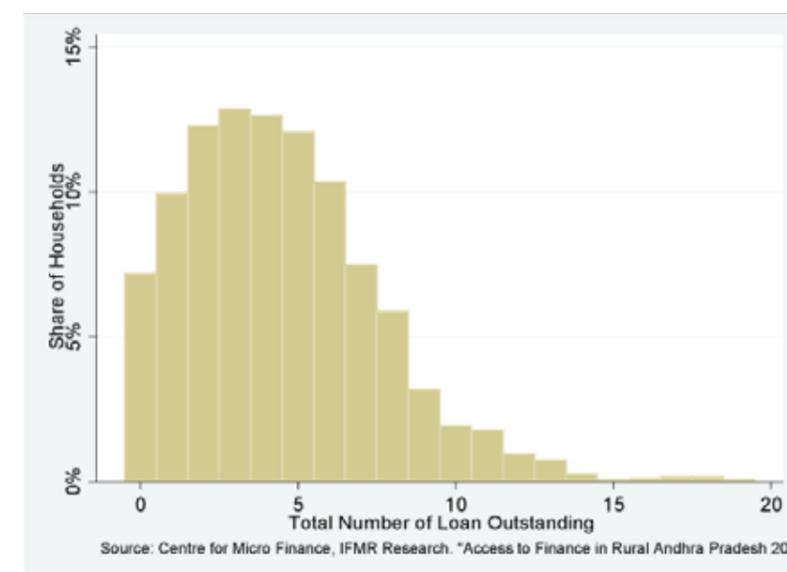
Unfortunately, prior to this survey, there was very little data available on the prevalence of multiple borrowing. In the absence of reliable data on multiple borrowing, researchers have been forced to rely on indirect methods of estimating multiple borrowing (see, for example, Krishnaswamy 2007) or on surveys conducted in small areas with a known high incidence of multiple borrowing (see, for example, Kamath, Mukherji, and Ramanathan 2008, or APMAS 2006). While such studies may provide a general range for the extent of multiple borrowing overall, or precise estimates for specific areas, they do not answer the much larger question of how prevalent multiple borrowing is overall.

The lack of hard data on multiple borrowing has led to wildly divergent claims on how common the phenomenon is and whether it should be a source of concern for the microfinance sector. In one camp, there are those who claim that multiple borrowing is widespread and may cause a whole-scale crisis in the sector. Some have even gone so far as to compare the state of the microfinance sector in South India with that of the sub-prime mortgage market in the United States prior to the recent financial crisis (Rozas 2009). Those in the second camp claim that reports of multiple borrowing are exaggerated and, to the extent that it exists, multiple borrowing is caused mainly by borrowers' inability to fulfil their complete credit needs from a single source. Below we attempt to bring hard data to this debate.

Multiple borrowing is extremely common.

Multiple borrowing is extremely common, with an estimated 84% of households having two or more loans from any source. Surveyed households reported a median of four loans outstanding from all sources. Figure 11 shows the distribution of total loans per household from all sources.

Figure 11: Distribution of Total Loans per Household



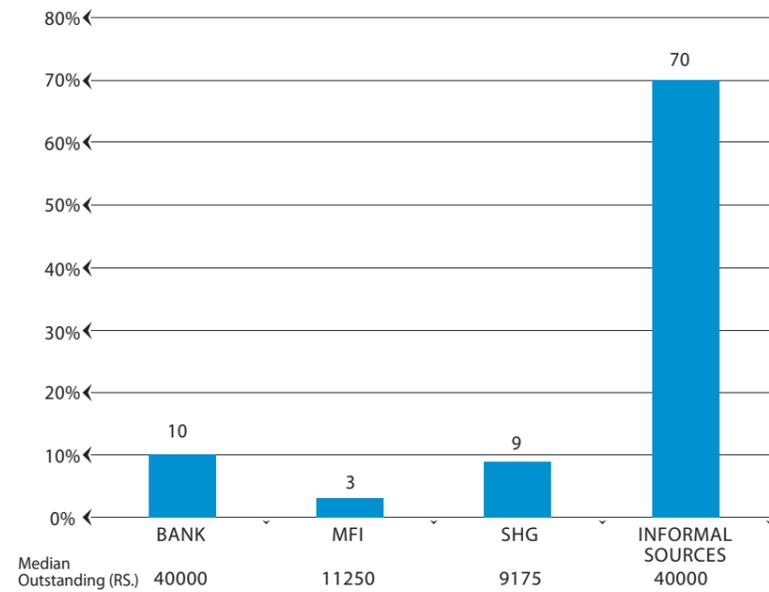
37. These figures include both major models of Indian microfinance, SHGs and MFIs.

Multiple borrowing is driven mainly by multiple loans from informal sources.

When the source of loans is taken into consideration, the situation related to multiple borrowing does not appear nearly so dire. Much of the recent debate regarding multiple borrowing has been over the extent to which microfinance clients, particularly clients of MFIs, borrow from multiple microfinance lenders at the same time.

When we look at the instances of multiple borrowing from the same source we find that the incidence of multiple borrowing from same source is most prominent among those who borrowed from the informal sources. The data (Figure 12A) shows that 3% of all households have two or more loan outstanding from MFIs, while 70% of them have at least two loan outstanding from informal sources.

Figure 12A: Percentage of Households with Multiple Loans from a Given Source



Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."

When we look at the distribution of total loans outstanding for a given source (Figure 12B), we find that among those who borrow from MFIs there is a slightly higher tendency to have multiple loans outstanding compared to those who borrow from SHGs: nearly 30% of rural households who were active MFI borrowers had more than one loan outstanding at the time of the survey. In comparison, only 16% of active SHG borrowers had more than one loan outstanding at the time of survey.

Yet both of these figures pale in comparison to the tendency toward multiple borrowing exhibited by those who borrow from informal sources: of households with at least one loan from an informal source outstanding, 85% had more than one informal loan outstanding.

Figure 12B: Distribution of Total Number of Loan Outstanding for Households with at least One Loan Outstanding by Source

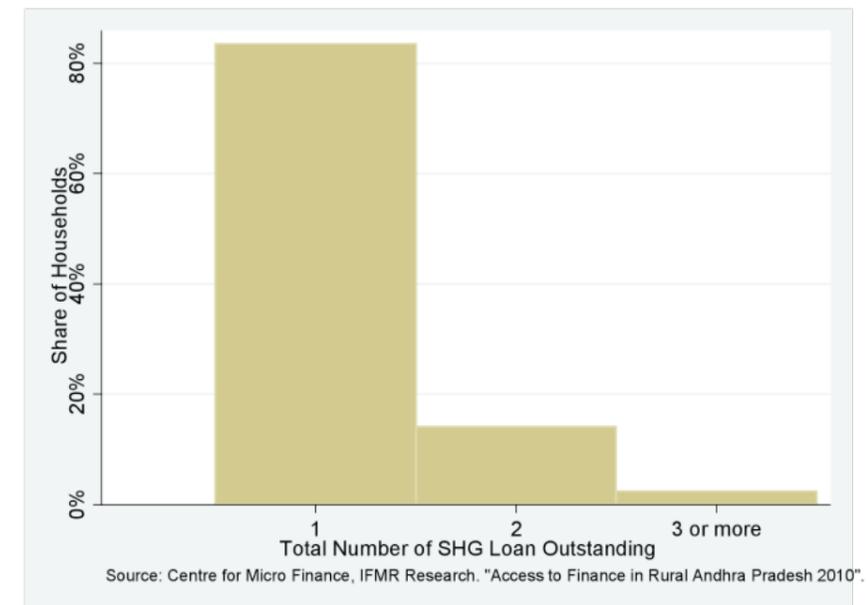
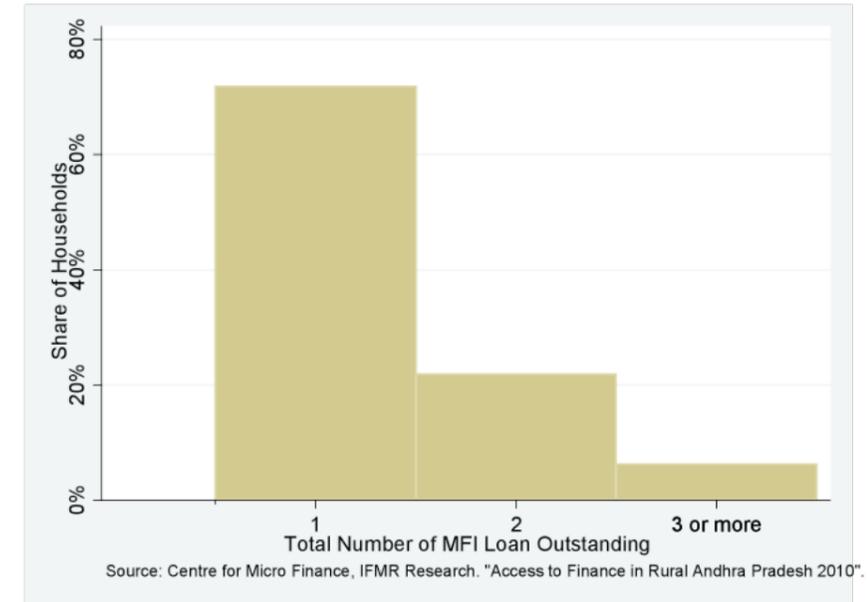
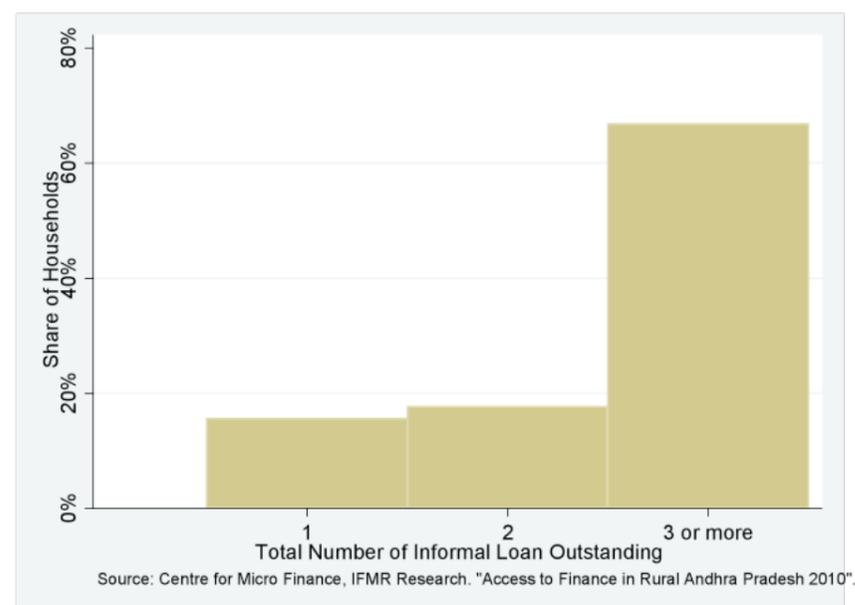
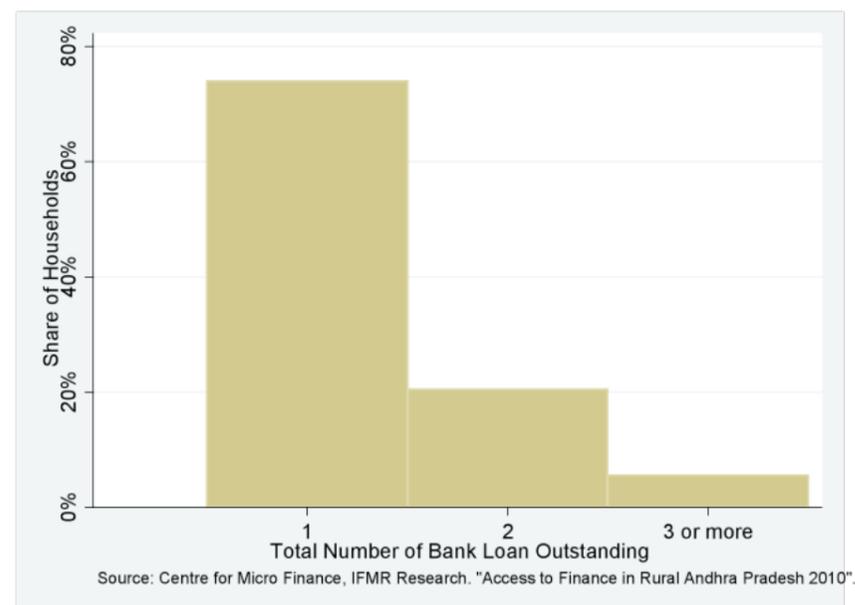


