Do Rural Banks Matter? Evidence from the Indian Social Banking Experiment*

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Abstract

Between nationalization in 1969 and liberalization in 1992 the Indian central bank took control of the placement of banks as a means of advancing social objectives. During this period more than 50,000 new branches were built primarily in unbanked, rural locations. This represented a seven fold increase in the proportion of rural locations which were banked. In this paper we evaluate the impact of this 'social banking' experiment on rural development. Our focus, in particular, is on whether policy driven branch expansion into unbanked locations helped to transform production and employment activities and to reduce poverty and inequality. By exploiting this unique episode in Indian history the paper is able to shed light on long standing debates surrounding whether state-led credit expansion undermines or promotes rural development.

1   Introduction

Working out ways to lift people out of poverty is a key objective within development economics. Whilst there is a great deal of rhetoric on this subject we understand little about what concrete steps can be taken. One policy area that has attracted a lot of theoretical attention is credit, access to which is often seen as critical in enabling people to transform their production and employment activities and to exit

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poverty. There is, however, a great deal of skepticism as to whether interventions in credit markets are capable of reaching the poor. Rigorous interventions of actual interventions in credit markets remain thin on the ground and, partly as a result of this, debates rage as regards whether interventions of various forms promote or undermine development.

Nowhere is the debate more heated than as regards formal credit. Here there are two opposing views. The first view which has been dominant for much of the post-war period states that expansion of formal lending institutions such as commercial banks should be engines of structural change and poverty reduction in rural areas. This rationale was used to justify the state taking over control of banking in the majority of low income countries in the post War period (see Besley, 1995). This view lines with much of the theoretical literature in seeing expansion of access to credit as being critical to getting people out of poverty traps (see Banerjee and Newman 1993; Aghion and Bolton 1997). A second view does not dispute that access to credit is critical to poverty reduction but views government intervention in credit markets as being either ineffective or counterproductive in this regard. Formal credit in rural areas will tend to be captured by rural elites. And elite capture combined with the imposition of interest rate ceilings can lead to financial dualism where formal concessional funds are concentrated in the hands of the powerful few and terms in informal markets (on which the poor are forced to depend) are worsened (see McKinnon, 1973; Adams et al, 1984;). Thus expansion of subsidized formal credit can have the unintended consequence of undermining rural development and increasing rural poverty. By the 1990s the pendulum had swung firmly towards this more pessimistic view and this led to focus on alternative providers of credit such as microfinance institutions (see Morduch, 1999).

This paper uses a massive state-led bank branch expansion which took place in India between 1970 and 1990 to shed some light on these issues. Between 1970 and 1992 over 50,000 new bank branches were built predominantly in unbanked, rural locations. The number of banks opened in unbanked locations in a state in any given year was driven by centrally mandated policy rules. Moreover, at the height of this program the intensity of bank building in a state was inversely related to its initial bankedness. We exploit the supply-driven nature of this expansion to assess its impact on development outcomes. During the period bank lending was also skewed towards particular groups. By the late 1980s, agriculture and small-scale industry received roughly 40 percent of total bank credit. Within agriculture, small and marginal farmers had received about 42 percent of total agricultural credit.[1] On the other hand, this period also saw declining profit margins and increasing overdue ratios for commercial banks. These cost considerations and the perception that the program was unsuccessful at reaching the poor ultimately led to the program being abandoned in 1990.

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[1]These are farmers with land holdings of less than 2 hectares, and operate about 25 percent of the sown acreage in India.

Our main focus is on understanding what impact the banking of rural locations had on rural welfare outcomes. And what were the channels through which these effects, if any, worked. Our approach is related to Bingswanger and Khandker (1995) and Binswanger, Khandker and Rosenzweig (1993). These papers use district level data from India to examine the role of banking in affecting rural outcomes. Our analysis is also in the spirit of recent papers which examine the impact of financial liberalization and deepening using micro-data (Paulson and Townsend 2000, Gine and Townsend 2001).

Working out whether state led financial deepening is central to fighting poverty or whether it has been the victim of elite capture seems to us to be an important question for a number of reasons. Government control over banking was the norm in most low income countries in the four decades after the First World War and subsidised bank credit continues to represent an important source of credit in rural areas. Careful assessment of the development impact of social banking is needed in order for us to pass judgement on whether state controlled banks are the appropriate conduit for rural credit. This is made even more relevant by the fact that microfinance schemes, often vaunted as the appropriate successor to commercial banks in rural areas, have also often proven to be unprofitable. And if credit interventions are unprofitable in rural areas it is relevant to ask what should be the right measure of success for rural credit. If it is poverty alleviation then we need to ask how did commercial banks do on this front. Working out whether formal credit is captured or not would thus seem to use central to the design of future policies which purport to attack poverty by giving the poor greater access to credit.

Though there has been a lot of recent work on the links between financial intermediation and growth (see e.g. Bencivenga and Smith 1991) there has been very little careful assessment of the links to poverty reduction. Given that state control over banking was justified mainly on the basis of improving social welfare this would seem to be a serious omission. In addition by using subnational data and the specific form of the policy experiment we are able to get around omitted variable and endogeneity concerns which loom large in the macro literature.

The paper is organized as follows. In Section 2 we describe the Indian social banking experiment and provide evidence on the supply-side nature of the expansion. Section 3 contains the empirical analysis and Section 4 concludes.

2 The Policy Experiment

2.1 Motivation

In India, early concern for rural credit in modern development was manifested in the 1951 All-India Credit Survey.[2] This survey's recommendations foreshadowed initia-

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[2]Long standing concerns of the British Administration that rural indebtedness caused backwardness and poverty served as the motivation for this survey.

tives by governments and international organizations across the developing world to expand access to formal credit in rural, unbanked locations. The report's rationale for such initiatives were founded on two key premises. First, supply led inexpensive formal credit was necessary to displace 'evil' moneylenders who exploited their monopoly power to charge high rates of interest and were therefore net contributors to rural poverty.[3] Second, state led expansions of cheap credit were necessary to allow poor, rural households to adopt new technologies and production processes, and thus to escape the cycle of poverty and indebtedness.

After Independence the Indian central bank (henceforth RBI) sought to expand rural access to formal credit via the cooperative movement. However, by the mid-1960s it became apparent that increasing the quantum of financing of credit cooperatives by the RBI could not address the central problem that the bulk of rural India remained without a source of formal credit. This, combined with political demand for the use of commercial banks as agents of change in rural areas, led to the government-initiated 'social control of banking'. In July 1969 the 14 largest commercial banks were nationalized via the Bank Company Acquisition Act. The preamble to this act stated

"The Banking system touches the lives of millions and has to be inspired by larger social purpose and has to subserve national priorities and objectives such as rapid growth of agriculture, small industries and exports, raising of employment levels, encouragement of new entrepreneurs and development of backward areas. For this purpose it is necessary for the government to take direct responsibility for the extension and diversification of banking services and for the working of a substantial part of the banking system".

Over the next two decades (1970-92) RBI used these banks as a vehicle to launch a unique experiment in social banking. Figure I graphs the bank branch expansion in India during the 20th century. Between 1970 and 1992 the number of bank branches in India increased sevenfold to roughly 65,000. Much of this increase was achieved by the banking of unbanked locations in rural areas – over this period the number of banked locations in India rose from under 5,000 to over 25,000. Rural branches constituted roughly 60 percent of bank branches by 1992, as against 22 percent at the time of nationalization in 1969 (see Figure II). Equally striking is the fact that post-1992 branch building in rural and unbanked locations went to pretty much zero, while branch building in urban and metropolitan locations increased. Alongside it skewed bank lending towards the so called priority sectors of agriculture, small scale industry and entrepreneurs. Between 1969 and 1992 lending to these sectors (as a share of bank lending) trebled and accounted for 40 percent of all lending, with agriculture and small scale industry each receiving 16 percent of bank credit.

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[3]Overall, informal finance was viewed as anti-developmental, exploitative, geared towards consumption as opposed to investment and incapable of providing an appropriate range and volume of credit.

