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**Nature and Dimensions of
Farmers' Indebtedness in
India and Karnataka**

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NATURE AND DIMENSIONS OF FARMERS' INDEBTEDNESS IN INDIA AND KARNATAKA

Meenakshi Rajeev, B P Vani & Manojit Bhattacharjee¹

Abstract

This paper examines the nature and extent of farmers' indebtedness in India using the unit record data from the 59th round of the NSSO, provides a comparative picture of the major Indian States and an in-depth analysis of Karnataka. In terms of access to credit, seen through the extent of indebtedness, Karnataka is better placed than many Indian States, however, Andhra Pradesh, Tamil Nadu, Punjab and Kerala are ahead of Karnataka. Ironically, almost half of the credit is still provided by the informal sector in Karnataka (on an average). Poor farmers with lower land holdings are much more deprived of formal sources of credit than the comparatively richer ones. Thus, they also pay a much higher rate of interest with modal value of 36 per cent. Nevertheless, it is heartening to note that loans are taken mostly for income generating purposes; but it also indirectly implies that the poor are not getting access to formal sources of credit even for the income generating purposes.

Introduction

In the discussion on the issue of rural indebtedness, the farming class, no doubt, assumes considerable importance. This is mainly because a large portion of the 60 per cent of the population that depends on cultivation in India fall under the marginal and small farmers categories. These farming households need credit on a continuous basis to meet their working capital needs. The food security of the country, to a large extent also depends on the output generated by these farmers. Therefore, it is necessary to ensure timely and affordable credit to the farming households.

In reality however, we observe that most of the poor and marginal farmers do not have access to the formal credit network. In this context, it is important to note that the farming class is not a homogeneous group. The farmers belong to different economic and social groups and for policy purposes, it is essential to understand the kind of access these different groups of farmers' households have to credit. Regional variations in this context also assume importance because in certain States we observe the burden of indebtedness forcing some farmers to take extreme steps such as suicide. This calls for the identification of specific State level measures to combat credit related problems.

When we consider farmer households, the land-holding size rather than household income or expenditure provides a better indicator of their economic status. Keeping this aspect in mind, we examine the indebtedness scenario with respect to certain indicators by classifying farming households according to the size of their land-holdings. An analysis is also carried out by considering the social class to which the household belongs, such as Schedule Castes or Schedule Tribes (SC or ST) or weaker sections such as households headed by women.

A number of studies examine the trends in the lending of the formal sector for different economic activities or different sectors of the India economy by using the bank level data from the

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Reserve Bank of India (see Shetty, 2005; Patnaik, 2005; Chavan, 2005, Basu, 2006). Studies on the rural credit market observe an increase in supply of credit to rural areas after nationalisation of commercial banks (in 1969). However, after liberalisation (1991) there has been a decrease in rural banking net work as reflected through indicators such as the number of rural branch offices of commercial banks (Rajeev and Vani, 2011).

The problems that the poor face when they cannot access credit from the formal sector have been highlighted in various studies. Even though the State made endeavours to address these problems by stipulating norms for compulsory lending to the agricultural sector, the formal lending agencies have not been successful in reaching out to the poor. The data of the National Sample Survey Organisation (NSSO, 2002-03) reveals that while about 30 per cent of the poor borrowers get credit from the formal sector banks, this percentage increases to 60 for the richer farmers (see also Siamwalla *et al.*, 1990, Bell, 1990). The denial of access may be due to the lack of collateral, inability to comply with bureaucratic procedures, illiteracy, etc. (see also Gupta and Choudhuri, 1997, Lele, 1981, Benjamin, 1981).

Most studies that deal with NSSO (2005a, b) data, however, do not provide any analysis of unit record household level data; the authors generally argue on the basis of the consolidated statistics provided in the NSSO report. This paper is intended to fill this gap.

Data Source

The Union Ministry of Agriculture desired a comprehensive assessment of the situation of farmers in the country in the beginning of the millennium in order to understand the various aspects concerning farmers — standard of living, income and income generating assets they possess, farming practices and preferences, availability of resources, their awareness of technical developments and access to modern technology in the field of agriculture etc. To provide this information to the Ministry of Agriculture, the National Sample Survey Organisation (NSSO), as a part of its 59th round, conducted a Situation Analysis Survey (SAS) of farmers. The period of survey was January to December 2003. We may note in this context that this is the most recent data on farmers' indebtedness available at the macro economy level.

The survey was conducted only in the rural areas of the country and the respondents were from farmer households defined as one which owns farmland and at least one member is engaged in farm activities on any part of the land during the last 365 days. In all 51,770 households were surveyed in the central sample conducted directly by NSSO (2005b). The States are also supposed to carry out similar surveys in order to increase the sample size, through respective state samples. Pooling of State and Central samples enables one to arrive at estimates at the regional level. In this survey however, only seven States participated in the State sample and Karnataka is *not* one of them. Hence, strictly speaking, not very reliable estimates could be expected at the district level and consequently, most of our analysis is concentrated at the State level. However, we do present estimates of a few district level indicators generally to throw light on district level variations.

The NSSO data provides information regarding households that have outstanding loan on a pre-specified date (in this case as on June 30, 2002), based on which one can arrive at the percentage of households within a category of households (such as within an income category and so on) that have

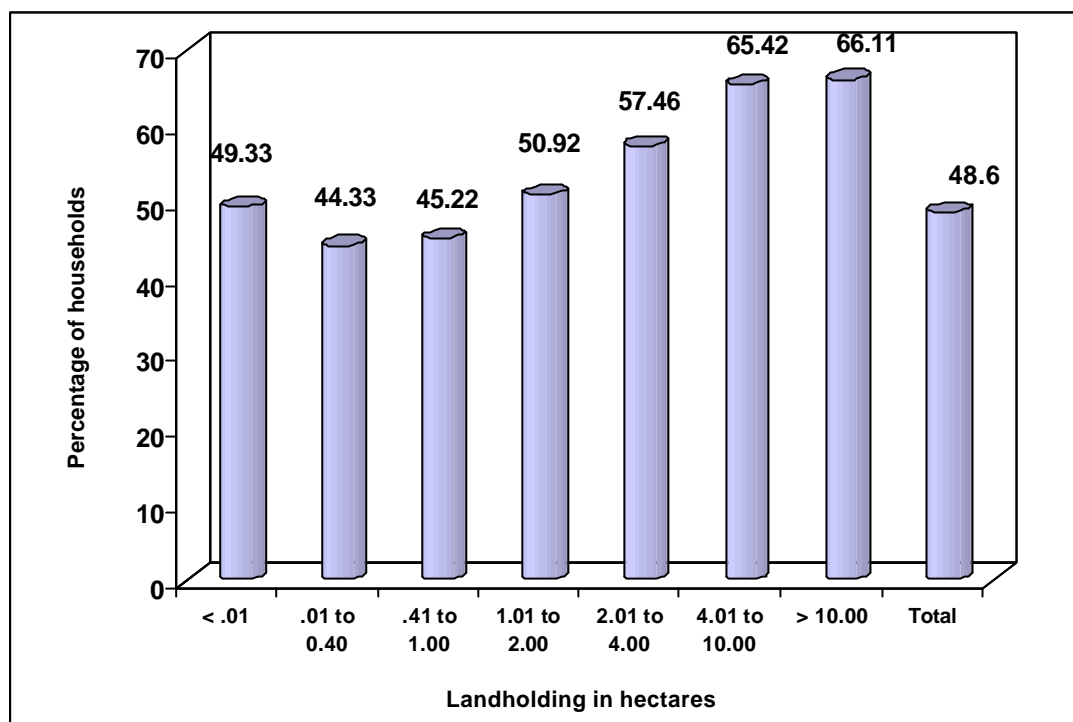
outstanding credit. This indicator termed as the *incidence of indebtedness* (IOI) essentially represents the percentage of households having outstanding loan amongst the households of that category. A careful examination of the above data reveals that IOI is higher for the higher income groups and secondly, more economically advanced States have a higher level of IOI. Further, Schedule Tribe households in general have lower IOI than the General or OBC category households. Observing these characteristics, one is tempted to interpret IOI more as a pointer of access to credit rather than an indicator of distress, though the latter possibility also cannot be ruled out especially for the relatively poorer households.