Figure 12B: Distribution of Total Number of Loan Outstanding for Households with at least One Loan Outstanding by Source

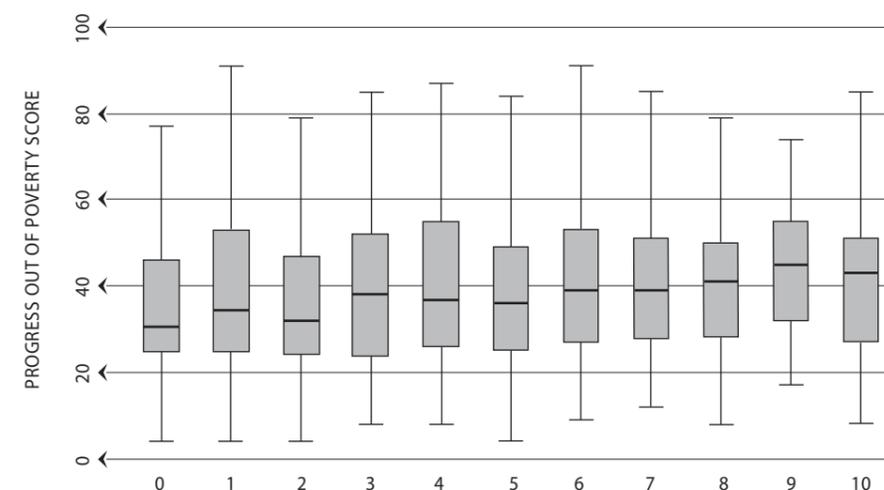


In addition, the histograms above slightly oversimplify the state of multiple borrowing in that they do not take into account multiple borrowing across different loan sources. Yet the share of households borrowing from both at least one MFI and at least one SHG was only 7%, indicating only a slight correlation in the propensity to borrow from these two sources. Our analysis also indicates that as compared to a household which does not have a loan outstanding from an SHG, a household with an SHG loan outstanding is approximately 6% more likely to have a loan outstanding with an MFI.

Multiple borrowing appears to be more common among the better off.

On average, households with more loans outstanding appear to be better off than those with fewer loans outstanding. Figure 13 displays the PPI scores of households according to the number of loans they have outstanding. The graph exhibits a clear upward trend, indicating that a household's PPI score is strongly correlated with the number of loans it has outstanding.

Figure 13: Progress out of Poverty Score by Number of Loans Outstanding*



Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."

*Middle lines within boxes correspond to median PPIs. Lower edges of boxes correspond to 25th percentile and upper edges of boxes correspond to 75th percentile PPI value for respective bank type.

*Households with more than 10 loans outstanding excluded due to small sample size.

Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."

Many cases of multiple borrowing appear to be driven by an inability to obtain sufficient credit from a single source.

Whether multiple borrowing should be a cause for concern or not depends greatly on the reason why the borrower has taken multiple loans. If a borrower takes more loans because she cannot make repayments on an existing loan, then multiple borrowing is indeed a cause for concern. If, on the other hand, she borrows from multiple sources because she is unable to obtain sufficient credit from a single lender, then the borrowing is much less distressing.

could not obtain sufficient credit from a single source. A large share of households with multiple loans outstanding borrowed two or more loans in the same month for the same purpose. Bundling loans together from different sources at the same time appears to indicate a credit constraint - no single source supplies what borrowers require, forcing them to look elsewhere. This also suggests that a large portion of multiple borrowing is due to this constraint, rather than people using a loan to pay off another.

While it is difficult to ascertain the true reasons for multiple borrowing based on a relatively short survey, the timing and purpose of loans suggests that many households borrowed from multiple sources for the latter reason - because they

The average total amount borrowed in these cases was Rs. 45,280. The main loan usages for such borrowings mirror the overall usage of informal borrowings:

Table 12: Usage of Multiple Loans taken out in the Same Month

LOAN USAGE	SHARE
Health	20%
Buy agricultural inputs	18%
Home improvement/construction	18%
Marriage	17%
Household consumption	17%

Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."

In Depth Look at SHGs

Indebtedness to SHGs in rural Andhra Pradesh is quite high but not as high as some previous estimates.

Estimates of microfinance penetration³⁸ of the target population (those households just below the poverty line) in Andhra Pradesh have recently been as high as 224%, implying that each household below the poverty line belongs to at least two groups, if not more (Rozas and Sinha, 2010). Andhra Pradesh has even been deemed the most saturated microfinance market in the world, even surpassing Bangladesh.³⁹ Our study found penetration to be significantly lower. Approximately 72% of rural households have a member who belongs to a self help group.

Table 13: SHG Members' Principal Outstanding by Duration of Membership

MEMBERSHIP YEARS	AVERAGE PRINCIPAL	MEDIAN PRINCIPAL
0-5 years	INR 7,965	INR 5,000
6-9 years	INR 10,855	INR 9,000
10+ years	INR 13,211	INR 10,000

Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."

The average age of groups was 5.2 years, while average membership was 4.8 years. Slightly more than a third (37%) of groups had been formed in the last 2 years, while 32% of groups were older than 8 years.

The majority of SHG members had an outstanding loan at the time of survey.

Of all SHG members, 72% had an outstanding loan, and only 17% of members belonged to groups that had never received a bank loan. Of these groups, 35% were formed in 2007 or earlier, implying that some groups faced a slight delay in receiving their first loan, if in fact, these groups had been formed primarily to access credit. Generally, groups save for 6 months to 1 year and undergo rating by a bank before they are offered a bank loan.

Principal loan amounts received by SHG members increased significantly with membership years.

The median principal loan amount received by members was Rs. 6,800, while the average came to Rs. 9,417. These amounts are comparable with industry estimates of an average loan size of Rs. 7,344 in Andhra Pradesh and an average of Rs. 5,544 for India.⁴⁰

Loan amounts differed significantly with duration of group membership:

Table 14: Year of Most Recent Loan among SHGs with No Loans Outstanding

LAST LOAN YEAR	PERCENTAGE
2008	26%
2007	25%
2006	15%
2005	8%
2004 or earlier	9%

Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."

Regular savings, the defining aspect of self-help groups, was overwhelmingly strong.

The primary component of SHGs is regular savings—from these savings, groups generate a common pool through which they can extend emergency loans and avail bank loans. Almost all groups (99%) reported collecting regular savings: about 96% collect Rs. 50 in savings per individual per month, while 4% of groups save weekly at an average of Rs. 17 per week (Rs. 66 monthly).

Regular group meetings were common, despite the fact that many groups had not received a follow-up loan.

An estimated 87% of groups meet monthly while 7% meet weekly. Only 2% of members reported that their groups no longer meet. The average time spent per meeting is 80

minutes and the average time spent traveling to and from meetings is 20 minutes. The average time spent traveling to the bank to deposit or withdraw savings is 192 minutes. From these figures, we may infer that the member in charge of bank transactions (usually the president or treasurer) spends an average of 5 hours monthly, or nearly an entire working day, on SHG business.

Reports of dropouts and defaults were limited.

Nearly 74% of groups had no dropout members. The mean age of groups with no dropouts was 4.4 years, while the age of those with one or more dropouts was 7.9 years. The top reasons for dropping out were repayment problems and members moving to new locations. A large number (88%) of groups have had no member defaults. Only 2% of groups have seen a member default and drop out of the group.

Table 15: Stated Reasons for Leaving SHG among Drop-outs

REASON	PERCENTAGE QUOTED
Repayment Problem	34%
Moved	32%
Old Age	23%
Group Conflict	9%

Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."

38. Rozas and Sinha (2010) estimated microfinance penetration in Andhra Pradesh to be 17.2% as opposed to 16.4% in Bangladesh. These numbers include both SHG and MFI membership.

39. Estimates based on state-wise SHG average savings and loan amounts, taken from the Microfinance India State of the Sector Report 2009.

Multiple SHG/MFI memberships by individual SHG members seem to be driven by credit need.

As we saw in the multiple borrowing section, only 9% of households had two or more SHG loans.