Table I traces the evolution of debt-structure in rural India since Independence.[4] At independence commercial banks accounted for a meagre 1 percent of rural household debt. Other formal lenders, namely the credit cooperatives and the government, also played a limited role in the rural economy. Informal lenders accounted for the lions' share of rural household debt in India in 1951– within this group moneylenders accounted for close to 70 per cent of household debt. We find evidence that the initial channelling of formal credit via rural cooperatives led to a more than doubling of the cooperative share of rural household debt between 1951 and 1961. The next three decades witnessed a dramatic increase in the share attributed to commercial banks. In 1961 commercial banks were nearly entirely urban based contributing only 0.3 percent to rural household debt, but by 1991 this figure had risen a hundred fold to 29 percent.[5] Alongside the share of moneylender debt fell from 60.9 percent in 1961 to 15.7 percent by 1991. Thus between 1951 and 1991, arguably due to explicit government policy, commercial banks transited from being the smallest to the largest lender in rural areas. In the remainder of this paper we examine the implications of this for output and employment diversification out of agriculture and rural welfare outcomes. However, before doing so we describe the main features of the social banking experiment which we exploit in our analysis.

2.2 Execution

Social banking had (at least) three distinct components. First, the RBI lowered the cost at which the rural poor had access to credit. Commercial bank interest rates were kept below the average interest rates in rural areas, and to ensure that commercial banks don't simply use rural deposits to increase urban lending the RBI regulated that a credit-deposit ratio of roughly 60% be satisfied by all rural and semi-urban branches of commercial banks.

Second, the RBI identified sectors which it felt did not have access to organized lending market or could not afford to pay the interest at the market rate.[6] It then skewed bank lending towards these 'priority' sectors, which included agriculture, small businesses and entrepreneurs. It did so by introducing priority sector lending requirements wherein banks had to meet specific targets in terms of percentage lent to certain sectors. Table II lists the many policy rules which drove such lending.

Finally, the centerpiece of social banking was the use of state control of bank placement to reach populations that had previously had no access to formal financial institutions (see Table II). The 1949 Banking companies act implied that a bank

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[4]The All India Rural Credit Survey carried in 1951 was renamed the All India Debt and Investment Survey in subsequent years though the surveys are comparable and based on the same survey design (see Table 1).

[5]The 1961 Census showed that roughly half of India's towns, and virtually no villages, have a commercial bank.

[6]At the time of bank nationalization in 1969 commercial bank credit mainly went to industry (62%) and trade and commerce (26%).

which wanted to open a new branch had to get a license from the RBI.[7] Pre-bank nationalization in 1969 the program enjoyed limited success – the RBI could restrict license provision, but not enforce targets. This changed with nationalization. In December 1969, the branch expansion program was revamped and RBI announced that future banking development will be judged in terms of population served per bank office. Moreover, branch expansion will be explicitly skewed towards unbanked rural and semi-urban locations.[8] Over the next twenty three years the policy rules driving branch expansion were repeatedly refined in order to increase the presence of commercial banks in rural India. Table II lists these policy rules.

The key policy variable underlying the branch expansion program was the 'unbanked' location – a rural or semiurban population location not served by any commercial banks.[9] During the social banking era unbanked locations were identified by the 'Lead Bank' in a district in collaboration with the state government authorities.[10] At specified intervals (roughly every three years) using the Lead Bank lists, and in consultation with the state governments, the RBI would circulate the list of unbanked locations to all banks. The RBI also maintained (and periodically refined) a licensing criterion which stated how many branches at unbanked locations a bank must open in order to be eligible to open a branch at an already banked location. Finally, to ensure that banks did not simply respond by not opening branches the RBI also set targets regarding the number of unbanked locations which were to be banked during the BBE program – to meet these targets unbanked locations were allocated to nationalized banks. Given the unbanked locations list and the license criterion individual banks would submit their branch expansion perspective plan to the RBI. Conditional on satisfying the above requirements the banks would receive branch licenses.

The RBI successfully used a combination of licensing rules and targets to force banks to build in unbanked locations. The result was a sharp fall in the population per bank branch across states between 1970-1992, with branch building intensity much higher in states that had a higher proportion of rural unbanked locations in 1969 (see Figure III). Moreover, the extent of bank building in this period was determined by the choice of policy rule. Figure IV graphs the average number of branches opened in banked and unbanked locations for the 16 major states since 1950. Eyeballing the

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[7]The initial reason underlying this law was prevention of the (perceived) indiscriminate growth of bank branches during the war period. The RBI initially follows cautious policy of licensing and used this law to bring about the closure of uneconomic branches and amalgamate and consolidate bank branches; this led to an overall decline of bank branches between 1949-1954.

[8]The Gadgil committee which determined the nature of BBE revamping noted that not even one percent of villages were served by commercial banks.

[9]A semi-urban location has between 10,000-100,000, and a rural location less than 10,000. Towns with more than 100,000 inhabitants are considered "cities".

[10]In 1969 RBI assigned every district in India to a Lead Bank which was to co-ordinate all the other banks in trying to provide services for the rural population of one specific area. The Lead Bank was to complete a survey of the banking needs of the district, and identify unbanked locations.

graph suggests a close correspondence between changes in the rate of branch expansion (both banked and unbanked) and the choice of policy rules. Bank expansion shows a first spike in 1970, followed by a relatively higher rate of branch expansion in banked locations, relative to unbanked, until 1977. After this, the change in the licensing rule implied building in unbanked locations occurred at four times the rate of building in banked locations. In 1985, the service area approach led to a sharp increase in total bank building, followed by a policy induced shutdown of building in 1986. Branch building thereafter increased until 1990. 1990 marked the beginning of the end of social banking, and 1992 its demise. After 1992 there was pretty much no bank building in unbanked locations but a sharp increase in building in banked locations. The latter reflects pent up demand in banked urban locations which was not met earlier due to the licensing requirements. In our analysis we exploit this supply driven nature of bank expansion to examine the economic impact of rural banks.

3   Empirical Analysis

Our basic method is to run panel data regressions for states s and years t of the following form:

$$y_{st} = \alpha_s + \gamma_t + \lambda y_{st-2} + \beta b_{st} + \xi x_{st} + \varepsilon_{st}$$

where y_{st} is an outcome variable, b_{st} is the measure of branch expansion, x_{st} are the exogenous variables of interest that explain the outcomes, α_s is a state fixed effect and γ_t is a year effect. We allow for robust standard errors.

State fixed effects will pick up differences in climate and culture along with heterogeneous initial conditions. Year fixed effects help to pick up shocks which affects all states. We have experimented with a number of different specifications and sets of control variables. In the tables below, we use development expenditure per capita, population size and settlement structure as our controls (the x_{st}).[11] An adjustment model allows us to look directly whether expansion into unbanked areas led to changes in output, employment, poverty and inequality. Parameters can be interpreted as growth effects thus we get a sense of how social banking has affected long run development in a state.[12]

Our main focus in on bank placement which is broken out into two series – branches opened in unbanked locations and branches opened in banked locations. Both of these series begin in 1970 and cumulate to 1992. We are thus capturing the

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[11]We have experimented with inclusion of a range of control variables.

[12] The presence of a lagged dependent variable in a panel with fixed effects raises the usual issue of bias. In this instance, the longish time horizon, probably means that this is not hugely important. In each of our models, we test for autocorrelation in the errors using a test that is robust to the existence of a lagged dependent variable. Since in all cases, we find none, we proceeded without making any allowance for this. We also performed the test for stationarity in panel data suggested by Madalla and Wu (1999) which seemed to suggest no difficulty with assuming stationarity.

stock of banks opened since the inception of the social banking experiment following bank nationalization in 1969. We run each of the series in separate regressions. In this way we can exploit the key differences between the series. Opening in unbanked locations is a proxy for branch expansion into poorer, rural areas which have had limited access to formal finance. Opening in banked locations, in contrast, proxies for opening in richer semi-urban, urban and metropolitan areas where there has been at least some contact with institutions of formal finance.