All India and Inter-State Analysis

At the All India level, the incidence of indebtedness was 48.6 per cent with an average outstanding debt per farmer household of Rs 12,585. This figure rises to Rs 25,891 if we consider only the indebted households. As discussed earlier, if indebtedness can be taken as a proxy for access to credit then it implies that only 49 per cent of the farmer households have access to credit either from formal or informal source. Does this mean that the rest of the households do not require credit or do not have an access to credit? IOI across different landholdings (Fig 1) shows that access to credit increases with the landholding size. One can broadly say that the household with landholdings of more than 4 hectares may or may not require credit, but majority of the households with less than 4 hectares of land possibly need credit for farm activities²; the fact that IOI for these households is much lower than 50 per cent is an indirect indication that the small and marginal farmers face constraints in accessing credit (both from formal and informal sources).

² An exercise carried out by us to estimate the cost of cultivation, income and household expenditure through a field survey of Karnataka farmer households reveals that only the large farmers have positive savings.

Figure 1: Incidence of Indebtedness across landholdings: All India (formal and informal sources)



Note: Interpretation: 49.33 per cent of the households with landholding less than 0.01 hectare have outstanding loan and the rest 50.67 per cent households belonging to the same landholding category have no outstanding loan.

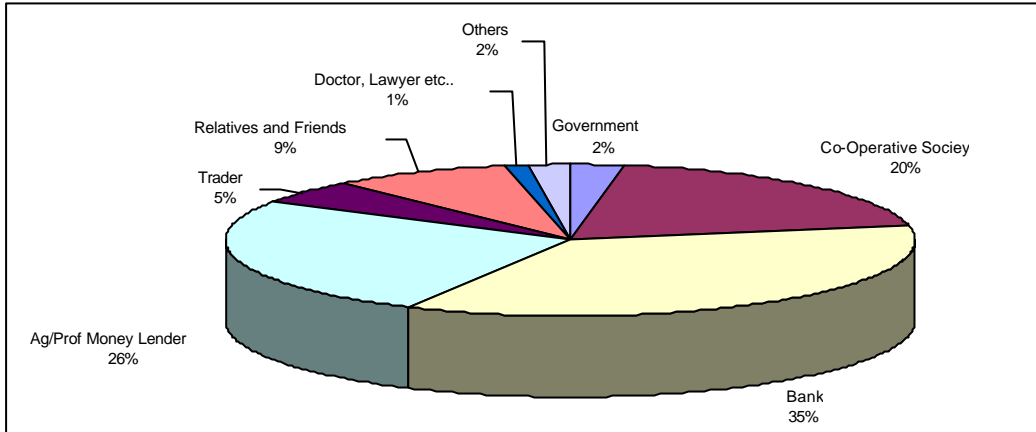
Source: Authors' analysis of NSSO data

Regional Variations

The interstate analysis indicates a wide variation across States with Andhra Pradesh having the highest IOI at 83.1 per cent and Uttaranchal the lowest at 7.2 per cent. All the four southern States and Punjab possess IOI in excess of 60 per cent (see Table A.1 in the Appendix). These are also States with good banking network, and a good network of informal lenders, which possibly result in such high percentages.

At All India level 58 per cent of credit supplied to the indebted households comes from formal sources and the rest i.e., 42 per cent is from informal sources. Banks play a major role in the formal sector (35 per cent in total credit and 60 per cent of the formal sector credit) and moneylenders are the largest suppliers of credit among the non-formal sources (26 per cent of total credit and 62 per cent of informal credit) (see Fig 2).

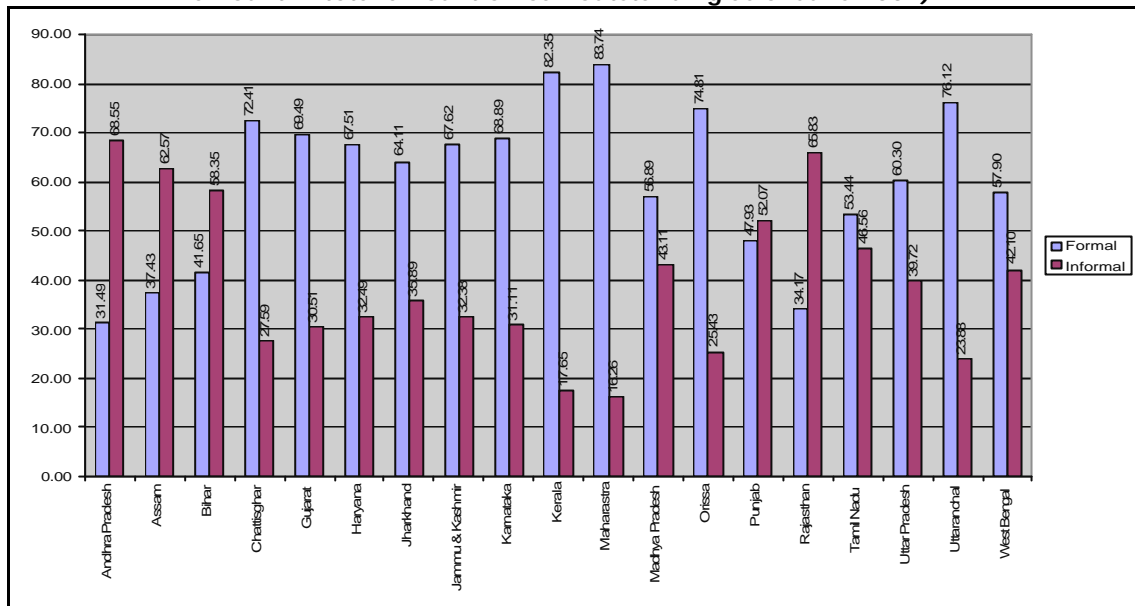
Figure 2: Source wise access to credit (percentage of amount of total loan): All India



Source: Authors' analysis of NSSO data

The interstate variation in access to formal credit is also quite noticeable. Andhra Pradesh had the lowest share from the formal sector at 31 per cent and Kerala and Maharashtra had the highest i.e., around 83 per cent (see Fig 3). This reveals an interesting fact — even though access to credit is quite high in Andhra Pradesh, most of it is from non-formal sources. In Maharashtra, Gujarat, Kerala, Haryana and Tamil Nadu co-operative societies played a major role in providing credit to farmers. This is an additional insight perceived from the analysis of the data on farmer households. Concentrating on Andhra Pradesh, we see that 53 per cent of the credit is from professional moneylenders. The other States where the dependence on the moneylenders is more are Tamil Nadu, Rajasthan, Punjab and Bihar. The modal (mode) interest rate charged by these moneylenders is 36 per cent, which is more than three times the interest rate charged by formal sources. If the borrowed amount had at least been used for income generating purposes then the farmer households would be in a position to repay the loan; otherwise repayment can be a serious problem. We therefore examine next the purpose of the loan.