Looking specifically at multiple memberships by individual members, we found 13% of SHG members and 67% of MFI members belonged to at least one SHG and one MFI simultaneously. Twenty-three percent of these individuals had no outstanding SHG loans, and half of this group had never received a loan from their SHGs at the time of survey. Dual membership, therefore, may be driven by the need for more immediate loan sanctions, which MFIs often provide. On the other hand, continued membership in SHGs may be preferred as a means of saving (which MFIs are not permitted to provide) and as a vehicle through which to receive flexible, emergency loans from fellow group members. Only 3% of SHG members belonged to more than one SHG.

Group members were asked to estimate the extent of multiple memberships within their groups to establish whether public perception reflected the actual rate of dual membership. Sixty

six percent of all SHG members reported having no multiple borrowers in their groups, while another 18% claimed to have no idea of whether multiple borrowing was taking place.

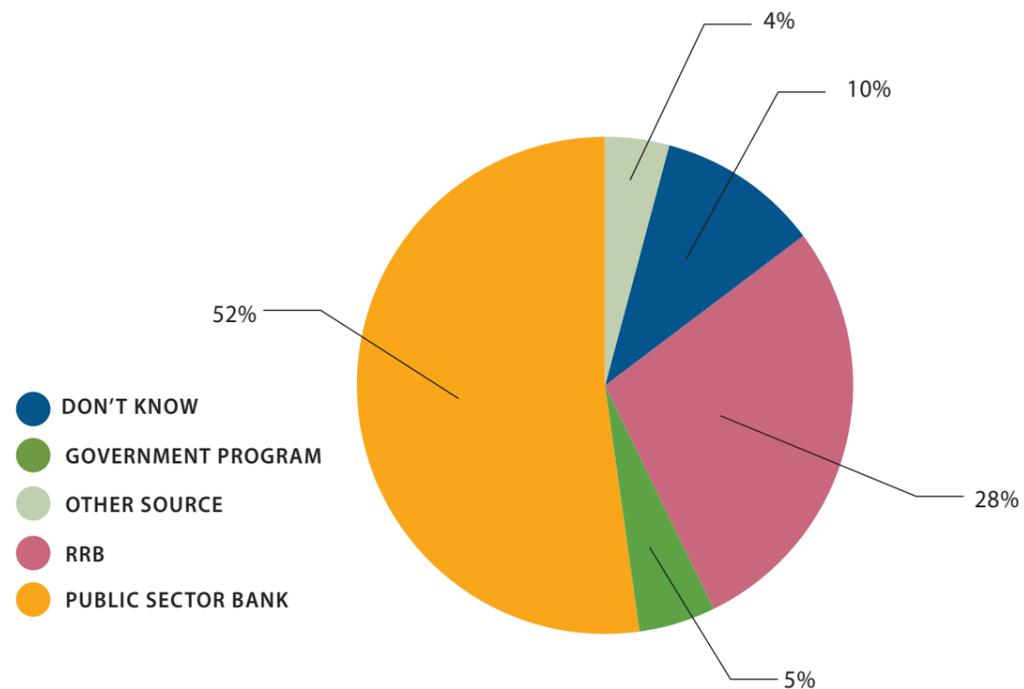
Although groups were overwhelmingly government-formed, most members did not receive SGSY subsidies.

95% of SHG groups were government-formed—we can assume that they were formed under the DWCRA or Velugu programs. Of these groups, only 2% received SGSY subsidies. The average individual subsidy received amounted to Rs. 12,739. Interestingly, only 7% of rural members reported that politicians had approached their groups to ask for political support.

Group credit was overwhelmingly extended by public sector banks.

Over 50% of group loans were issued by Public Sector Banks, followed by Regional Rural Banks at 28%, as illustrated in Figure 14. These numbers align with industry calculations of 2009 national bank linkages which estimate that commercial banks issued 55% of group credit, while RRBs issued 27%.⁴¹

Figure 14: Break up of Lending to SHGs



Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."

Capture by elites was not evident, either in terms of leadership or household profile.

The average principal amounts for loans taken by group leaders was only slightly higher than the principal of member loans, at Rs. 9804 versus Rs. 9371.

remained largely identical across occupational profile and caste/religious affiliation (Scheduled Caste, Scheduled Tribe and Muslim households). Notably, there was considerable variance for households in the Other category.⁴²

In addition, average and median loan amounts borrowed

Table 16: Borrowing Rate and Principal Outstanding of SHG Members Broken Down by Various Categories

SHG LOANS			
HOUSEHOLD PROFILE	PERCENTAGE WITH OUTSTANDING LOAN	AVERAGE PRINCIPAL	MEDIAN PRINCIPAL
Landless Laborer	52%	INR 11,029	INR 9,500
Commercial	51%	INR 13,014	INR 10,000
Farmer - Marginal	56%	INR 12,078	INR 8,800
Farmer - Small	59%	INR 11,182	INR 8,800
Farmer - Large	54%	INR 10,920	INR 8,700
Other	47%	INR 12,677	INR 6,733
Scheduled Caste	58%	INR 11,462	INR 9,750
Scheduled Tribe	55%	INR 11,825	INR 9,000
Muslim	58%	INR 11,744	INR 8,575

MFI Borrowing

Borrowing from MFIs was much lower than anticipated for rural Andhra Pradesh.

Only 12% of rural households belonged to a joint liability group formed by a private microfinance institution, and 95% of joint liability group members had microfinance loans outstanding at the time of interview.

The average years of membership in a MFI was surprisingly low.

The average duration of membership in joint liability groups was only 1.6 years and nearly 64% of members had been in their groups for one year or less (as shown in Table 17 below). This could be due to the inability of households that borrow from MFIs to repay loans consistently over a longer period of time, compared to SHGs, where members borrow only according to credit need.

Alternatively, this data could also reflect the continued rapid expansion of MFIs in the state.

40. See Microfinance India State of the Sector Report, 2009.

41. This could be explained by the fact that many households in the "Other" category were retired and, thus, probably had a lower credit requirement.

Table 17: Distribution of Years of Membership in MFI

YEARS OF MEMBERSHIP WITH MFIS	%
0	37%
1	27%
2	11%
3	12%
4	4%
5	4%
6	3%
7	1%
8	1%
9	0.2%
10	1%

Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."

Loan sizes, unsurprisingly, increased with membership more rapidly in MFIs than in SHGs.

MFI clients received an average of just under Rs. 10,000 during their first year but their average loan size gradually increased to just over Rs. 13,000 after five years of membership, half the time it would take to receive a comparable amount in an SHG.

Average loan sizes in rural Andhra Pradesh were significantly higher than the national average outstanding amount of Rs. 5,200.

Table 18: Average and Median Principal Outstanding by Age of MFI Group

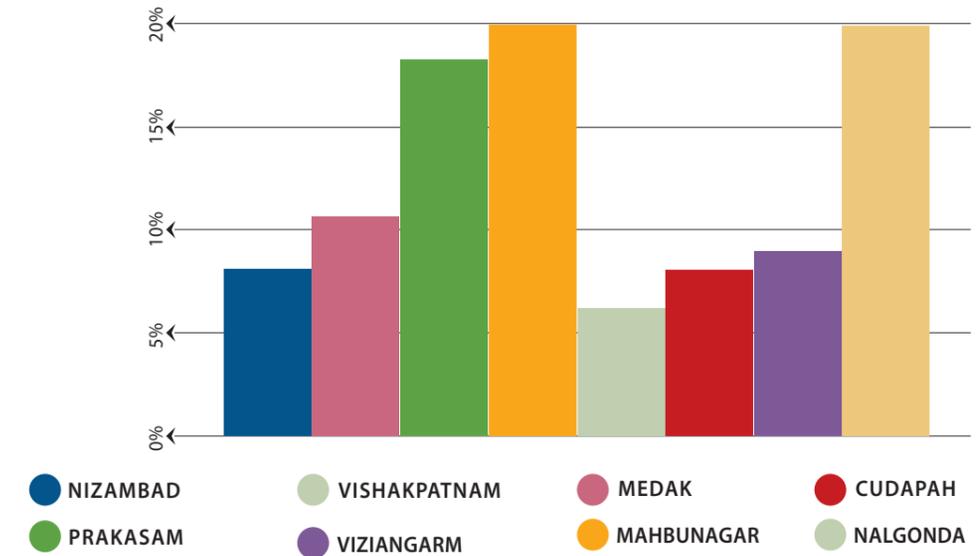
MEMBERSHIP YEARS	AVERAGE PRINCIPAL	MEDIAN PRINCIPAL
0-1 years	INR 9,541	INR 10,000
1-2 years	INR 10,361	INR 10,000
2-3 years	INR 10,511	INR 10,000
3-4 years	INR 11,711	INR 10,000
4-5 years	INR 12,787	INR 12,000
5 years	INR 13,083	INR 10,000

Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."

Borrowings were greatest in districts close to Hyderabad.

Nalgonda and Mahbubnagar, two districts bordering Hyderabad, the capital of Andhra Pradesh, led in MFI memberships. Prakasam, which borders the saturated Guntur district, followed closely behind. Unsurprisingly, Vishakapatnam and Vizianagarm districts, both with large populations of Scheduled Tribe and Scheduled Caste populations, had the lowest outreach.

Figure 15: Incidence of MFI Borrowing by District



Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."

Other Financial Products

Chit Funds

Membership in chit funds remained limited to a small portion of the population.

Our data shows that only 8% of households reported having membership in a chit fund.

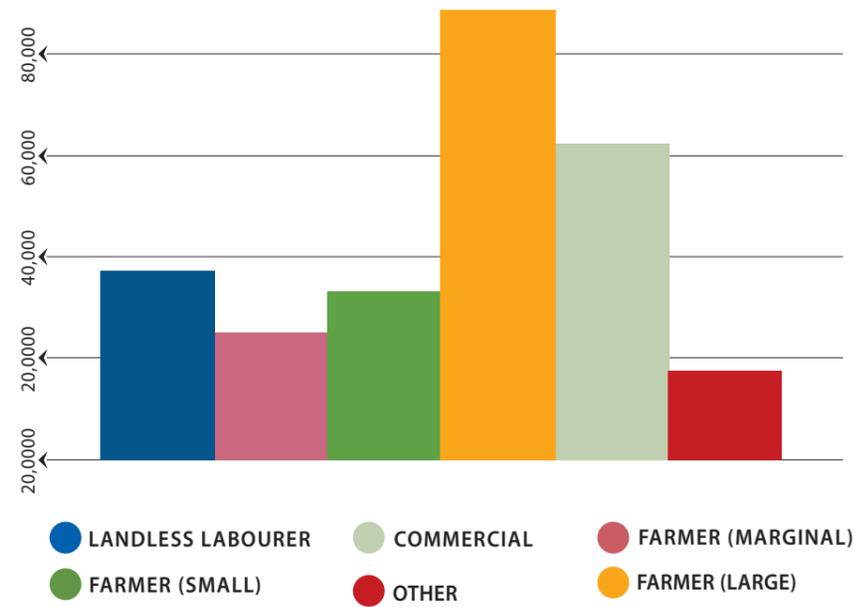
Only 5% of groups were required to provide documentation in order to join their chit group—we can assume that the remaining groups are unregistered.