Once we have obtained a basic set of results on the impact of branch expansion on output, employment, poverty and inequality our empirical strategy is to subject these results to a number of robustness checks. The first thing we do is to examine whether we get a similar pattern of results when we use priority and non-priority sector lending series in place of the series on openings in unbanked and banked locations. We then see whether our results hold up when we instrument the branch expansion series using settlement patterns in 1969 interacted with years when new policy rules were issued by the RBI. Finally we look at large household data sets for 1983, 1987 and 1993 to see whether we can uncover some of the mechanisms which underpin the state level results.

3.1   Basic Results

In Table V we examine whether branch expansion has any impact on the composition of output in the Indian states 1970-1992. In column (1) we seen that increasing the number of banks opened in unbanked locations has no impact on growth of agricultural output. This is striking as raising agricultural productivity was a central objective of the program and hence often the focus of evaluations (see e.g. Binswanger et al, 1993). Column (2) shows that branch expansion into banked locations also had no impact on agricultural output. These results go some way to explaining some of the negative perceptions regarding effectiveness the program.

In column (3) we see that expansion into unbanked areas has a significant positive impact on the growth of non-agricultural output. This is our first indication that branch expansion may have had different effects on different sectors of the economy. Column (4) shows that increasing the stock of offices located in locations with already one bank also has significant impact on non-agricultural output. The magnitude of the effect is similar between the two series.

In columns (5) and (6) we look at changes in diversification directly by taking the log of the ratio of non-agricultural output to total output as our outcome variable. This is a measure of structural change. In column (5) we see that branch expansion into unbanked areas had a significant impact on growth in the share of output accounted for by non-agricultural sources. Branch expansion into banked locations, in contrast, does not exert any impact on growth in diversification (column 6). Opening a branch in a unbanked location has a higher marginal impact on structural change

in production than opening a branch in a banked location.[13] This is a key result as it suggests that the policy of skewing bank placement towards unbanked locations may have accelerated diversification and modernization as indicated by a falling share of agriculture in total output.

If having access to banks is facilitating entry into non-agricultural activities then we might expect that to show up in the growth of the small business sector. Columns (7) and (8) look at growth in the unregistered manufacturing sector (which covers firms with less than ten employees with power and less than twenty without) expressed as a share of total output. Focusing on this sector makes sense as it is a key destination for people diversifying out of agriculture and because capital may be required to start new firms. We observe that expansion of banks into unbanked locations contributes to the growth of this sector whereas expansion into banked locations does not. Expanding the number of banks in rural, unbanked areas appears to have encouraged the setting up and growth of small manufacturing units. And this form of diversification can be an important means of increasing the productivity of rural people and lifting them out of poverty (Lanjouw and Lanjouw, 1995). The marginal impact of building a bank in an unbanked as opposed to banked location suggests that the former intervention is doing more to relax constraints on the formation and growth of small firms. And this finding, along with those for the total non-agricultural output share, are consistent with capital constraints on diversification being more binding in unbanked locations.

In Table VI we turn to the issue of how branch expansion affects employment and wages in rural areas. The data we use is for manual labor in rural areas (see Data Appendix). We are therefore looking at an extremely basic form of diversification but which is nonetheless of interest in terms of ascertaining whether rural branch expansion affected employment and wages of the rural poor. In columns (1) and (2) we see that branch expansion has no impact on the growth of the manual non-agricultural labor force.[14] In column (3) we see that expansion into unbanked locations, however, has a significant negative impact on the growth of agricultural manual labor. We so no impact from expansion into banked locations.[15] Improving access to banks in unbanked locations seems to enable people to exit from being agricultural laborers which is the employer of last resort in rural India. This is an important result as agricultural laborers comprise a significant fraction of the poor in India and finding

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[13]Opportunities for diversification defined in this crude manner are likely to be larger in unbanked as opposed to banked locations.

[14]Expansion into unbanked locations, however, did exert a positive and significant influence on the number of non-agricultural laborers. Discrepancy between the growth and level results may in part be accounted for by the fact that adjustment in the rural labour force in extremely slow.

[15]Given that we are focussing on the rural labor force in Table VI, we would *ex ante* expect branches built in banked locations which from 1970 were mainly semi-urban or urban to have limited effects. These results should therefore be viewed as consistency checks on the unbanked results. In this respect it is therefore reassuring that we see no signficant results for the banked location series in Table VI.

ways to help them exit into more productive forms of employment is a key challenge (World Bank, 1997).

In columns (5) and (6) we see that expansion into unbanked locations is associated with a rise in the share of non-agricultural labor in total labor. This is consistent with the results we have for output diversification. Increasing the density of banks in rural, unbanked locations seems to be associated with agriculture becoming less important within total output and rural employment. In columns (7) and (8) we look at real wages of agricultural laborers. As people employed in this sector are often landless and have limited outside options wage levels are themselves key markers of rural welfare (see Dreze and Mookherjee, 1991). We observe that the expansion of branches into unbanked areas is associated with an *increase* in the real wages of agricultural laborers. This is consistent with improved access to banks in rural areas helping to improve non-farm opportunities which enables more people to escape agricultural labor (see column (3)) which in turn puts upward pressure on wages. The results in columns (3) and (7) of Table VI thus identify an important indirect route through which building bank branches in rural areas can reduce rural poverty by improving the welfare of those who remain as agricultural laborers. Note that this in addition to the positive welfare effect for those who exit agriculture and enter into more productive occupations as a result of having access to banks.

In Table VI we directly address the central issue of whether branch expansion affects poverty.[16] Columns (1) and (2) presents results where the aggregate squared poverty gap for each state is used as the left hand side variable.[17] We find that increasing the stock of branches built in unbanked locations reduces aggregate poverty whereas expanding branches in banked locations does not. In columns (3) we see that this result is driven by branch expansion in unbanked areas driving down rural poverty. There is no good reason to think that building bank branches in unbanked, rural locations would affect production and distribution relations in the urban sector. This is confirmed in column (5). In columns (4) and (6) we see no impact of branch expansion in banked locations on either rural or urban poverty. In columns (7) and (8) we use the difference between rural and urban poverty as the left hand side variable. As we observed from column (5), urban poverty does not respond to building bank offices in unbanked locations. Running poverty as a difference then helps to control for any omitted variables that have common effects on poverty in both places.[18] This would include a whole range of government policies which are

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[16]India is one of the few countries in the world which has collected reliable poverty and inequality data over a long time period which makes it possible for us to directly anlayse the impact of social banking on welfare (see Ozler, Datt and Ravallion, 1996). This data also allows us to examin rural and urban poverty and inequality seperately.

[17]Given that we are interested in whether branch expansion affects movements below the poverty line we have chosen to use the squared poverty gap measure which gives alot of weight to how far households are below the poverty line as opposed to just looking at the proportion below as in the case of the poverty line.

[18]Unlike poverty levels, it is also a variable that does not trend downwards overtime. This helps

not sector specific. Column (7) confirms our finding that increasing the density of branches in unbanked locations helps to reduce the rural-urban poverty difference. Branch expansion into banked locations, in contrast, does not lead to any reduction in the gap between rural and urban poverty (column 8).[19] Taken together this is fairly compelling evidence that the architects of the social banking experiment have been partly successful in achieving their key objective of improving rural welfare through state led credit expansion.[20] And the fact that the marginal impact on poverty is higher for branches built in unbanked as opposed to banked locations is suggestive that the rural focus of the program is justified at least from a social perspective.

From the NSS surveys we have reliable measures of inequality across the 1970-1992 period. This enables us to look at whether the distribution of income is affected by the policy intervention. If, as is suggested, by the poverty results that the benefits of the program are being concentrated in the lower end of the distribution we might expect to observe compression in the distribution of income. This is indeed what we observe in column (1) where branch expansion into unbanked locations is seen to reduce aggregate inequality in the economy. In contrast, expansion into banked locations has no impact (column 2). In columns (3) we (4) we see that this result is driven by expansion into unbanked locations driving down rural inequality. Expansion into unbanked or banked locations has no impact on urban inequality (columns 5 and 6). And these results differ from the literature which suggests that financial deepening tends to lead to rising inequality (see e.g. Townsend and Ueda, 2001 on Thailand). This suggest specific design features of the social banking experiment have helped to reach the poor.