Figure 3: State wise access to formal credit (shares of formal and informal sector loan amount in total amount of loan outstanding as of June 2002)

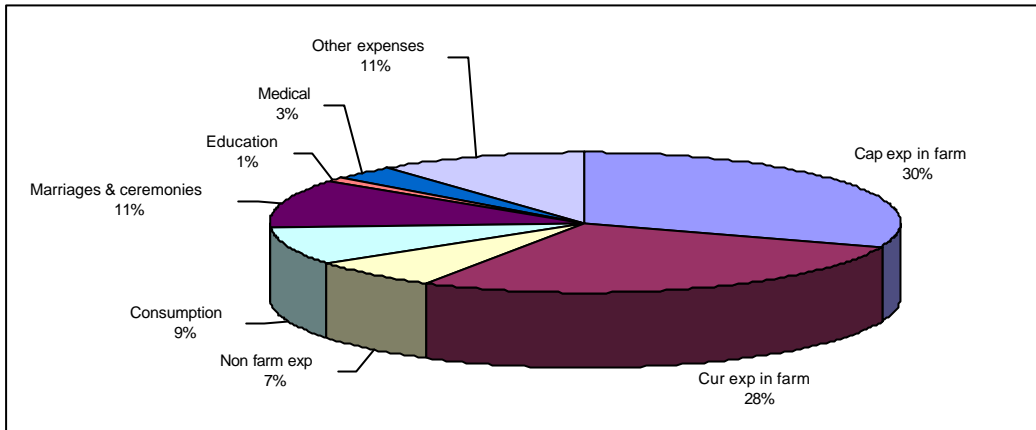


Source: Authors' analysis of NSSO data

The purpose wise usage of the credit at the All India level reveals that 65 per cent is used for the income generating purposes and only 35 per cent for non-income generating purposes (Fig 4). Among the non-income generating category, expenditures on marriage and ceremonies play a dominant role. From our field experience³, we also found that festivals and ceremonies play a major role in rural areas and the farmers end up spending substantial amounts by borrowing from the informal source at a high interest rate. Variations across the States are seen in this respect; for example, farmers in Assam use only 39 per cent of loan for income generating purposes whereas, in Maharashtra, Karnataka and Chattisgarh farmers use nearly 80 per cent of the credit for income generating purpose (Table A.2 in the Appendix). Both capital and current expenditure in farm business are the main categories for which credit is used (Fig.4).

³ Related to a project taken up for State Planning Board, Government of Karnataka, ongoing.

Figure 4: Usage of the credit (percentage of total amount of loan outstanding): All India



Source: Authors' analysis of NSSO data

1. Access to and Usage of Credit across Landholdings

Table 1 (column 1) indicates that 61 per cent of the farmer households fall under the 0.01 to 0.40 and 0.41 to 1.00 hectares of land holding categories taken together and furthermore another 18 per cent of the households belong to 1.01 to 2.00 hectares of land holding category. Thus nearly 80 per cent of the farmer households belong to marginal and small farmer categories. These categories have 45 per cent, 53 per cent and 58 per cent, respectively, of their credit through formal agencies. i.e., on an average only 50 per cent of their credit is through formal agencies. In other words, these small and marginal farmers constitute 80 per cent in number while their share in the total formal credit is only 52 per cent. They (see Table 1 for household classification in terms of landholdings) in turn use 36 per cent, 57 per cent and 69 per cent of total borrowings, respectively, towards income generating purposes. The farm households with less than 0.4 hectares of land (i.e., between 0.01 hectare to 0.40 hectare), use less than 36 per cent of loan for income generating purposes. With 55 per cent of the total borrowing coming from informal sources for such farmers, and 64 per cent of total loan amount used for non-income generating purposes, a clear possibility of repayment problem arises. Thus, the formal sector needs to reach out to the comparatively poorer farmers not only for production related credit but also for consumption credit. Presently there is a provision for debt swap whereby a formal bank can take over informal loan of farmers and help them repay loan under better terms. However, the farmers often lack information about such useful schemes and the need of the hour is to make such provisions more popular especially among poor farmers.

Table 1: Access to credit and usage of credit (amount of loan): All India

Land holding in hectares	Share of household (per cent)	Source of credit		Purpose of usage	
		Formal* (per cent)	Informal (per cent)	Income generating** (per cent)	Non income generating (per cent)
< 0.01	3.62	24.19	75.81	24.93	75.07
0.01 to 0.40	29.39	44.79	55.21	35.76	64.24
0.41 to 1.00	32.49	52.64	47.36	56.90	43.10
1.01 to 2.00	18.10	57.66	42.34	68.92	31.08
2.01 to 4.00	10.64	65.02	34.98	78.28	21.72
4.01 to 10.00	4.82	68.99	31.01	83.25	16.75
> 10.00	0.90	67.01	32.99	81.59	18.41
Total	100.00	57.68	42.32	65.15	34.85

* Percentage of amount of formal loan outstanding of total amount of loan outstanding.

** Percentage of total amount of loan used for income generating purposes out of total loan amount outstanding.

Source: Authors' analysis of NSSO data

Across the States, there are wide variations in access to credit through formal sources. In most of the States, marginal and small farmers rely heavily (to the tune of 70 per cent of total loan amount) on the informal sources. In addition, the usage of credit by the marginal and small farmers for income generating purposes in most of the States is quite low and this trend is especially noticeable in the backward States. Thus, more dependence on informal credit at a high interest rate coupled with usage of it primarily for non-income generating activities are definitely not promising signs and indicate that the formal credit institutions have a challenging task to reach out to the economically backward classes. What about the socially backward classes? Are they comparatively better off?

2. Access and Usage of Credit across Social Groups

Across the social groups, we find that at the All India level only 36 per cent of the Schedule Tribe households are indebted, while with respect to Schedule Caste and the general category, incidence of indebtedness is 50 per cent; and interestingly the OBC category has the highest IOI at 52 per cent. Thus, access to credit is substantially lower for tribal farm households revealing that the formal credit institutions not only have an important role to play to reach out to the economically backward classes but also to the socially backward classes.

The IOI for households headed by women is 42 per cent vis-à-vis their male counterparts which is 50 per cent revealing that not only the socially backward classes but also the weaker sections, such as women, have poor access to credit (from both formal and informal sources) compared to other categories. *One may argue that a male can also access credit in a female headed household. However, our analysis of these households shows that above 80% of such households are headed by widows with small children. In particular, access to formal credit was quite high for general category (66 per cent)*

and lowest for the SC category (46 per cent). Both the SC category and women used a relatively lesser share of credit for income generating purpose (see also Table A.3 in the Appendix).