Initial payments varied widely according to household profile.

The average initial payment was Rs. 2,363. This rose to Rs. 6,653 for registered groups. Initial payments varied from as little as Rs. 50 to a maximum of Rs. 32,000.

The mean chit pool (the average total amount which was auctioned at regular meetings) came to Rs. 53,553. Broken down by household profile, the averages varied considerably:

Figure 16: Average Chit Pool Size by Occupation of Member



Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."

Remittances

Very few households receive remittances.

Only 3.68% of rural households receive money from a household member living outside the household. Households which received remittances reported that bank transfers and cash were used as methods of delivering funds more frequently than cheques or postal money orders.

Arogyasri Health Insurance Scheme

In 2007, the government of Andhra Pradesh launched a comprehensive health insurance scheme for poor households – the Rajiv Arogyasri Health Insurance Scheme. The scheme provides BPL card holders with up to Rs. 1,50,000 (1.5 lakh) in coverage for major health procedures such as surgeries or cancer treatments. Beneficiaries may receive treatment free of charge (at any hospital, public or private, participating in the scheme).

A significant portion of non-BPL households have Arogyasri cards.

Despite the fact that only BPL households are eligible for the Arogyasri, a small but significant portion of rural households who do not have BPL ration cards (3.0%) have the Arogyasri card.

Many households received treatment under Arogyasri but a significant portion were forced to pay out of pocket expenses.

A significant percentage (4.7%) of rural households has received medical treatment under the Arogyasri program since the launch of the program. Yet, despite the fact that the program is intended to be free for patients, a large portion (36%) of patients who had received treatment under Arogyasri reported having to pay out-of-pocket fees.

Other Insurance Products

Many households have life insurance but few have any other insurance product.

Nearly half (43.8%) of rural households have life insurance but, not including the Arogyasri health insurance scheme, few have any other form of insurance.

Table 19: Take up of Various Insurance Products

INSURANCE PRODUCT	SHARE OF HOUSEHOLDS WITH PRODUCT
LifeLife	44%
Health (not including Arogyasri)	2%
Crop or weather	0.5%
Accident	0.4%
Cattle	0.3%

Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."

Conclusion

The results contained in this report reveal that the actual levels of financial inclusion of rural Andhra Pradesh households are far different from what we previously believed. A much greater share of rural households have access to a formal savings account than did only ten years ago, though many of these accounts are not actively used for savings. Similarly, a much larger proportion of households are indebted, many of them from multiple sources, than were ten years ago. Despite the concern about indebtedness to MFIs, the share of households with a loan from an MFI remains

relatively low and, for most households, MFI debt is a relatively small share of total debt.

The results from this report illustrate that recent government initiatives as well as the expansion of the microfinance sector have had an enormous impact on financial inclusion of rural households in recent years. More effort is required to understand the changing landscape of financial inclusion in other states across the country.

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Appendix A – Sampling Methodology

1920 households were randomly selected for surveying using a three stage sampling design in which first 8 districts, then 64 villages, and then 1920 households were randomly selected. Details of the method of selection at each stage are provided below.

Table 20: Overview of Sampling Strategy

Stage	Total Number Selected	Selection Strategy
District	8	<p>Districts were selected using stratified random sampling. The 22 districts of Andhra Pradesh containing at least one rural area (one district in the state, Hyderabad, contains only urban areas) were divided into four strata based on the following two variables:</p> <ul style="list-style-type: none"> • The estimated share of rural households falling under the official poverty line obtained from Chaudhuri and Gupta (2009) • The estimated share of adult women belonging to a microfinance group based on data collected from MFIs by the Centre for Microfinance. <p>Within each stratum, two districts were selected with simple random sampling without replacement.</p>
Village	64	<p>Within each district, villages were selected using stratified random sampling. In all districts except for Ranga Reddy, villages were divided into four strata based on the distance to the nearest bank branch according to the village directory data of the 2001 census. In Ranga Reddy district, where a bank branch is present in all villages, villages were divided into four strata based on the distance to the nearest town.</p> <p>Within each stratum, two villages were selected with probability proportional to size (based on number of households) without replacement.</p>
Households	1920	<p>Within each village, 30 households were selected using simple random sampling without replacement. A village mapping exercise was conducted to enumerate all households living in the village. In cases where the survey team was unable to locate a sample household a replacement household was randomly selected from the list. (Replacement households may be identified by use of the variable "replacement" in the dataset.)</p>

In the course of surveying, the surveying team encountered significant difficulty in conducting surveys in one of the districts selected, Krishna district. In the weeks before the surveyors arrived there had been a spate of robberies perpetrated by thieves fraudulently posing as surveyors. After several encounters with angry villagers, the survey team decided to abandon all attempts to survey in Krishna district and instead randomly selected another district from the same district strata to conduct surveys in.

Due to the omission of surveying in Krishna district, the data collected as a result of the survey is not representative of the rural areas of the entire state but rather the rural areas of the entire state excluding Krishna district. Often in this report, the authors use the phrase "rural households in Andhra Pradesh" in place of the more accurate but less concise "rural households in Andhra Pradesh excluding Krishna district." Readers should note that all estimates presented here in this report are strictly valid for rural households in Andhra Pradesh excluding Krishna.

Rigorous quality checks were undertaken throughout the survey, both in the design of the field team structure and through supervision by CMF staff. Prior to surveying, staff received intensive training, both in a classroom setting and in the field, to ensure accurate data collection. In addition to thorough scrutiny of each survey by all levels of the team (surveyor, supervisors, and monitors), supervisors and monitors accompanied surveyors or conducted backchecks on at least 50 % of surveys collected daily. Further surprise backchecks and accompaniments were undertaken by both the CMF Research Associate and Regional Field Coordinator throughout the length of the field work. In case of any doubts, either the Research Associate or Project Assistant conducted re-visits before completing data collection in a district. The rate of non-response was extremely low, and in such cases, replacement households were randomly selected.

Appendix B - How to Access and Use the Data

The questionnaire and all data used in this report are available for download at: <http://ifmr.ac.in/cmfr/resources.html>

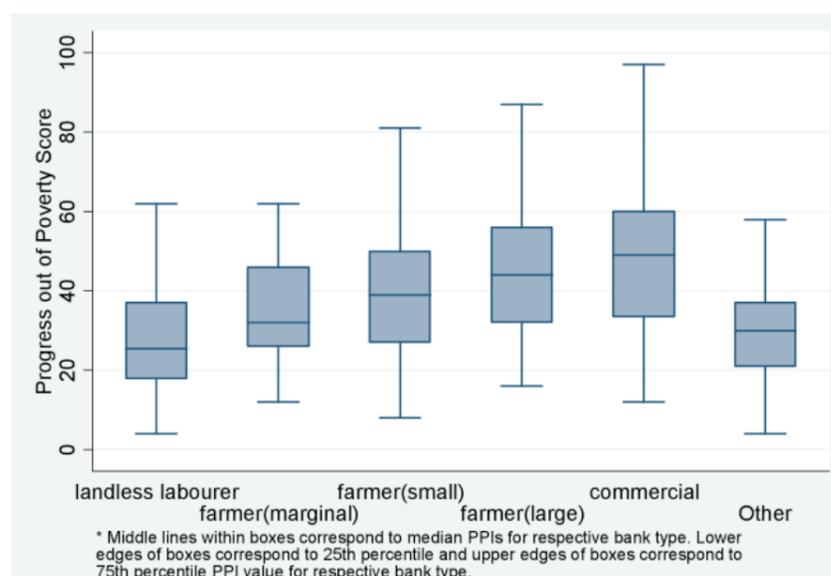
Appendix C – Determination of Occupational Categories

Households were assigned to one of five occupational categories and the residual category “other” based on the rules described below. Please note that the definitions used to determine occupational categories, especially the distinction between marginal, small, and large farmers, varies by context and that the definitions used here may not match those used by other researchers or government agencies. (In particular, the definitions used here do not match the definitions used to determine eligibility for the recent loan waiver.)

Rules for how occupational categories were assigned

- If agriculture on land owned by the household was one of the household's two main sources of income the household was classified as a farming household.
- Farming households owning less than one acre of land were classified as marginal farmers. Farming households owning between one and four acres of land were classified as small farmers. Farming households owning more than four acres of land were classified as large farmers.
- Non-farming households which relied on salaried employment or an own business as one of the household's two main sources of income were classified as commercial.
- Non-farming, non-commercial households which relied on wage labour (either via agriculture, as a coolie, or in NREGA) as one of the household's two main sources of income were classified as landless labourers.
- All households not falling into any of the categories above were classified as other. This includes households that were retired or reported remittances or transfers as their main source of income.

Figure 17: Progress out of Poverty Scores by Occupational Category



Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."

Appendix D – Five Most Frequently Cited Reasons for Not Availing a Loan by Lender Type

Table 21: Top 5 Reasons for Not Availing a Loan from a Formal Source

REASON	SHARE
Have no idea about these sources or their products	19%
Lack of land	13%
Already had or could get loan from another source	12%
Lack of guarantor	11%
Application rejected	11%

Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."

Table 22: Top 5 Reasons for Not Availing a Loan from a MFI

REASON	SHARE
Irregular income flows or repayment capacity	60%
No MFIs are close enough to join	24%
Have no idea about MFIs or how they function	19%
Can't save regularly	12%
Don't know any MFIs or members	6%

Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."

Table 23: Top 5 Reasons for Not Availing a Loan from a SHG

REASON	SHARE
Irregular income flows or repayment capacity	29%
Can't save regularly	10%
Tried but was unable to join	9%
Don't want group conflict	9%
Have no idea about SHGs or how they function	5%

Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."