The inequality results mirror those for poverty. And we have from the regressions on output and employment some insights into how branch expansion into rural areas might reduce poverty and inequality. The growing presence of banks in rural areas seems to have helped poorer people to move into non-farm employment and production activities. This has led directly to a reduction in rural poverty and inequality. However, this transition out of agriculture has appear to have benefited those who have remained in agriculture by tightening the market for agricultural labor and pushing up wages. This indirect effect would further reduce rural poverty and inequality. These results do not sit at all well with the popular perception that bank expansion in India mainly benefited rich elites in India.

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to allay concerns that our series on branches opened in banked and unbanked locations are just picking up time specific time trends.

[19]Our findings on poverty are robust to using alternative measures of poverty – specifically the headcount ratio or poverty gap as left hand side variables.

[20]At what cost, however, is another question.

3.2 Priority Sector Lending

We have so far built up a fairly convincing picture of how branch expansion into rural, unbanked locations has expanded non-agricultural output and employment and reduced rural poverty and inequality. These are striking results that do not sit well with the notion that state led credit expansion undermined rural development (Adams et. al., 1984).

However, the social banking experiment in India did not solely consist of skewing branch placement toward unbanked locations. A second major objective of the program was to skew lending towards priority sectors. That is the policy makers wanted to change the composition of lending with a view to reaching groups which were typically excluded from formal finance. The principal target groups were agriculturists, small businessmen and entrepreneurs. This was a type of affirmative action program where varying proportions of total lending were "reserved" for these groups whereas the residual was unreserved (see Table II). The Reserve Bank of India used its control over the banking sector via the lead bank scheme to ensure that these targets were enforced. And because branch expansion into unbanked locations was used to fulfill these targets the two interventions are related (see Figure VI). However, they capture different aspects of social banking – branch placement is locational whereas priority sector lending is compositional.

As a cross-check on the robustness and validity of our basic results in Tables VIII-XI we replicate our basic results tables using priority and non-priority sector lending in place of expansion into unbanked and banked locations respectively. Table VIII presents the results for output where we see a similar pattern to that for branch placement. There is no impact of bank lending on agricultural output (columns 1 and 2) however we see that priority sector lending increases non-agricultural output whereas non-priority lending does not (columns 3 and 4). In columns (5) and (6) we see that both forms of lending drive up non-agricultural output as a share of total output whereas we see no effects on unregistered manufacturing output (columns 7 and 8). These results are interesting as they confirm that social banking appears to have mainly benefited the non-agricultural sector and there is a suggestion that priority sector lending has a larger impact on expansion of this sector than non-priority sector lending.

In Table IX where we again focus on rural manual labor we see that priority sector lending contributes to growth of the non-agricultural labor force but has no impact on the agricultural labor force growth (columns 1 and 3). In contrast unreserved, non priority lending does not affect movements in the sizes of either agricultural or non-agricultural labor forces (columns 2 and 4). This suggests that priority lending is reaching manual labor and its main impact seems to be in assisting diversification into non-agricultural employment.[21] This is confirmed in column (5) where we see that increases in per capita priority lending are associated with increases in the share

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[21]These individuals are likely to be exlcuded from non-priority lending.

of non-agricultural labor within total labor. In columns (7) and (8) both priority and non-priority sector lending are seen to increase wages of agricultural laborers suggesting that they both help to improve outside options thus leading to upward pressure on wages in this unattractive occupation.

The results in Table X on lending and poverty exactly mirror those for branch placement and poverty in Table VI. Increases in lending to the priority sectors leads to reductions in aggregate poverty (column 1) whereas we so no effect of increasing lending to the non-priority sectors (column 2). In column (3) we see that this is the result of priority sector lending driving down rural poverty as is has no impact on urban poverty (column 5). As a result of this pattern we see that increasing per capita lending to the priority sectors is associated with closing the gap between rural and urban poverty (column 7). Nowhere do we see expansion of unreserved lending to the non-priority sectors having any impact on poverty. This is also what we found for branch expansion into banked areas in Table VI. We thus get the impression that it is a form of credit that largely bypasses the poor. And it was precisely this observation that led architects of social banking to both expand branches into rural areas and to reserve some fraction of lending for disadvantaged groups. On the basis of Tables VI and X it would appear that they have been at least partly successful in reaching and assisting the credit constrained poor. And based on the evidence so far the main way that they social banking has helped has been in assisting poorer individuals in moving into non-agricultural production activities and employment. This confers both a direct benefit and an indirect benefit through upward pressure on agricultural wages.

In Table XVI we see that priority sector lending does not affect inequality, however, non-priority sector lending tends to increase rural inequality but reduce urban inequality. Its overall effect is to increase the gap between rural and urban inequality.

3.3 Instrumentation

There is a remaining concern that our estimated impact of branch expansion on diversification and welfare outcomes may be biased due to our inability to control for factors which affect both potential bank profitability in unbanked locations and the outcome variables of interest – a leading contender being income growth in Indian states.

We consider an instrumental variables approach to address this concern. Our approach builds on the idea that centrally mandated policy rules drove branch expansion and priority sector lending between 1970-1992 (see Table II). The focus of the branch expansion policy was on the banking of unbanked rural and semi-urban locations, and the main policy changes were alterations in how such locations were chosen, the ratio in which banks could build branches in unbanked versus banked locations, and overall targets regarding the number of locations to be banked.

Pre-social banking Indian states were characterized by wide differences in the

extent of unbankedness, and the distribution of rural, semi-urban and urban locations. A consequence of this diversity was wide variation in the impact of the change in branch expansion policies on bank building in Indian states. This variation provides the basis for our instrumentation strategy. In particular, states with more rural and semi-urban locations in 1969 experienced bank building at a higher intensity. There will, however, be variation in the intensity of branch building induced by nationwide policy changes implemented by the Reserve Bank of India (see Table II).[22] Our instrumentation strategy thus exploits policy-driven changes in the importance of a state's initial distribution of census locations in affecting the intensity of bank building in a state. To do so we interact the set of location variables with dummies for the years in which therer were policy changes.[23] These interaction variables constitute our instrument set. The plausibility of our instrumentation strategy relies on two factors: first, the policy process underlying the choice of branch expansion policy is independent of state specific economic conditions. Second, the impact of a policy change in a single year affected the 16 states differentially. This is likely to be the case as the distribution of settlements in 1961 and hence the propensity to to attract banks will differ across states.

Tables XII and XIII report results where the interaction variables instrument for the branch expansion into unbanked and banked locations. For brevity, we report a subset of the outcome variables. The results of the overidentification test suggest that it is reasonable to assume that the initial location distribution of a state has a time varying impact on branch expansion in a state but not on diversification and welfare outcomes in the state. Our instrumental variable results mirror the OLS results. Columns (1) and (3) of Table XII tell us that expansion into unbanked areas increased output diversification. As before, we find similar positive effects on real agricultural wages but not employment diversification (columns (5) and (7)). In every case branch expansion in banked locations leaves the outcomes unaffected. Table XIII considers welfare outcomes – branch expansion into unbanked, but not banked, locations lowered rural poverty and inequality. Comparing the uninstrumented and instrumented results we find the point estimates are either unchanged or higher, which is suggestive of instrumentation correcting a measurement error problem.

3.4   Microdata

The state level analysis shows that social banking was associated with output and employment diversification out of agriculture, and reductions in rural poverty and inequality. The fact that we found similar results when we instead used priority

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[22]Simple growth regressions show that a 1 percent increase in the number of rural and semi-urban locations in a state in 1969 increased the growth rate of bank building between 1970-1992 by 0.5 percent. Moreover, a one percent increase in the number of banked locations in a state in 1969 decreased bankbuilding between 1970-1992 by 0.80 percent. There is no evidence of convergence in state income.