Even though at All India (average) level the share of credit from formal sources is low for the SC farmer households, a wide variation is seen across States. In Maharashtra, Kerala, Orissa and West Bengal, SC households that are indebted had more than 70 per cent of their credit from formal sources. These households also used a substantial portion of their credit for income generating purposes. Kerala, Maharashtra and Gujarat are more gender sensitive and more than 70 per cent of the credit for the women headed farmer households has come from the formal sector.

Having seen the picture of indebtedness across the States and India we now concentrate on the state of Karnataka.

Indebtedness Scenario in Karnataka

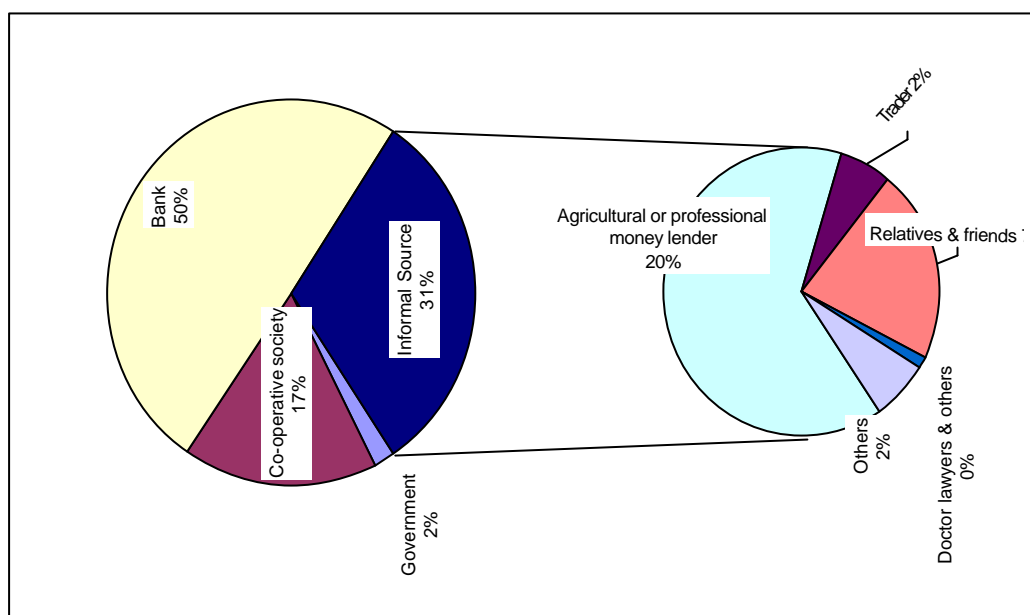
The above State level analysis reveals that Karnataka is a State with reasonably good access to credit (middle performing state), however, there are variations in access across various social groups and weaker sections.

1. Sources of Borrowing

Here the sources of borrowing are classified into two broad groups, viz., formal and informal sources, where the sources such as the government, co-operative societies and banks fall under the formal source while moneylenders, traders, relatives and friends, doctors, lawyers and others belong to the informal category. The outstanding debt in many States, including Karnataka, is financed more by formal sources than the informal sources (Fig 5 and Fig. 3⁴). Commercial banks play a major role in financing 50 per cent of the outstanding debt, while 17 per cent of the outstanding loan is taken care of by co-operative banks and a small portion, i.e., 2 per cent, by government sources. The rest, 31 per cent, of the debt is financed by non-formal sources within which moneylenders play a major role, i.e., they finance 20 per cent of the total debt at a modal interest rate of 36 per cent. Even though modal interest rate is 36 per cent from moneylenders, roughly one-fourth of the loans taken from them are at the interest rate of 60 per cent.

⁴ Fig 5 presents a disaggregated picture of the data shown for Karnataka in Fig 3.

**Figure 5: Sources of loan (percentages with respect to amount of loan for each category):
Karnataka**



Source: Author's analysis of NSSO data

Table 2: Loans outstanding from different sources: Karnataka

Sources of credit	Share of loans (number of loans)	Average amount of loan outstanding (in Rs.)	Median loan outstanding by sources (in Rs.)	Modal rate of interest (in per cent)
Government	1.51	31043.92	20520	14
Co-operative society	21.23	19698.37	10325	18
Bank	29.48	41989.13	15000	12
Formal Source	52.22	32619.97	14985	12
Agricultural or professional money lender	29.74	16599.07	10000	36
Trader	4.33	10631.38	6350	36
Relatives & friends	10.37	16118.53	5000	0
Doctors, lawyers & others	0.80	11882.61	4000	0
Others	2.53	20348.6	11000	36
Informal Sources	47.78	16073.54	8240	36
Total	100.00	24706.94	10000	36

Source: Author's analysis of NSSO data

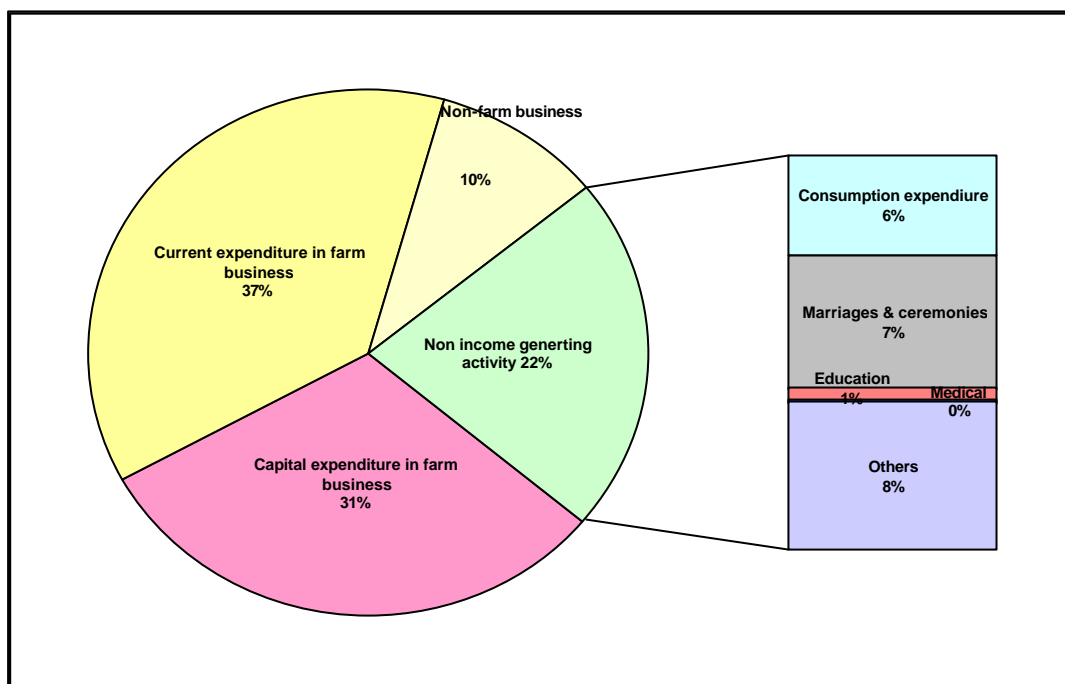
Even in terms of number of loans (see Table 2), 52 per cent of loans are from formal sources and the rest are from various informal sources. The median outstanding loan of the formal source is

around Rs 15,000 whereas with respect to informal loans, it is only about Rs 8000 per borrower. It is also found that most of these borrowers facing moneylenders who charge a high interest rate are from the OBCs (constitutes 60 per cent) and those having land holdings between 0.01 to 2.00 hectares of land (i.e., around 84 per cent). It is surprising to see that among those who are indebted to moneylenders only 15 per cent and 10 per cent are from the socially deprived classes, i.e., SC and ST, respectively. There are two possible explanations here, either the socially deprived classes have better access to formal sectors through certain welfare programmes or they are not credit-worthy for the money lenders who do not take the risk of lending them. This issue has been discussed in the sequel.