Table 24: Top 5 Reasons for Not Availing a Loan from an Informal Source

REASON	SHARE
Irregular Income Flows/ Repayment capacity	45%
No need	15%
Already had or could get a loan with other source	13%
Interest rates are too high	7%
After cultivation	7%

Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."

Table 25: Top 5 Reasons for Not Availing a Loan from a Chit Fund

REASON	SHARE
Irregular income or repayment capacity	71%
Can't save regularly	16%
No chit funds close enough to join	14%
No idea about what chit funds are or how they work	9%
Not trustworthy	3%

Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."

Appendix E - Progress out of Poverty index

PPI scores were calculated using the India Poverty Scorecard designed by Mark Schreiner. The Poverty Scorecard is a proxy survey which estimates the likelihood of a household's being under a given poverty line (in our case, we use India's National Poverty Line). The scorecard was created using data from Round 62 data of the National Sample Survey Organization's (NSSO) India Socio-Economic Survey. The table below lists the likelihood of being under the poverty line for the specified PPI ranking.

Table 26: PPI Ranges and Corresponding Likelihood of Falling below Poverty Line

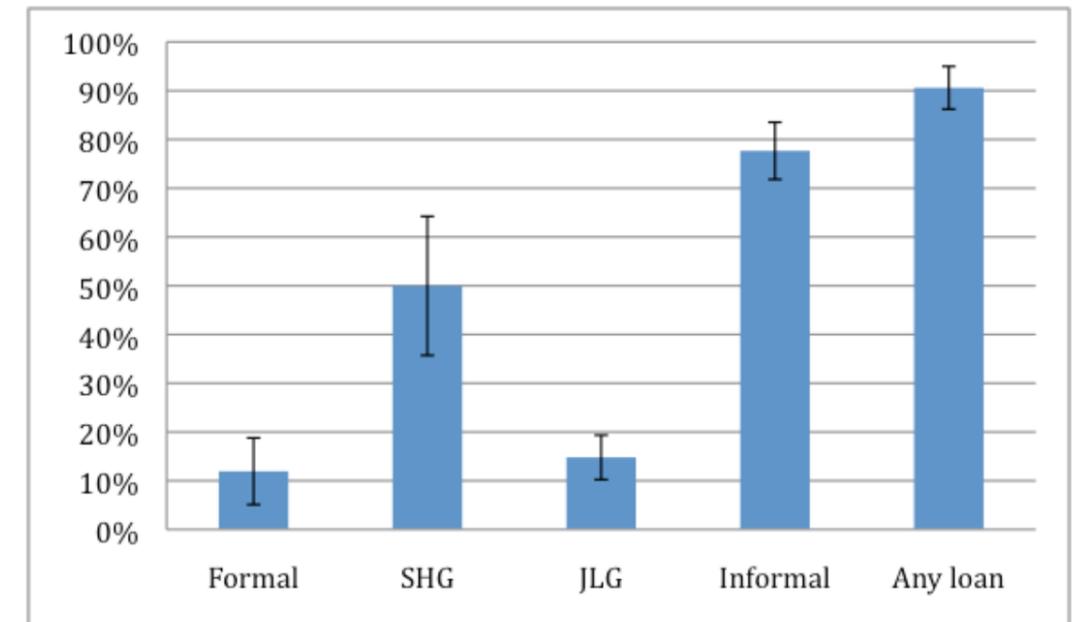
PPI	LIKELIHOOD OF BEING BELOW NATIONAL POVERTY LINE
0-4	77%
5-9	59%
10-14	51%
15-19	36%
20-24	29%
25-29	21%
30-34	19%
35-39	15%
40-44	10%
45-49	5%
50-54	5%
55-59	6%
60-64	6%
65-69	4%
70-74	2%
75-79	2%
80-84	1%
85-89	1%
90-94	0%
95-100	0%

Source: www.progressoutofpoverty.org

Appendix F - Borrowing by Household Type and Source

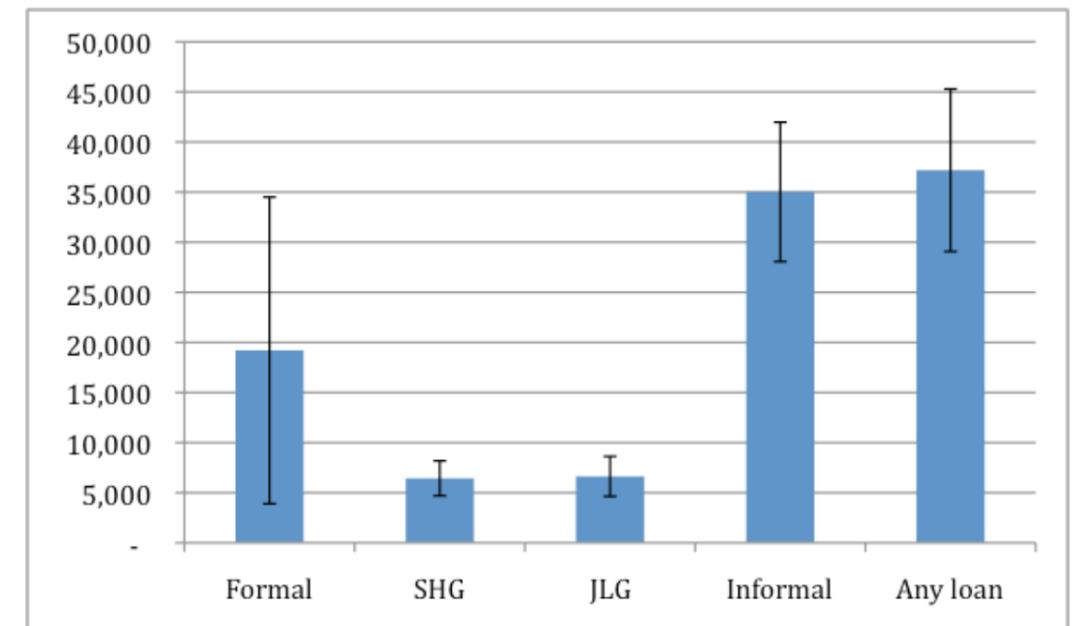
The graphs below display indebtedness and loan size (for those with at least one loan) by household type and source (where the "Formal" represents Banks and JLG represents MFI"). Error bars indicate confidence intervals at 95 % level.

Figure 18: Percent of Landless Labourer Households Indebted by Source



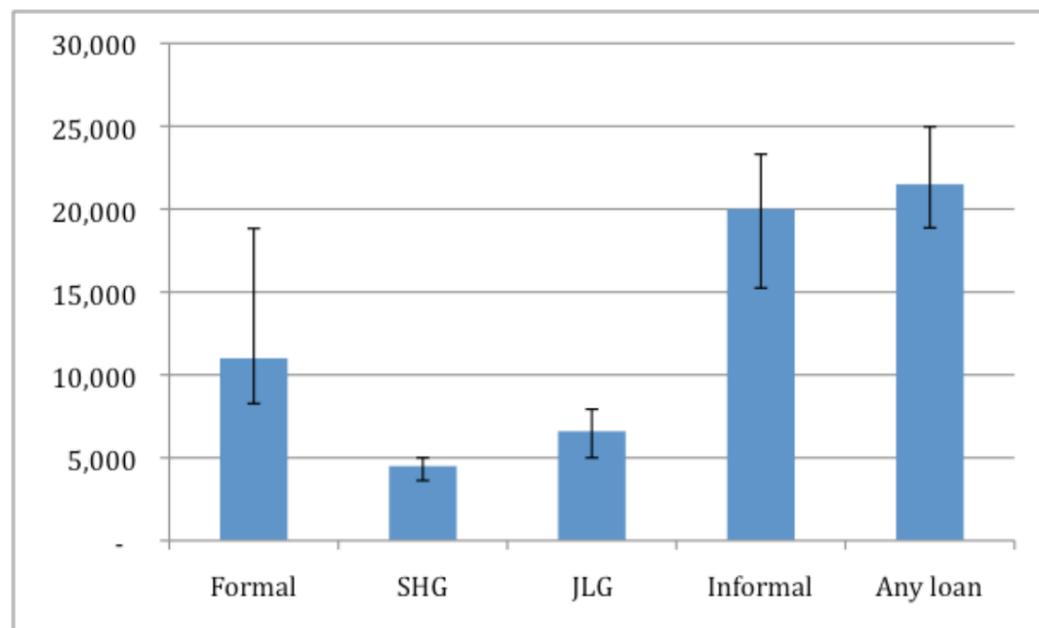
Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."

Figure 19: Mean Outstanding by Source for Landless Labourer Households with at Least One Loan from Source



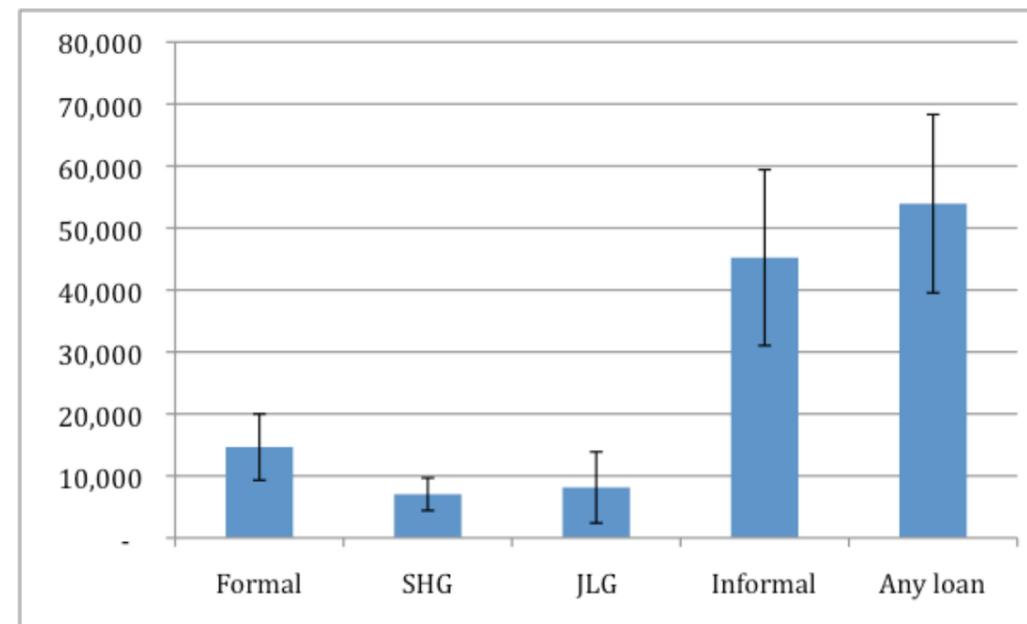
Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."