[23]These years, and the associated policy changes, are listed in Table II.

sector lending as the explanatory variable suggested that opening bank branches in unbanked locations acted as a conduit for increased borrowing. In this section we provide direct evidence on this channel by combining household level data on borrowing behavior with information on the number of banks opened in unbanked locations. Our household data comes from the National Sample Surveys on Employment and Unemployment for the years 1983, 1987 and 1992 (henceforth 'NSS').[24] For consistency and comparability of results we use the same measures of social banking as in the state-level analysis.

Table XIV provides descriptive statistics. Our focus on rural labor households is due to the fact that NSS only collects loan information for these households.[25], [26] Our data-set consists of slightly under 75,000 rural labor households, of which 36 percent report being in debt.[27] The average indebted household has 1.3 loans outstanding.[28]

We use these data to examine how opening branches in unbanked and banked locations affected three sets of outcomes. First, the extent of household borrowing. Second, the purpose for which rural households incurred debt. And finally, household per capita expenditure. By doing so, we both provide household level evidence on the role of social banking in affecting the composition and extent of household borrowing, and a natural household-level counterpart to our state-level poverty and inequality regressions. Our estimation procedure is to run regressions of the form

$$y_{hst} = c_s + \tau_t + \phi_1 b_{st} + \phi_2 x_{st} + \varepsilon_{hst}$$

y_{hst} is the outcome variable of interest. x_{st} is a vector of household demographic characteristics which includes household head age (and age squared), a dummy for whether he/she is literate, household size and the household share of adult women and children. c_s are state, and τ_t year, dummies. In all regressions the omitted year is 1983. Finally, b_{st} is the state-level branch expansion measure.

Table XVI examines the impact that the expansion of banks into rural locations had on rural households borrowing behavior. Column (1) and (2) tell us that branch expansion in both banked and unbanked locations was associated with reductions

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[24]The survey was designed to specifically study the occupational distribution in India, also see appendix

[25]Rural labor is defined as manual labor (by a person living in a rural area) in agricultural and/or non-agricultural occupations in return for wages/salaries either in cash or kind (excluding exchange labor). The rural labor households are divided into two groups, agricultural labor (those which earned 50 percent of their income during the last year from wage paid as manual labor in agriculture, and other labor (all the rest).

[26]This sample design is a potential source of bias as we may expect changes in households' ability to borrow to affect their employment behavior. However, in so far as increased credit access is likely to lead to individuals changing their occupation away from rural labor our estimate of the effect of social banking on real outcomes is likely to be biased downwards.

[27]The latter figure, while relatively low, concurs with other analysis of rural household indebtedness (see Kochar, 1994).

[28]To ensure that outliers do not drive our analysis we exclude the top 1 percent households by income and indebtedness.

in overall borrowing. However, this was not the case for every type of borrowing. Expansion into unbanked locations significantly lowered the household borrowing from moneylenders but raised borrowing from banks. This is a significant finding in so far as an important stated aim of the social banking experiment was to displace moneylenders which were viewed as counterproductive given the high interests rates charged and the extent to which rural residents were perceived to be indentured servants of moneylenders. In contrast, we find that branch expansion into banked locations had the converse effect.

We now examine whether branch expansion also affected the composition of household debt. We distinguish between consumption loans which include borrowing for medical, educational, legal, marriage and other household purposes, and investment loans which include borrowing for land improvements, building or 'productive' purposes. Table XVII column (1) tells us that bank building in unbanked areas lowered household borrowing for consumption purposes, but increased household borrowing for investment purposes (column(4)). In contrast branch expansion into banked locations left household consumption borrowing unaffected, but lowered household borrowing for investment purposes. In columns (3) and (6) we ask whether the source of household debt and the purpose for which it is used are correlated. Consistent with our earlier findings we find that banks are the most important source for investment debt but the least important source for consumption debt. The converse is true of moneylenders.

Finally, in Table XVIII we examine the relationship between mean household expenditure and branch expansion. This provides a natural micro-level counterpart to our state-level inequality and poverty regressions. Column (1) tells us that a one percent increase in the number of locations banked raises the average household's mean per capita expenditure by 0.20 percent. Expansion into banked locations on the other hand leaves rural labor households' expenditure unaffected. These findings are reassuring as the state-level poverty and inequality measures are derived from household data from the same survey source.

Overall, these household level results are consistent with our state-level findings. We find robust evidence that branch expansion into unbanked locations increased rural household borrowing from banks, the extent of borrowing undertaken for investment purposes, and household per capita expenditure.

4 Conclusions

In this paper we have evaluated a large infrastructure program whose primary aim was to build bank offices in unbanked, rural locations in India. Our focus is exclusively on the impact of this project on rural development. We make no attempt to look at cost effectiveness. Forced location of banks in erstwhile unbanked rural locations was the centerpiece of the Indian social banking experiment. We find that the arrival of bank branches in unbanked locations seems to have been in part responsible for

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diversification into non-agricultural production and employment, a reduction in rural poverty and a reduction in rural inequality. We take this as suggestive evidence that lack of access to credit has been an impediment to stuctural change and poverty reduction in India. Our results do not sit well with the dominant perception that social banking has been ineffective or counterproductive in terms of achieving its objectives. Our results have also thrown up some ideas about how poverty reduction is being achieved. There appears to be both a direct effect that comes through the growth of the non-farm sector and an indirect effect that comes through agricultural wages. Our results also such that the results we are seeing on rural poverty are driven by the 'social' elements of the program – namely expansion into unbanked locations and priority sector lending. When banks were left to thier own devices as they were in case of placing branches in already banked locations and non-priority sector lending they appear to bypass the poor. The architects of the social banking experiment in India thus appear, in part, to have been justified in stressing these social elements in their attempts to use state control of banking as an engine for poverty reduction.

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5   Data Appendix

5.1   State-level data

The data used in the paper come from a wide variety of sources.[29] They cover the sixteen main Indian states listed in Table I and span the period 1970-1992.[30] Haryana split from the state of Punjab in 1965. From this date on, we include separate observations for Punjab and Haryana. Variables expressed in real terms are deflated using the **Consumer Price Index for Agricultural Laborers** (CPIAL) and **Consumer Price Index for Industrial Workers** (CPIIW). These are drawn from a number of Government of India publications which include Indian Labour Handbook, the Indian Labour Journal, the Indian Labour Gazette and the Reserve Bank of India Report on Currency and Finance. Ozler, Datt and Ravallion [1996] have further corrected CPIAL and CPIIW to take account of inter-state cost of living differentials and have also adjusted CPIAL to take account of rising firewood prices. The reference period for the deflator is October 1973- March 1974. **Population** data used to express magnitudes in per capita terms comes from the 1951, 1961, 1971, 1981 and 1991 censuses [Census of India, Registrar General and Census Commissioner, Government of India] and has been interpolated between census years. Separate series are available for urban and rural areas.

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[29]Our data sets builds on Ozler, Datt and Ravallion [1996] which collects published data on poverty, output, wages, price indices and population to construct a consistent panel data set on Indian states for the period 1958 to 1992. We are grateful to Martin Ravallion for providing us with this data and to Guarav Datt for answering various queries. To these data, we have added information on state income, rural employment, infrastructure and public finances of Indian states.

[30]The states are: Andhra Pradesh, Assam, Bihar, Gujarat, Haryana, Jammu and Kashmir, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal

State income comes from Estimates of State Domestic Product published by Department of Statistics, Ministry of Planning, Government of India. Income variables are deflated and expressed in log per capita terms. The breakdown of total income into agricultural, non-agricultural and manufacturing income is done under the National Industrial Classification System (NIC) which conforms with the International Standard Industrial Classification System (ISIC). Within manufacturing – registered manufacturing is defined by the Factories Act of 1948 to refer to firms with ten or more employees with power or twenty or more employees without power. Unregistered manufacturing refers to firms below these cutoffs and the size of this sector is appraised by sample surveys carried out by the Department of Statistics.

Employment data come from the 1963-65, 1974-75, 1977-78, 1983, and 1987-88 issues of the Rural Labour Enquiry, National Sample Survey Office, Department of Statistics, Ministry of Planning, Government of India. The data refer to rural labour households, where rural labour is defined as manual paid activities as opposed to non-manual employment or self-employment. The primary source for the **wage** data is Agricultural Wages in India (Ministry of Agriculture, Government of India). Nominal wage data from this series has been deflated using the Consumer Price Index for Agricultural Laborers to obtain real agricultural wages. No agricultural wage data is available for the state of Jammu and Kashmir and no separate wage data is available for the state of Haryana.