2. Purpose of Borrowing

Examining activity-wise use of the loan, one observes that the usage of loan for income generating activities is quite high, i.e., as high as 78 per cent. Of all the income generating activities, nearly three-fourths of the loan from the formal agencies is used for current expenditure on farm business and the modal interest rate faced by the borrowers is 12 per cent. The next important category which the loan finances is capital expenditure in farm business — more than three-fourths of this loan is financed by formal agencies (Table 3 and Fig 6). Among the income generating activities, non-farm business forms the lowest category — accounting for only 10 per cent of the loan. This category however, has the highest average or the median outstanding loan. Here also the formal sector plays a major role in financing and borrowers face (modal) 16 per cent rate of interest.

**Figure 6: Purpose of loans (percentage in terms of amount of loan for each category):
Karnataka**



Source: Author's analysis of NSSO data

Table 3: Purpose for which loan has been used: Karnataka

Purposes	Share of loans	Source of loan from (in %)		Average amount of loan outstanding (in Rs.)	Median loan outstanding (in %)	Modal interest rate (%)
		Formal	Informal			
Income Generating Activity	78.04	77.16	22.84	27795.1	12500	12
Capital expenditure in farm business	30.73	76.21	23.79	38366.4	18000	12
Current expenditure in farm business	37.51	74.86	25.14	19830.4	10000	12
Non-farm business	9.80	88.97	11.03	85141.7	25750	16
Non Income Generating Activity	21.96	39.48	60.52	17713.0	8000	36
Consumption expenditure	5.64	18.97	81.03	8365.9	5000	0
Marriages & ceremonies	7.44	25.96	74.04	29516.5	20000	36
Education	0.62	63.06	36.94	14384.3	10000	60
Medical	0.16	23.70	76.30	5715.9	4080	0
Others	8.09	64.70	35.30	33447.2	15000	0
Total	100.00	68.89	31.11	24706.9	10000	36

Source: Author's analysis of NSSO data

When it comes to non-income generating activities, the marriages and ceremonies category and consumption category takes a major share of the loan. The sources for these categories are mostly

non-formal agencies and the borrowers face high interest rates with modal value at 36 per cent. The average amount borrowed for marriages and ceremonies is also quite high. The borrowers under these categories not only face a high rate of interest but also the fact that these categories cannot generate any income can be the cause of farmers' distress.

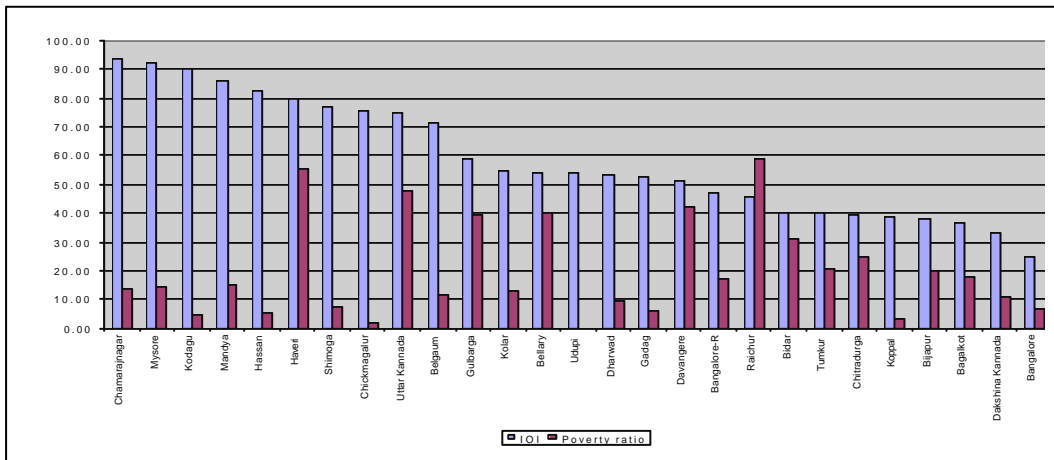
Region-wise Debt: Karnataka

In order to understand region wise variation, a district level analysis was deemed useful even with limited data and as expected across districts, a wide variation was noticed in IOI. It ranged from 93.75 per cent in Chamarajanagar, to 24.91 per cent in Bangalore. It is also seen that most of the districts where IOI is above 70 per cent, are agriculturally well developed either with plantation crops (districts such as Kodagu, Shimoga and Chickmagalore), or districts with highly irrigated area with food grain crops which are input intensive (districts such as Mysore, Mandya, Hassan etc.). The only districts, which figure in with high IOI but are not agriculturally well developed are Chamarajanagar, Haveri and Uttara Kannada. It is must be mentioned that in Haveri and Uttara Kannada the incidence of poverty is also quite high (Fig 7 and Table 4).

It could be further observed that most of the districts mentioned above are also 'better banked' districts as can be seen from the share of borrowing from formal sources. The average loan per household in some of these districts is quite high. Thus, it can be said that either IOI or average amount of borrowing could be taken as an indication of distress only if it is coupled with high poverty and low development.

In districts where IOI is quite low coupled with high poverty ratio, the absorbing capacity possibly is low. An analysis at the disaggregate level, disaggregation either in terms of economic status of the households i.e., land holding or per capita consumption expenditure or at social level in terms of backward castes may throw more light on the distress picture. However, data limitation does not permit an exercise of this nature.