Figure 20: Median Outstanding by Source for Landless Labourer Households with at Least One Loan from Source (un-weighted)



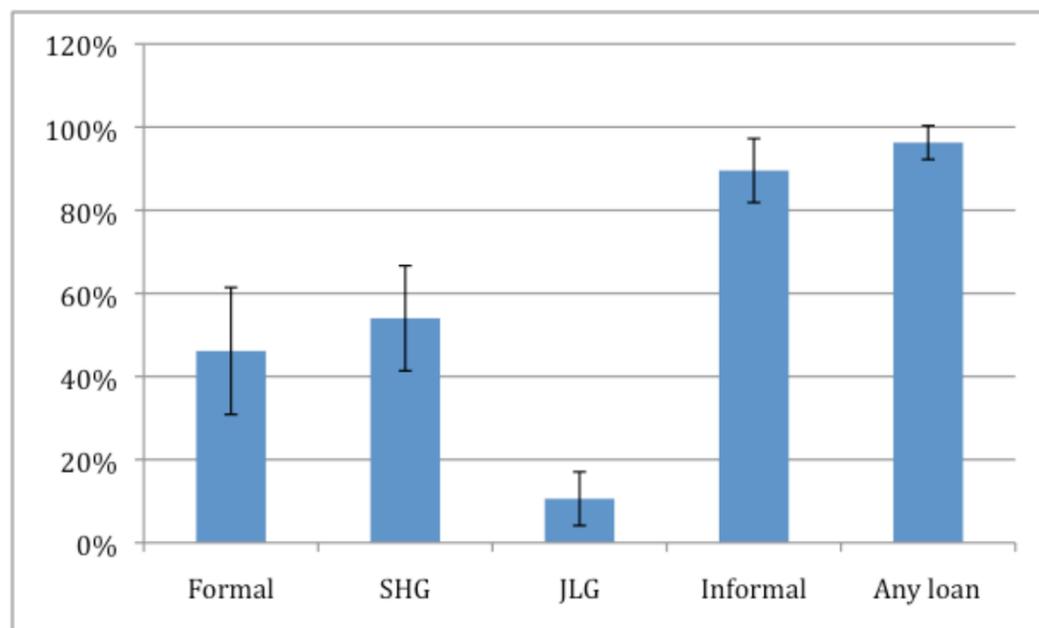
Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."

Figure 22: Mean Outstanding by Source for Marginal Farmer Households with at Least One Loan from Source



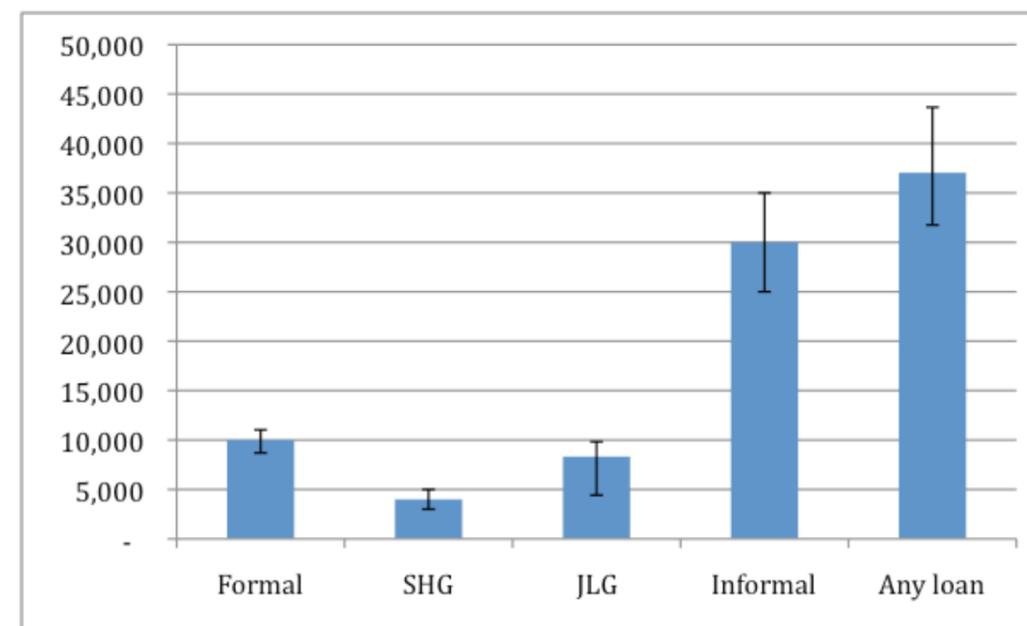
Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."

Figure 21: Percent of Marginal Farmer Households Indebted by Source



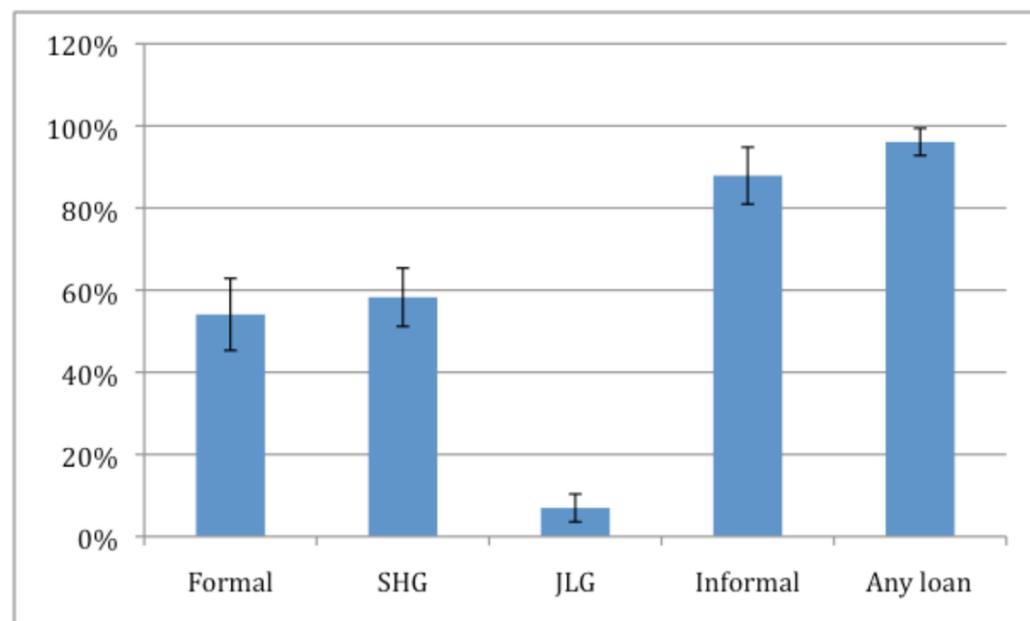
Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."

Figure 23: Median Outstanding by Source for Marginal Farmer Households with at Least One Loan from Source (un-weighted)



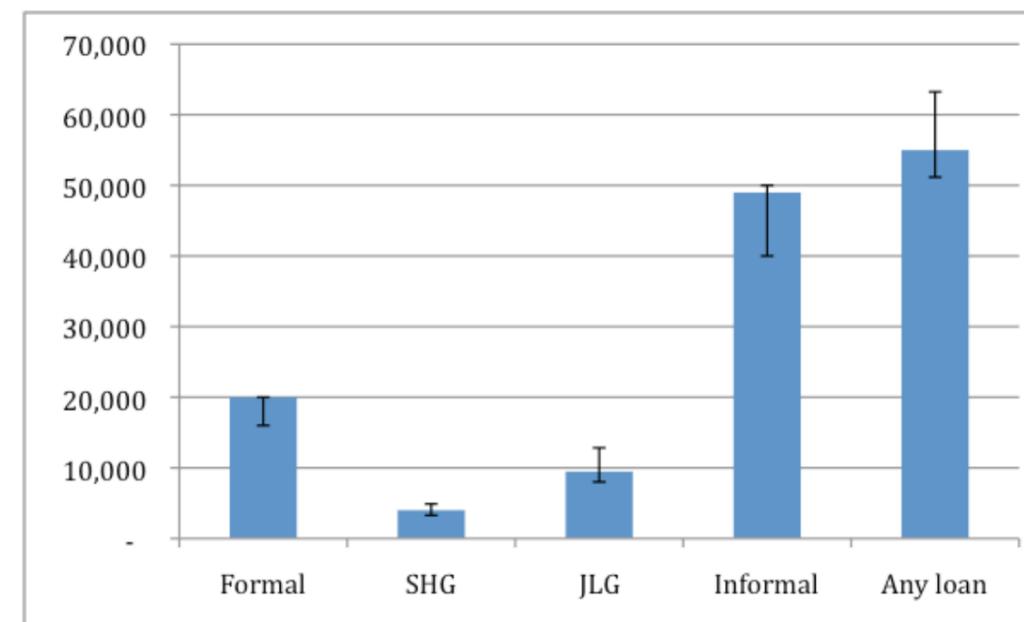
Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."

Figure 24: Share of Small Farmer Households Indebted by Source



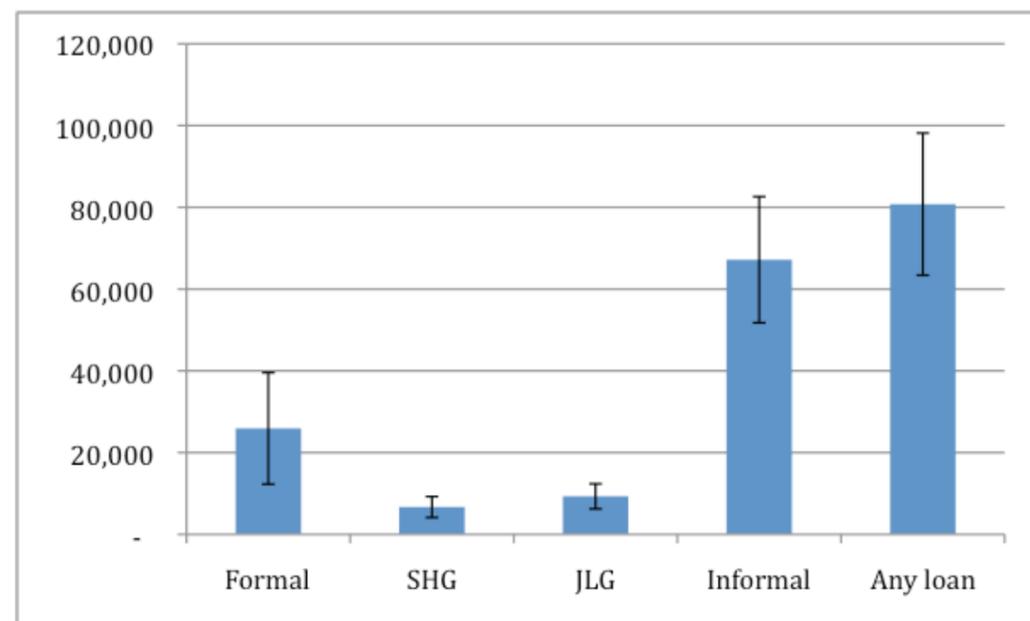
Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."