The **poverty** and **inequality** figures we use for the rural and urban areas of India's 16 major states, spanning 1957-58 to 1991-92 were put together by Ozler, Datt and Ravallion [1996]. These measures are based on 22 rounds of the National Sample Survey (NSS) which span this period. Not all 22 rounds of the survey can be covered for each of the 16 states.[31] The NSS rounds are also not evenly spaced: the average interval between the midpoints of the surveys ranges from 0.9 to 5.5 years. Surveys were carried out in the following years 1958, 1959, 1960, 1961, 1962, 1963, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1973, 1974, 1978, 1983, 1987, 1988, 1990, 1991, 1992. Because other data is typically available on a yearly basis weighted interpolation has been used to generate poverty measures for years where there was no NSS survey. The poverty lines used are those recommended by the Planning Commission [1993] and are as follows. The rural poverty line is given by a per capita monthly expenditure of Rs. 49 at October 1973-June 1974 all-India rural prices. The urban poverty line is given by a per capita monthly expenditure of Rs. 57 at October 1973-June 1974 all-India urban prices. See Datt [1995] for more details on the rural and urban cost

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[31]For 11 states (Andra Pradesh, Assam, Bihar, Karnataka, Kerala, Madhya Pradesh, Orissa, Rajasthan, Tamil Nadu, Uttar Pradesh, and West Bengal) all 22 rounds have been covered. Because Haryana only appears as a separate state from Punjab in 1965 we have adopted the including seperate series for these two states from this date onwards. For Gujarat and Maharashtra, 20 rounds are included, beginning with the 16th round in 1958-59 (before 1958-59, separate distributions are not available for these two states as they were merged under the state of Bombay). For Jammu and Kashmir, only 18 rounds can be included, beginning with the 16th round for 1960-61, due to a lack of data.

of living indices and on the estimation of the poverty measures. The headcount index and poverty gap measures are estimated from the grouped distributions of per capita expenditure published by the NSS[32], using parameterized Lorenz curves using a methodology detailed in Datt and Ravallion [1992].

5.2 Household Data

The sampling frame for the rural sector uses the census villages lists. The broad sample design is a two-stage stratified design. The first stage units are villages in the rural sector, the second stage units are households. States are first divided into agro-economic regions.[33] First stage units are allocated to each state proportionate to investigator strength, and subdivided into rural and urban sectors considering relative sizes of the rural and urban population. In 1983 there were 8,696, in 1987 8,518 and in 1993 7,284 sample villages. Large villages are separated into 'hamlet' groups. The households listed in a sample village or hamlet group are divided into three means of livelihood (self employed in non-agriculture, rural labor and other), then arranged by these classes. The households identified as "other" will be further arranged by land possessed. Ten households are then selected systematically and circularly with a random start. Credit information is ascertained for rural labor households, i.e. those with household types identified as agriculture labor or other labor.

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[32]Reports from the National Sample Survey Organisation, Department of Statistics, Ministry of Planning, Government of India and Sarvekshena, Journal of the National Sample Survey Organisation, Department of Statistics, Ministry of Planning, Government of India.