Figure 7: Incidence of Indebtedness and poverty ratio across districts of Karnataka



Source: Author's analysis of NSSO data

Table 4: Incidence of Indebtedness at regional level: Karnataka

Regions	IOI	Formal	Informal	Average amount outstanding per household	Rural poverty 2004-05	Per capita income from agriculture 2006-07
Coastal & Ghats	56.09	91.93	8.07	35708.42	20.26	
Uttar Kannada	74.68	95.21	4.79	56745.54	47.61	6252.00
Dakshina Kannada	33.27	97.55	2.45	6844.57	11.19	9835.00
Udupi	54.08	84.42	15.58	36310.90	0.00	7313.00
Inland Eastern	79.48	61.55	38.45	22442.62	5.10	
Shimoga	76.66	68.62	31.38	20678.81	7.78	10165.00
Chickmagalur	75.70	63.92	36.08	30767.64	2.03	13171.00
Hassan	82.71	36.39	63.61	16933.03	5.13	6977.00
Kodagu	90.16	93.06	6.94	36526.73	4.62	19663.00
Inland Southern	63.05	41.91	58.09	14201.97	15.14	
Tumkur	40.03	56.50	43.50	7867.71	20.63	6005.00
Kolar	55.03	44.62	55.38	21900.53	12.85	6820.00
Bangalore	24.91	59.49	40.51	2819.63	6.59	7711.00
Bangalore- Rural	46.97	55.43	44.57	10423.78	17.40	7594.00
Mandya	85.77	41.66	58.34	19347.67	15.31	6912.00
Mysore	92.43	27.13	72.87	15267.09	14.18	8275.00
Chamaraja Nagar	93.75	19.29	80.71	13426.48	13.83	6365.00
Inland Northern	53.59	82.88	17.12	16215.50	27.35	
Belgaum	71.33	89.59	10.41	38012.51	11.97	5732.00
Bagalkot	36.86	74.97	25.03	11679.61	18.05	6963.00
Bijapur	37.94	70.20	29.80	7693.05	19.97	5200.00
Gulbarga	59.21	63.21	36.79	9762.16	39.35	5558.00
Bidar	40.49	99.17	0.83	9837.61	31.02	3513.00
Raichur	45.95	55.01	44.99	4125.49	59.19	5620.00
Koppal	38.43	55.72	44.28	2894.97	3.65	5259.00
Gadag	52.87	88.68	11.32	13219.20	6.44	5978.00
Dharwad	53.22	87.42	12.58	12901.81	9.72	3080.00
Haveri	79.84	94.64	5.36	29169.50	55.13	5475.00
Bellary	54.11	77.23	22.77	16448.91	40.00	11297.00
Chitradurga	39.55	50.56	49.44	7094.61	24.76	6491.00
Davangere	51.28	51.05	48.95	6663.78	42.18	9525.00
Total	61.60	68.89	31.11	18135.09	20.67	

Source: Author's analysis of NSSO data

The correlation between per capita income and IOI shows a positive result and is significant at the 10 per cent level (table 4a). Thus districts with better income also have better access to credit and hence higher level of indebtedness.

Table 4a: Correlation between IOI and Per capita income across districts

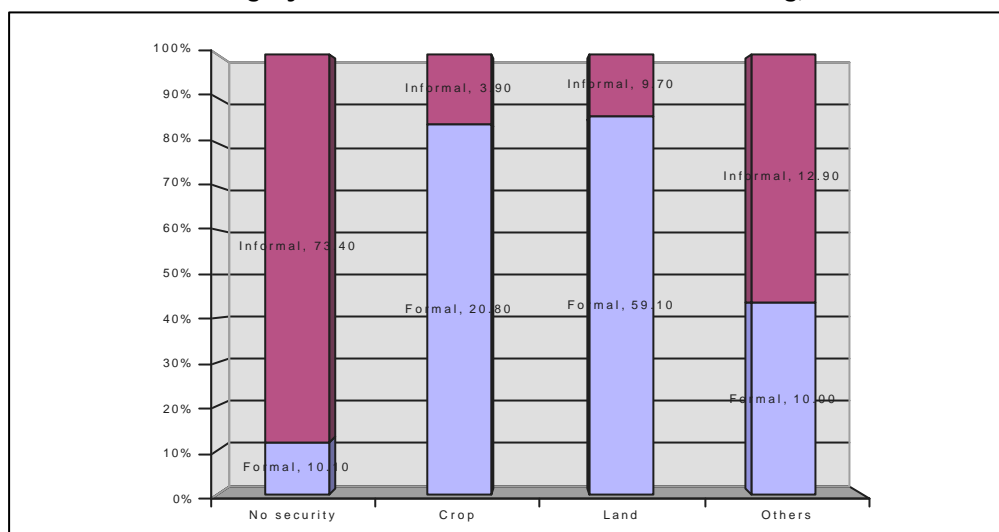
Correlations			
		IOI	Per capita district income from agriculture
IOI	Pearson Correlation	1	0.335
	Sig. (2-tailed)		0.088
	N	27	27
Per capita district income from agriculture	Pearson Correlation	0.335	1
	Sig. (2-tailed)	0.088	
	N	27	27

Debt Pattern across Economic Classes

1. According to Land Holdings

In Karnataka, 53.02 per cent of the farmer households belongs to the marginal landholding category; small farmers comprise another 21.22 per cent and the rest i.e., 25.76 per cent of the households are medium and large farmers. It is observed that IOI increases with size of the land holding. Out of the total loan outstanding, only 34 per cent are from marginal farmers and 18 per cent are from the small farmers. As can be seen from Table 4, the share of these loans coming from the formal financial institution is quite low for the marginal farmers and they face a high rate of interest. The modal interest rate faced by marginal farmers is 36 per cent, where as for the other landholding category it is around 12 per cent or 13 per cent. Juxtaposing this with the collateral provided for securing the loan from the formal financial institution we see that only 13 per cent of the formal loan is given without security, while land (59 per cent) and crops (21 per cent) constitute the major type of security required to get the formal loan (Fig 8 and Table 5). Marginal farmers, with smaller landholdings may not be in a position to provide the required security to the formal lending agency and consequently this constraints their access and forces them to fall back upon the informal agency that charges a higher interest rate. Further, it is also seen that they use a considerably smaller proportion of the loan for income generating activities, which in turn can push them towards a distressed state.

Figure 8: Type of security across institutions (percentage in terms of number of loans in each category out of total number of loans outstanding): Karnataka



Source: Author's analysis of NSSO data

Table 5: Incidence of Indebtedness across land holdings in Karnataka

Land in hectares	Share of households	Incidence of Indebtedness	Amount outstanding per loan (in Rs.)	Source of loan from		Loan used for		Modal interest rate
				Formal	Informal	IGA	NIGA	
<0.01	0.96	36.88	12073.42	18.90	81.10	24.44	75.56	36.00
0.01 – 0.40	13.26	58.37	13569.48	32.25	67.75	39.80	60.20	36.00
0.41 – 1.00	38.80	59.48	18646.10	61.68	38.32	68.44	31.56	36.00
1.01 – 2.00	21.22	65.42	19269.32	58.14	41.86	79.82	20.18	12.00
2.01 - 4.00	16.06	62.00	30450.15	74.12	25.88	87.88	12.12	12.00
4.01 - 10.00	8.42	69.40	54147.48	86.49	13.51	85.98	14.02	14.00
>10.00	1.27	58.68	91485.10	97.00	3.00	97.93	2.07	15.00
Total	100.00	61.61	24706.94	68.89	31.11	78.04	21.96	36.00

Source: Author's analysis of NSSO data

According to Expenditure Class

After reclassifying the monthly per capita expenditure (MPCE) class into three groups — per capita expenditure class from Rs 300 to Rs 420 as in and around the poverty line, less than Rs 300 as people in abject poverty and above Rs 420 as the comparatively richer class — we see that farmers who are really poor (MPCE below Rs 300) hardly have any access to formal financial institutions. In particular, 71 per cent of their borrowings are from informal sources (Table 6) and hence end up paying a high interest rate of around 36 per cent. The average loan outstanding is also quite low amounting to about one-third of the loan outstanding compared to the rich farmers. Further, 35 per cent of the farmers are in and around the poverty line (MPCE class of Rs 300 to Rs 420) and their share in the total outstanding debt is only 22 per cent. Even though a little more than 50 per cent of the farmers have an access to formal lending agencies, still modal interest rate for this category is as high as 36 per cent. Thus, repayment can become a problem since most of the loans are not used for income generating activities.