Figure 26: Median Outstanding by Source for Small Farmer Households with at Least One Loan from Source (un-weighted)



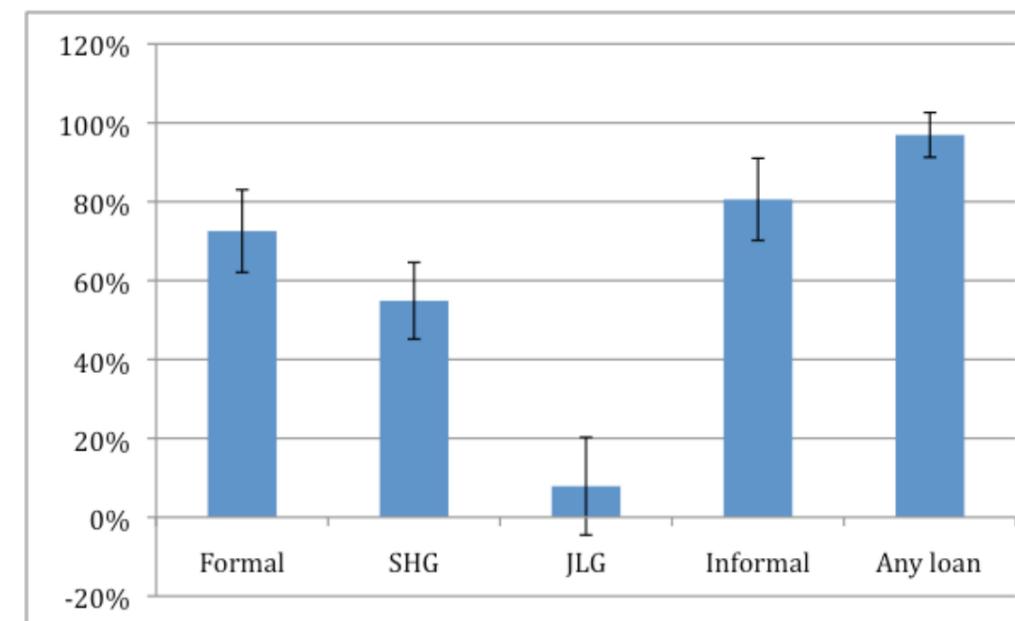
Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."

Figure 25: Mean Outstanding by Source for Small Farmer Households with at Least One Loan from Source



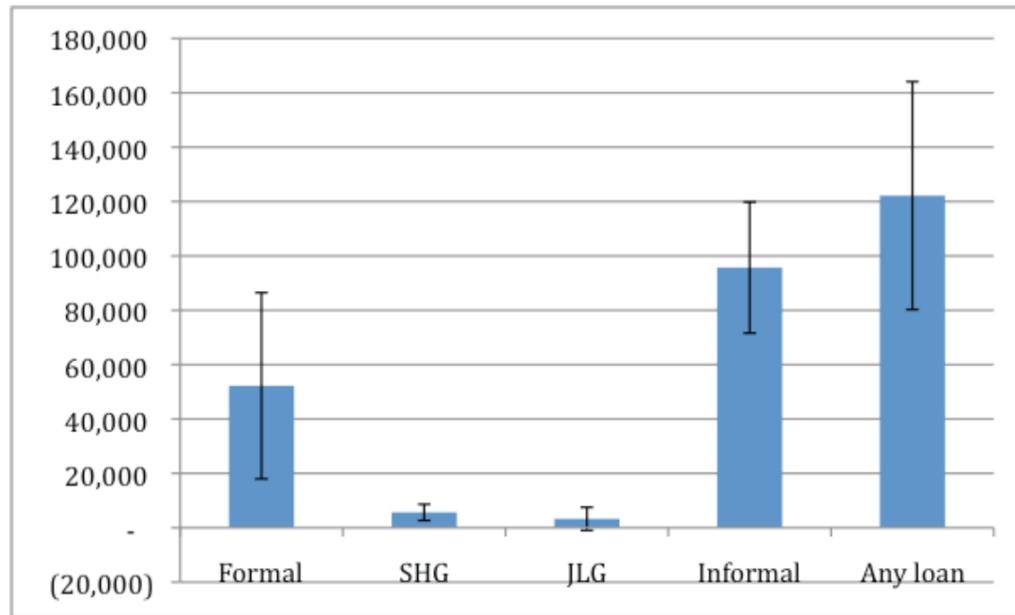
Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."

Figure 27: Share of Large Farmer Households Indebted by Source



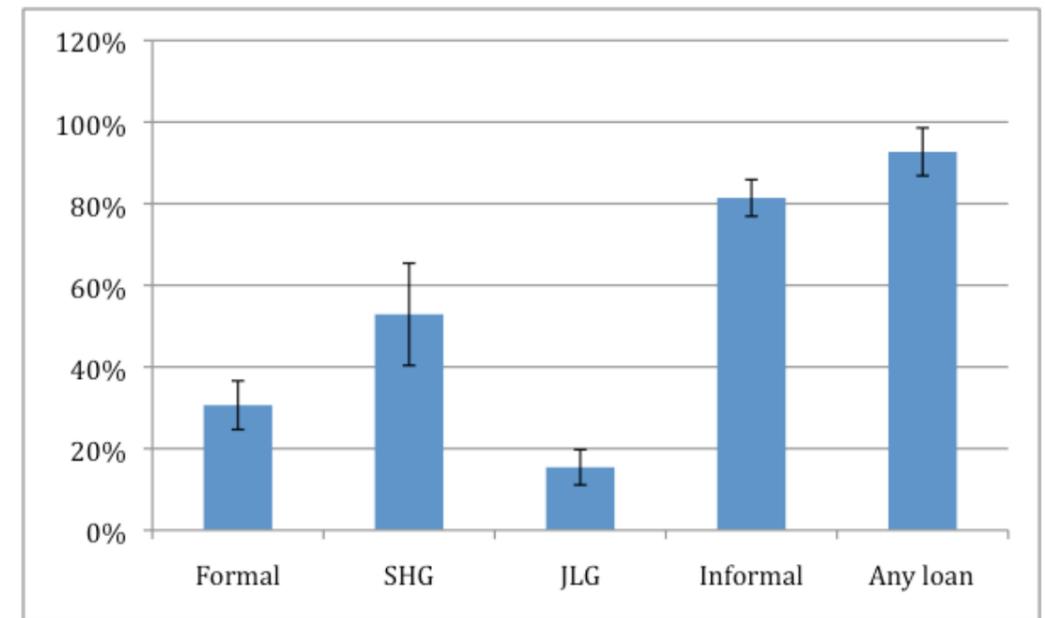
Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."

Figure 28: Mean Outstanding by Source for Large Farmer Households with at Least One Loan from Source



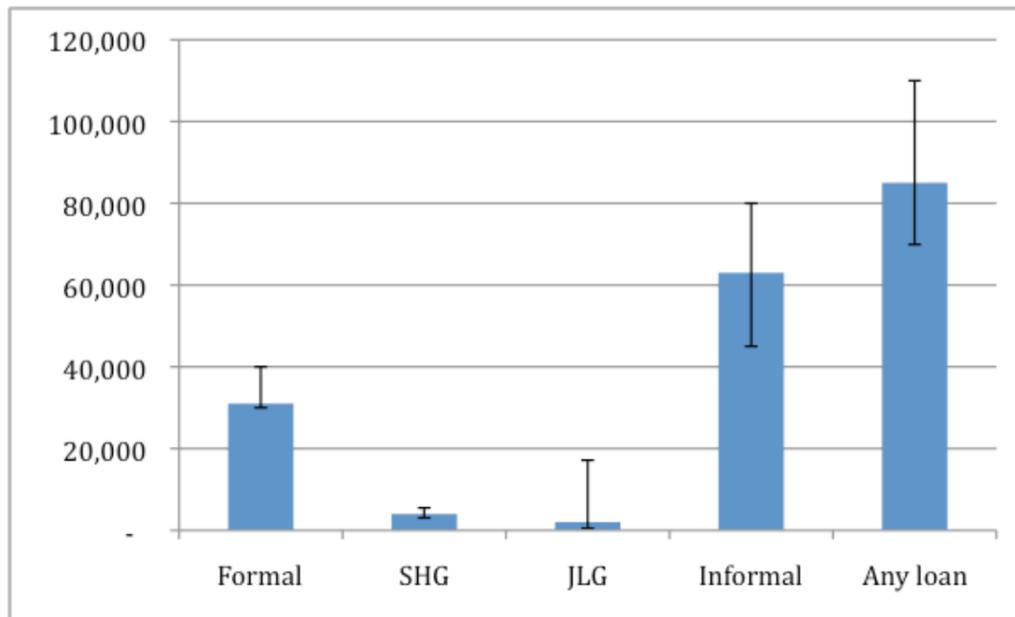
Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."