[33]These are groups of contiguous districts, similar with respect to population density and crop pattern.
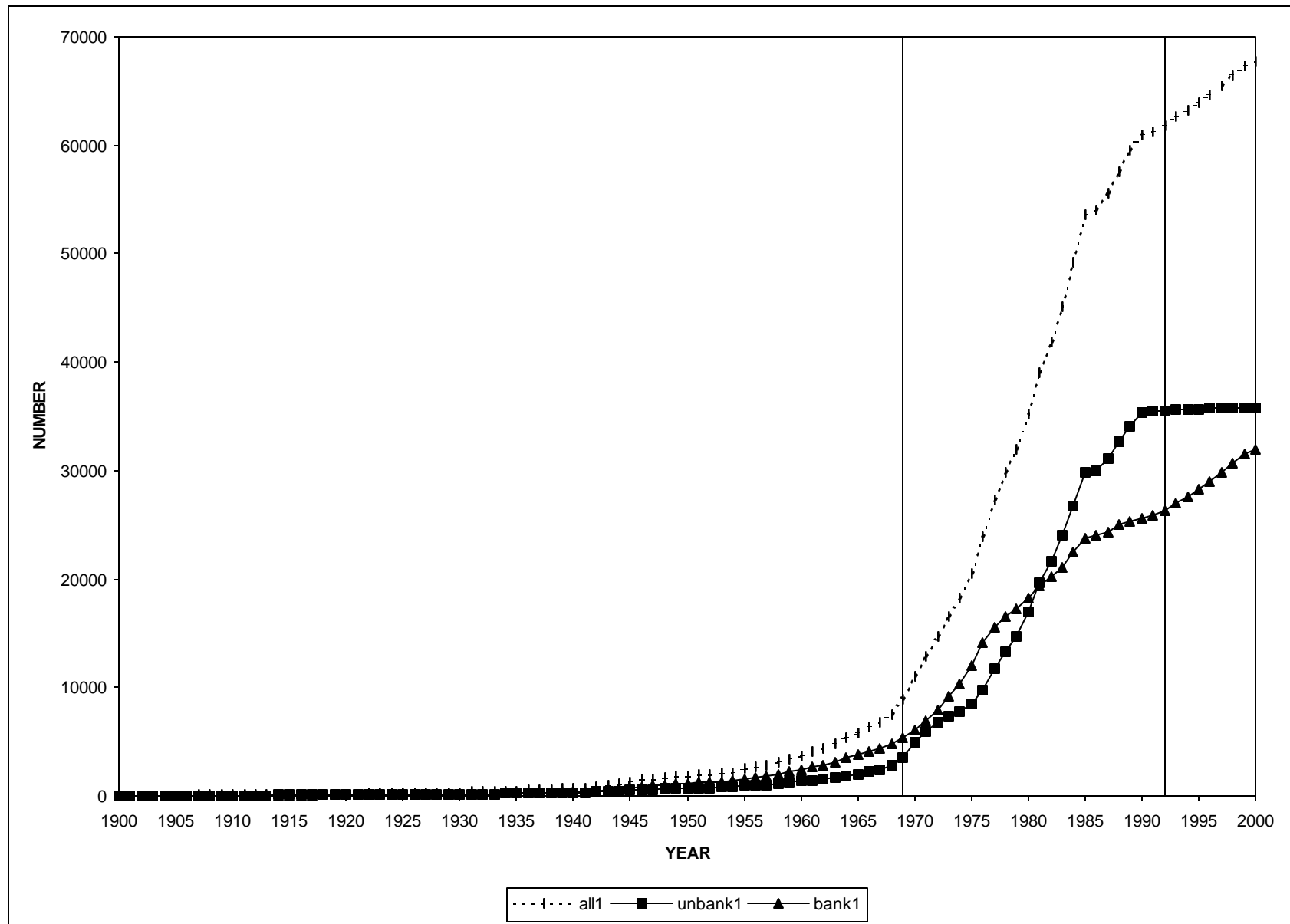
FIGURE I: NUMBER OF BANK BRANCHES IN INDIA (all1); BANKED LOCATIONS IN INDIA (unbank1)
and BANKS IN ALREADY BANKED LOCATIONSS (bank1)
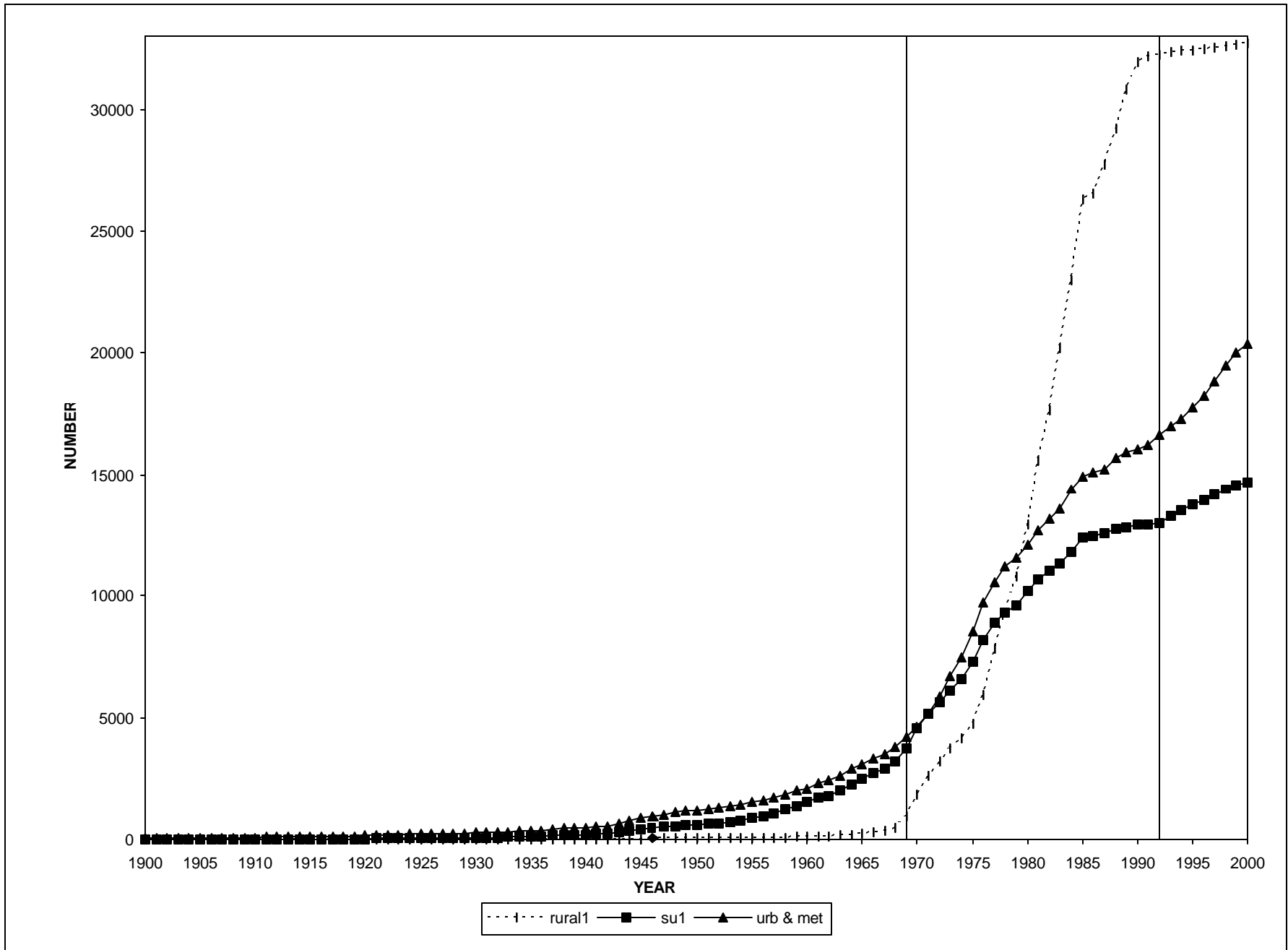
FIGURE II: NUMBER OF RURAL (rural1); SEMIURBAN (su1) AND URBAN & METROPOLITAN
BANK BRANCHES IN INDIA (urban+metro);
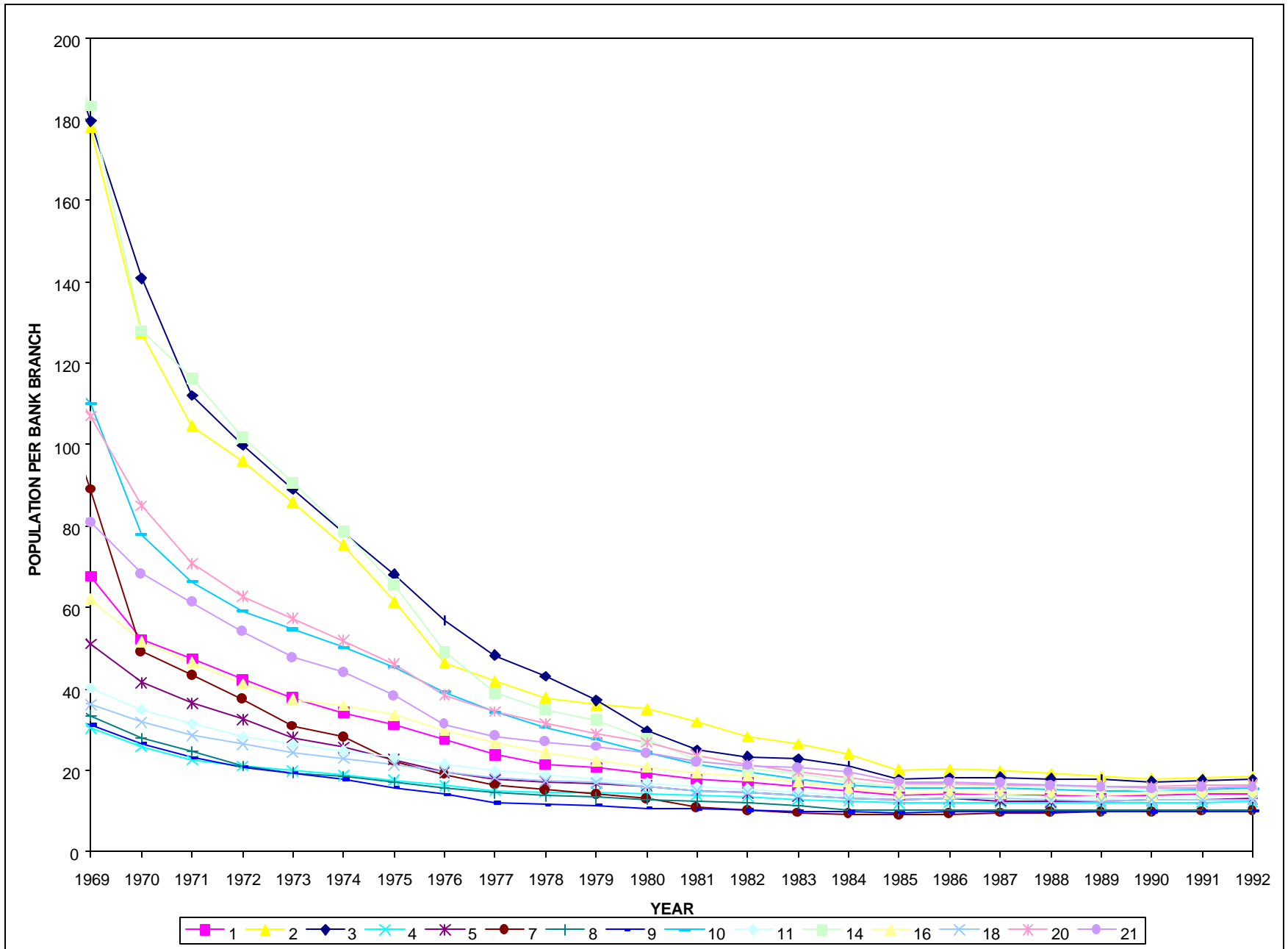
FIGURE III: POPULATION PER BANK BRANCH BY INDIAN STATE