Table 6: Debt structure across expenditure class: Karnataka

Per capita expenditure (in Rs.)	Share of households	Incidence of Indebtedness	Amount outstanding per loan (in Rs.)	Source of loan from		Loan used for	
				Formal	Informal	IGA	NIGA
Less than 300	5.90	40.1	11683.06	29.38	70.62	57.10	42.90
300 to 420	35.00	62.4	16081.28	54.24	45.76	65.20	34.80
420 and above	59.10	63.3	30056.37	73.95	26.05	72.30	27.70
Total	100.00	61.6	24706.94	68.89	31.11	69.40	30.60

IGA: Income generating activities, NIGA: Non IGA

Source: Author's analysis of NSSO data

An important question that arises now is who is poor in terms of social class or deprived class. Cross-classification across disadvantaged groups shows that a majority of these farmers are from the SC/ST category (Table 7). It is important to note that 70 per cent of the SC category and 66 per cent of the ST category farmers are marginal farmers. Though around 37 per cent of the women headed households belong to marginal farmers' category, if one considers small and marginal farmers as one category, 83% of the total women headed household falls in this combined category. We have seen earlier that the farmers in these landholding categories are considerably deprived of the loans from the formal institutions and face higher interest rate. As most of the SC/ST and households headed by women are in these categories, they are expected to be under stressed situation.

Table 7: Share of deprived class across different groups of farmers: Karnataka

	Schedule Caste	Schedule Tribes	Other Backward Class	Others	Women headed household	Total
Marginal	70.33	65.76	53.33	33.25	37.43	48.60
Small	17.75	16.92	22.54	25.59	46.12	22.68
Medium and Large	11.91	17.32	24.14	41.15	16.45	28.72
Small + Marginal	88.09	82.68	75.86	58.85	83.55	71.28

Source: Author's analysis of NSSO data

Since certain programmes are designed for the deprived classes it is essential to ask at this juncture what their shares are in the formal credit in terms of amount of loan?. Table 7 presents the debt situation across social groups and for the households headed by women in more detail. Even though 61 per cent of ST and 52 per cent of SC farmers have an access to formal lending agencies, their absorption capacity in terms of quantum of loan is quite low. Only 6 per cent of the formal loans by ST and 3 per cent by SC are absorbed. The *others* category takes a major chunk, i.e., about 62 per cent, and the same is the case with households headed by women. Both SC/ST and households headed by women face 36 per cent interest rate (in terms of modal value) (Table 8).

Table 8: Debt structure across deprived class: Karnataka

	Incidence of Indebtedness	Amount outstanding per loan (in Rs)	Source of loan from		Loan used for		Modal interest rate
			Formal	Informal	IGA	NIGA	
ST	57.16	16579.48	61.42	38.58	65.30	34.70	0.00
SC	51.88	11455.00	51.94	48.06	59.50	40.50	36.00
OBC	68.96	21141.57	53.67	46.33	65.30	34.70	36.00
Others	58.70	34238.32	81.86	18.14	77.60	22.40	12.00
W Hhs	54.40	19388.65	53.23	46.77	59.40	40.60	36.00
Total	100.00	24706.94	68.89	31.11	69.40	30.60	36.00

Source: Author's analysis of NSSO data

Note: ST - Schedule Tribes, SC - Schedule Caste, OBC - Other Backward Class, W Hhs - Women Headed households, IGA: Income generating activities, N: non

Woman-headed households have lower access to credit vis-à-vis most of the other categories and their access to formal sources is also poor. These observations give rise to important challenges for the formal credit institutions. Woman headed cultivator households (our analysis shows they are mostly widows with small children) undoubtedly face many problems in carrying out their production activities. If they need to depend largely on informal lenders with interest rate of 36 per cent or more, one can very well infer why we fail in achieving inclusive growth and development.

Conclusions

In this paper we examine, in detail, the nature and extent of farmers' indebtedness in India and provided a comparative picture of major Indian States. An in-depth analysis has also been carried out for Karnataka. In terms of access to credit, seen through the extent of indebtedness, Karnataka is better placed than many other States. Nevertheless, Andhra Pradesh, Tamil Nadu, Punjab and Kerala are ahead of Karnataka.

Ironically, almost half of the credit is still provided by the informal sector in Karnataka (on an average). The region wise picture shows that southern region is more dependent on informal sources of credit. Poor farmers with smaller land holdings are much more deprived of the formal sources of credit than the comparatively richer ones. Thus, they also pay a much higher rate of interest with modal value of 36 per cent. However, it is heartening to note that loans are taken mostly for income generating purposes. It also indirectly implies that even for the income generating purposes the poor are not getting access to formal sources of credit.

At All India level the share from the formal source is quite low for the SC category of farmer households and a wide variation is seen across the States. In Maharashtra, Kerala, Orissa and West Bengal, SC households had more than 70 per cent of their credit from formal source. These households also used a large proportion of their credit for income generating purposes. Kerala, Maharashtra and Gujarat are more gender sensitive and more than 70 per cent of the credit for the farmer households headed by women came from formal sector. Other States can learn some lessons from these States in this regard.

Thus to conclude, in many States in India the dependence of the deprived classes such as SC/ST on informal loans is much higher than that of the 'others' category. The weaker sections such as households headed by women also depend to a large extent on informal sources of credit. Thus, there is an urgent need to improve access to formal credit for the backward classes and poorer and weaker sections of the farmer community.

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Appendix

Table A.1: Incidence of Indebtedness

States	Incidence of Indebtedness	Average outstanding loan (in Rs)		Median outstanding loan (in Rs) within indebted household
		All households	Within indebted households	
Andhra Pradesh	82.13	23965	29178	13910
Assam	18.12	813	4484	1400
Bihar	33.02	4476	13552	5166
Chattisgarh	40.19	4122	10256	4125
Gujarat	51.91	15526	29912	15000
Haryana	53.13	26007	48952	24357
Jharkhand	20.87	2205	10564	4000
Jammu & Kashmir	31.84	1903	5977	576
Karnataka	61.61	18135	29437	10300
Kerala	64.37	33907	52676	22150
Maharashtra	54.85	16973	30948	12000
Madhya Pradesh	50.80	14218	27987	11200
Orissa	47.83	5871	12275	5700
Punjab	65.44	41576	63529	20000
Rajasthan	52.43	18372	35044	15500
Tamil Nadu	74.47	23963	32178	12360
Uttar Pradesh	40.33	7425	18409	8250
Uttaranchal	7.18	1108	15429	6840
West Bengal	50.12	5237	10449	4650
All India	48.61	12585	25891	10000

Source: Author's analysis of NSSO data

Table A.2: Purpose wise share (in terms of total amount of loan outstanding for each category out of total loan amount outstanding) of indebtedness