Figure 30: Share of Commercial Households Indebted by Source



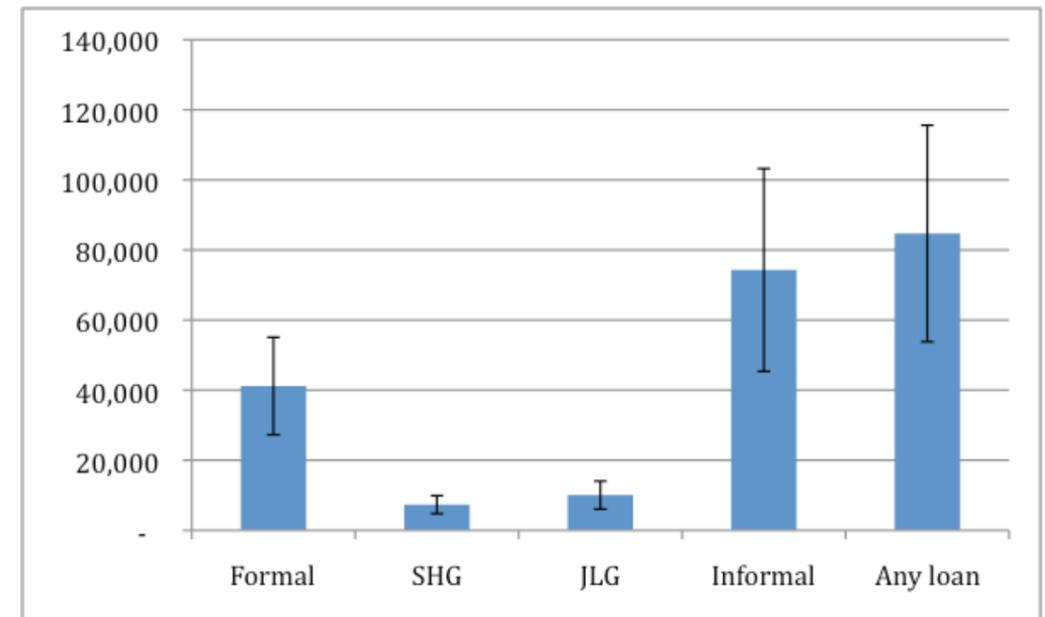
Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."

Figure 29: Median Outstanding by Source for Large Farmer Households with at Least One Loan from Source (un-weighted)



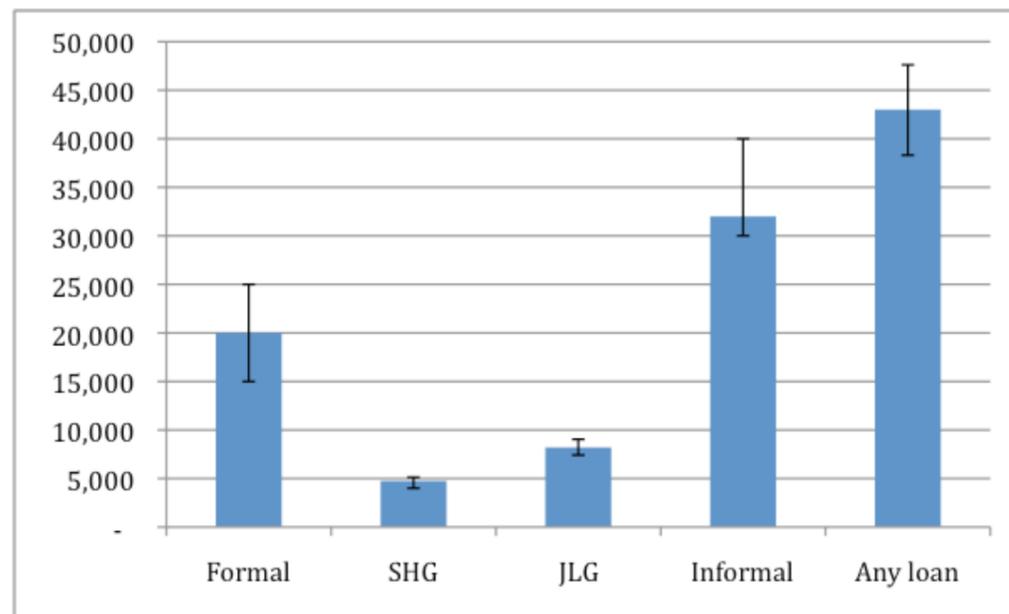
Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."

Figure 31: Mean Outstanding by Source for Commercial Households with at Least One Loan from Source



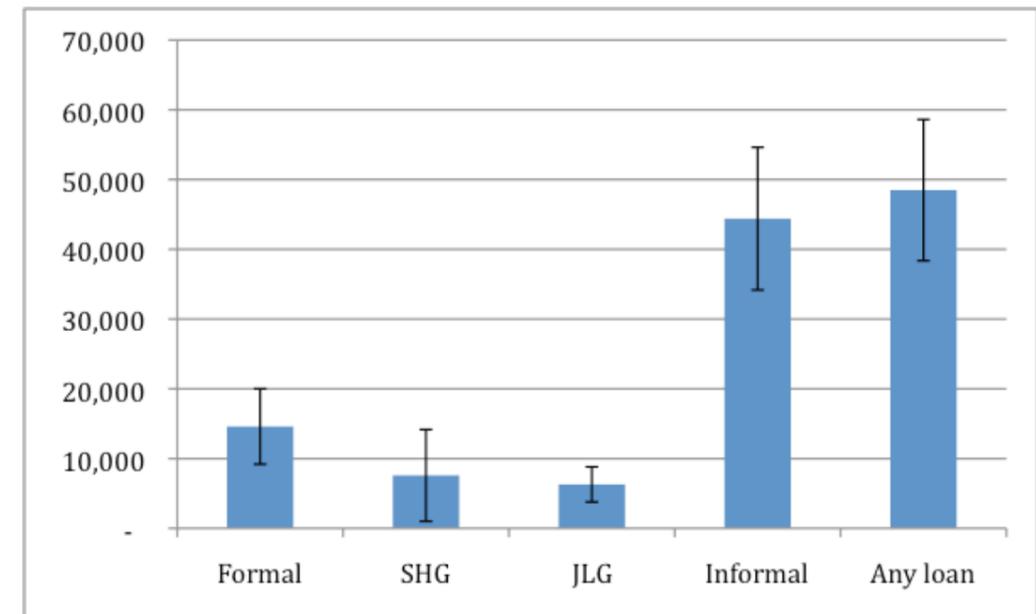
Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."

Figure 32: Median Outstanding by Source for Commercial Households with at Least One Loan from Source (un-weighted)



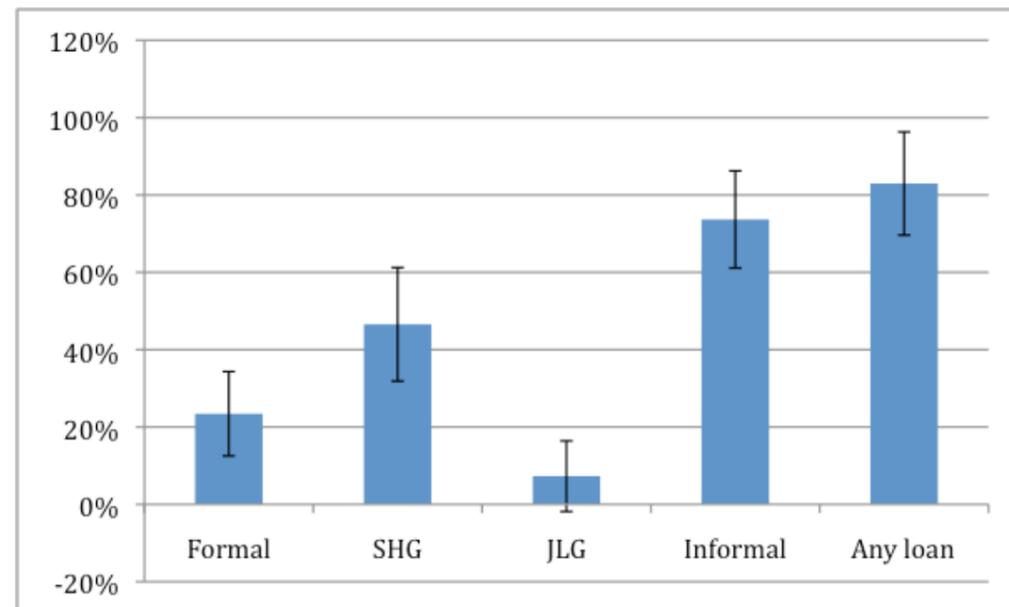
Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."

Figure 34: Mean Outstanding by Source for "Other" Households with at Least One Loan from Source



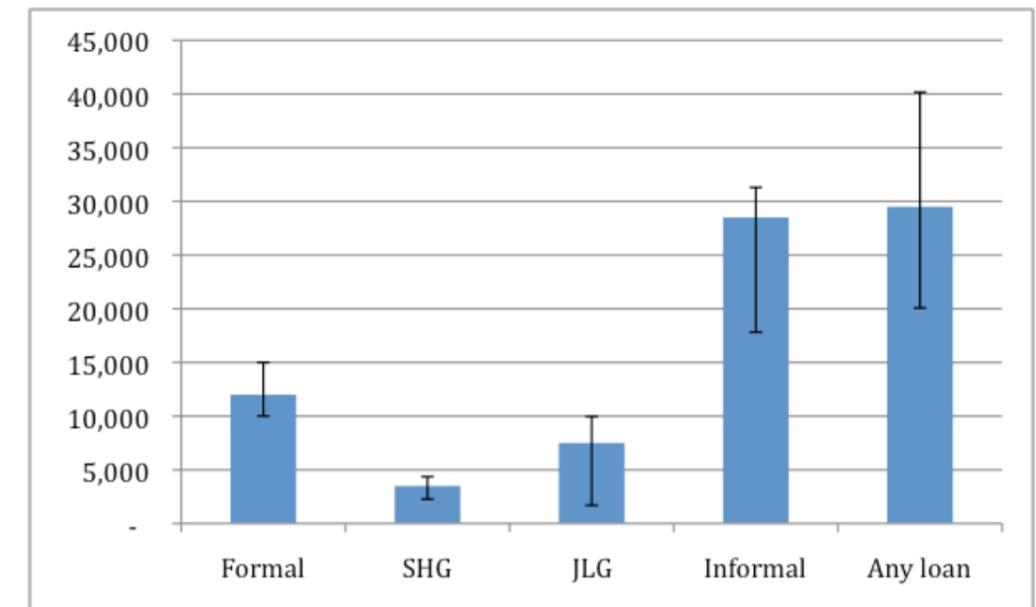
Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."

Figure 33: Share of "Other" Households Indebted by Source



Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."

Figure 35: Median Outstanding by Source for "Other" Households with at Least One Loan from Source (un-weighted)



Source: Centre for Micro Finance, IFMR Research. "Access to Finance in Rural Andhra Pradesh 2010."