State	Income generating	Capital expenses in farm	Current expenses in farm	Non farm expenses
Andhra Pradesh	64.66	23.37	38.08	3.21
Assam	39.43	16.56	6.73	16.15
Bihar	47.10	30.83	8.63	7.64
Chattisgarh	78.40	40.28	29.96	8.15
Gujarat	74.51	20.30	50.34	3.87
Haryana	68.96	35.95	26.25	6.76
Jharkhand	57.26	27.16	5.26	24.85
Jammu & Kashmir	53.22	26.01	3.15	24.06
Karnataka	78.04	30.73	37.51	9.80
Kerala	44.24	10.99	10.44	22.81
Maharashtra	80.21	37.93	37.49	4.79
Madhya Pradesh	69.71	47.03	21.27	1.41
Orissa	64.74	28.85	24.39	11.50
Punjab	66.69	26.35	35.97	4.37
Rajasthan	59.39	37.48	19.72	2.19
Tamil Nadu	54.86	24.28	25.08	5.50
Uttar Pradesh	67.93	40.30	20.65	6.98
Uttaranchal	51.45	18.37	15.78	17.30
West Bengal	55.95	24.37	21.33	10.25
Others	46.37	10.84	10.35	25.18
Total	65.14	30.61	27.79	6.75

Source: Authors' analysis of NSSO 59th round data

Contd...

Table A.2 (Contd.): Purpose wise share (in terms of total amount of loan outstanding for each category out of total loan amount outstanding) of indebtedness

State	Un income generating	Consumption	Marriages & ceremonies	Education	Medical	Other expenses	Total
Andhra Pradesh	35.35	11.47	9.57	1.43	2.41	10.46	100.00
Assam	60.59	12.38	11.78	0.13	1.51	34.77	100.00
Bihar	52.90	6.39	22.92	2.25	10.16	11.18	100.00
Chattisgarh	21.60	6.73	6.38	0.32	3.43	4.74	100.00
Gujarat	25.49	6.29	10.15	0.46	3.03	5.56	100.00
Haryana	31.04	4.79	14.00	0.00	1.99	10.25	100.00
Jharkhand	42.74	10.45	9.85	0.00	0.85	21.58	100.00
Jammu & Kashmir	46.78	18.27	9.34	0.00	2.03	17.14	100.00
Karnataka	21.96	5.64	7.44	0.62	0.16	8.09	100.00
Kerala	55.76	10.22	11.15	1.36	2.48	30.55	100.00
Maharashtra	19.79	4.17	4.92	0.85	1.52	8.32	100.00
Madhya Pradesh	30.29	9.56	14.38	0.06	3.61	2.68	100.00
Orissa	35.26	11.35	13.98	0.15	2.90	6.87	100.00
Punjab	33.31	8.46	10.23	0.04	2.60	11.98	100.00
Rajasthan	40.61	13.79	17.63	0.84	3.91	4.44	100.00
Tamil Nadu	45.14	13.12	8.72	2.55	4.14	16.61	100.00
Uttar Pradesh	32.14	6.84	11.82	0.20	6.10	7.11	100.00
Uttaranchal	48.55	9.17	7.42	0.00	2.22	29.74	100.00
West Bengal	44.05	7.18	11.15	0.52	5.13	20.08	100.00
Others	53.86	7.48	10.00	1.28	3.85	31.02	100.00
Total	34.87	8.80	11.12	0.84	3.33	10.78	100.00

Source: Authors' analysis of NSSO 59th round data

Table A.3: Share of indebtedness (in terms of total amount of loan outstanding for each category out of total loan amount outstanding) from formal/informal source

State	ST		SC		OBC	
	Formal	Informal	Formal	Informal	Formal	Informal
Andhra Pradesh	35.43	64.57	19.80	80.20	26.58	73.42
Assam	17.65	82.35	35.45	64.55	39.27	60.73
Bihar	17.04	82.96	30.61	69.39	41.24	58.76
Chattisgarh	75.25	24.75	77.09	22.91	69.68	30.32
Gujarat	71.03	28.97	36.11	63.89	68.36	31.64
Haryana	93.61	6.39	57.01	42.99	61.88	38.12
Jharkhand	86.04	13.96	74.74	25.26	57.12	42.88
Jammu & Kashmir	-	-	17.50	82.50	37.25	62.75
Karnataka	61.42	38.58	51.94	48.06	53.67	46.33
Kerala	96.09	3.91	83.73	16.27	76.10	23.90
Maharashtra	75.65	24.35	91.19	8.81	81.16	18.84
Madhya Pradesh	63.82	36.18	35.69	64.31	52.64	47.36
Orissa	78.91	21.09	77.75	22.25	73.36	26.64
Punjab	68.71	31.29	28.82	71.18	35.14	64.86
Rajasthan	35.94	64.06	32.04	67.96	33.83	66.17
Tamil Nadu	44.77	55.23	39.73	60.27	55.49	44.51
Uttar Pradesh	57.09	42.91	47.61	52.39	54.60	45.40
Uttaranchal	-	-	82.59	17.41	87.55	12.45
West Bengal	59.39	40.61	68.97	31.03	72.22	27.78
Others	68.66	31.34	69.11	30.89	59.68	40.32
Total	55.71	44.29	45.98	54.02	52.98	47.02

Source: Authors' analysis of NSSO 59th round data

Contd...

Note: ST - Schedule Tribes, SC – Schedule Caste, OBC – Other Backward Class

Table A.3 (contd.): Share of indebtedness from formal/informal source

State	Others		Women headed household		Total	
	Formal	Informal	Formal	Informal	Formal	Informal
Andhra Pradesh	39.63	60.37	25.20	74.80	31.48	68.52
Assam	39.55	60.45	7.77	92.23	37.43	62.57
Bihar	47.40	52.60	42.71	57.29	41.69	58.31
Chattisgarh	77.61	22.39	46.78	53.22	72.41	27.59
Gujarat	72.67	27.33	79.14	20.86	69.49	30.51
Haryana	72.21	27.79	27.00	73.00	67.51	32.49
Jharkhand	61.97	38.03	2.05	97.95	64.11	35.89
Jammu & Kashmir	74.54	25.46	2.94	97.06	67.62	32.38
Karnataka	81.86	18.14	53.23	46.77	68.89	31.11
Kerala	88.35	11.65	70.04	29.96	82.35	17.65
Maharashtra	85.46	14.54	73.05	26.95	83.74	16.26
Madhya Pradesh	67.28	32.72	51.21	48.79	56.89	43.11
Orissa	73.34	26.66	54.67	45.33	74.63	25.37
Punjab	50.80	49.20	29.48	70.52	47.93	52.07
Rajasthan	35.45	64.55	9.77	90.23	34.17	65.83
Tamil Nadu	64.99	35.01	38.81	61.19	53.44	46.56
Uttar Pradesh	77.99	22.01	43.39	56.61	60.29	39.71
Uttaranchal	68.35	31.65	98.06	1.94	76.12	23.88
West Bengal	52.02	47.98	56.28	43.72	57.92	42.08
Others	61.19	38.81	37.06	62.94	63.27	36.73
Total	66.12	33.88	45.86	54.14	57.67	42.33

Source: Authors' analysis of NSSO 59th round data

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