States: 1 – AP, 2 – ASM, 3 – BIH, 4 – GUJ, 5 – HAR, 7 – J&K, 8 – KAR, 9 – KER, 10 – MP, 11 – MAH, 14 – OR, 16 – PUN, 18 – RAJ, 20 – TN, 21 – WB
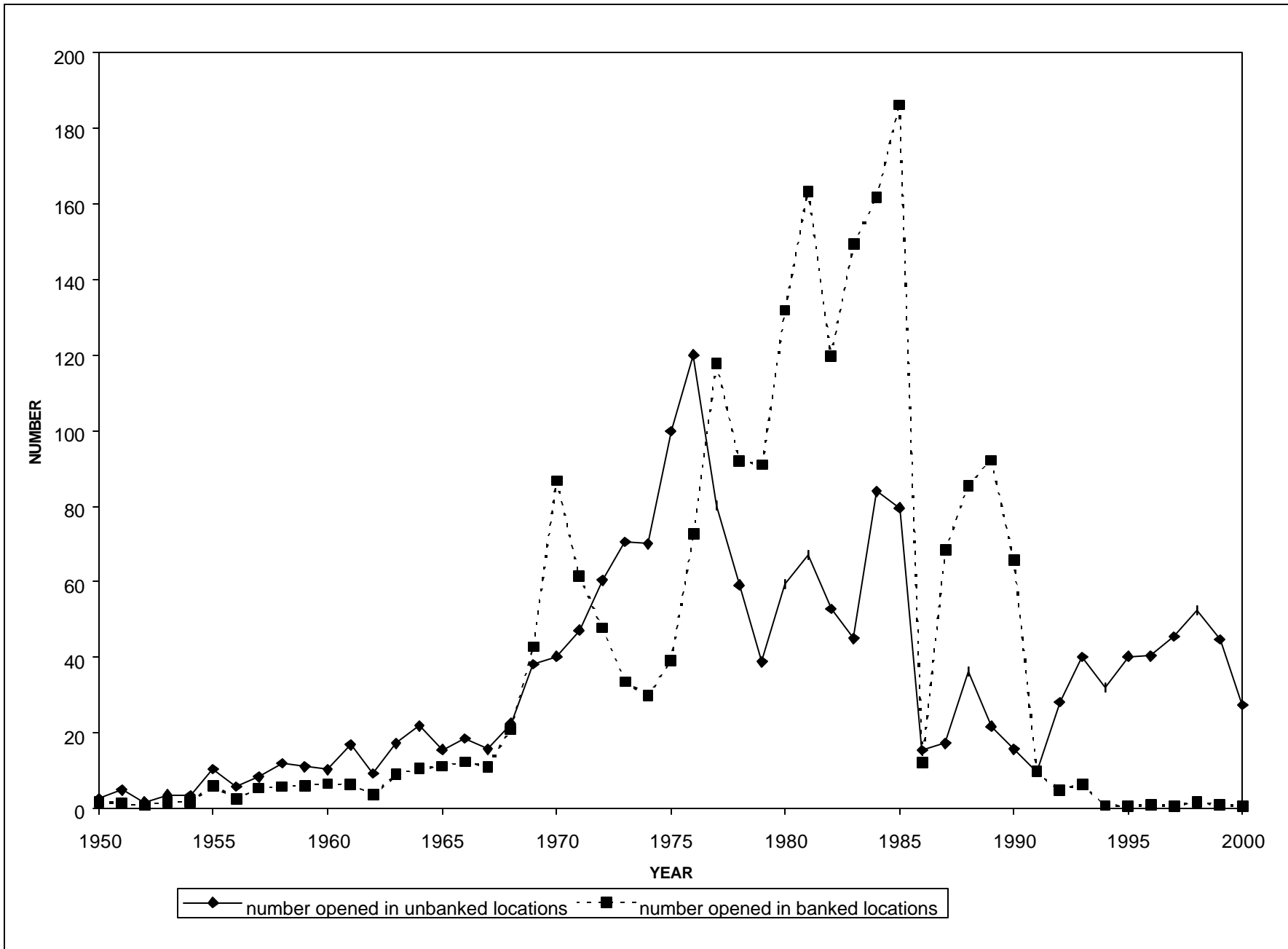
FIGURE IV: AVERAGE NUMBER OF BANK BRANCHES OPENED PER YEAR IN BANKED AND UNBANKED LOCATIONS

Note: The graph depicts the average number of bank branches opened per year, where the average is taken for the 16 Indian states.

Andhra Pradesh Assam Bihar Gujarat
Haryana Jammu & Kashmir Karnataka Kerala
Madhya Pradesh Maharashtra Orissa Punjab
Rajasthan Tamil Nadu Uttar Pradesh West Bengal

number unbanked locations banked

year

Graphs by State Name
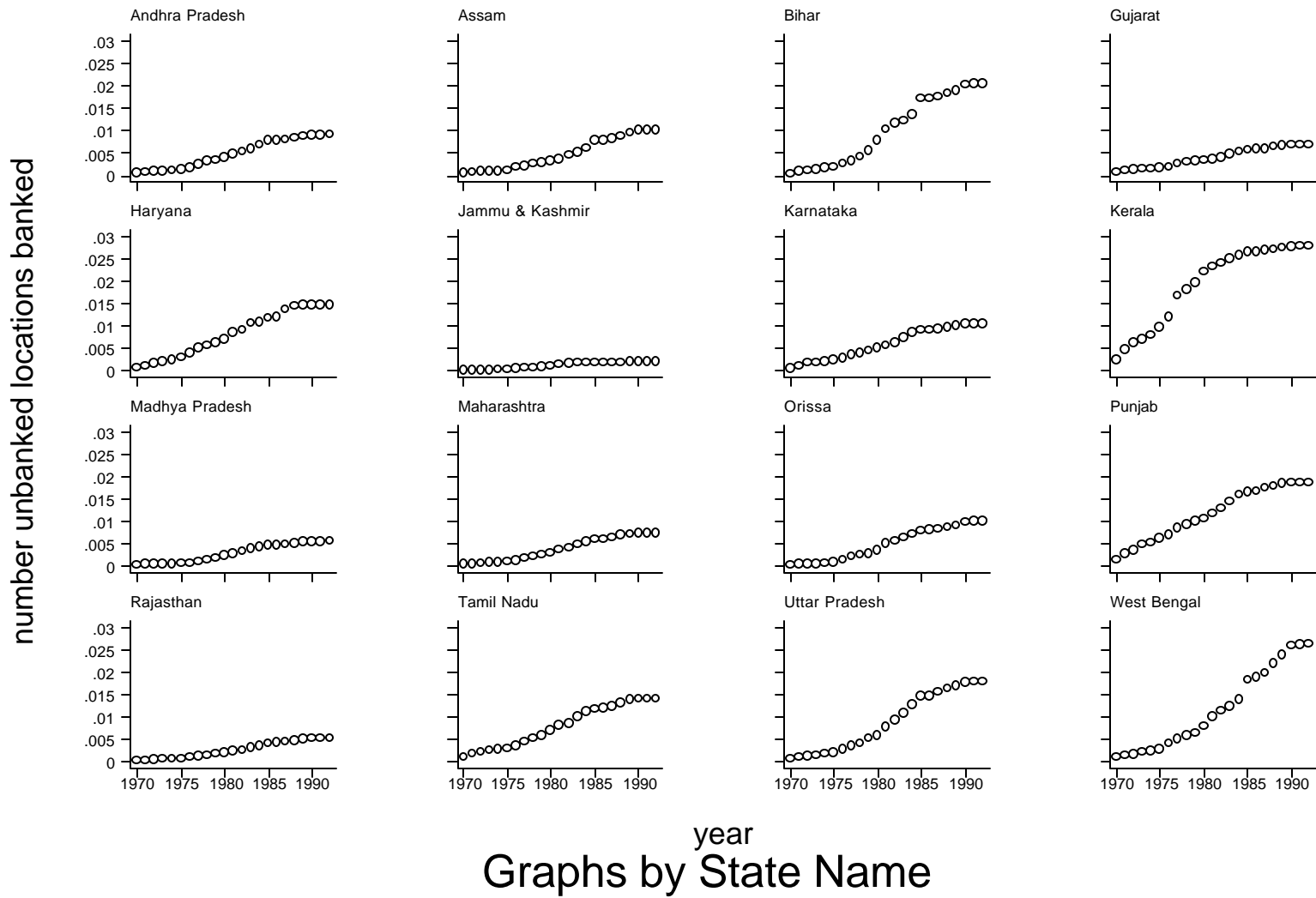
FIGURE V: NUMBER OF UNBANKED LOCATIONS BANKED 1970-1992
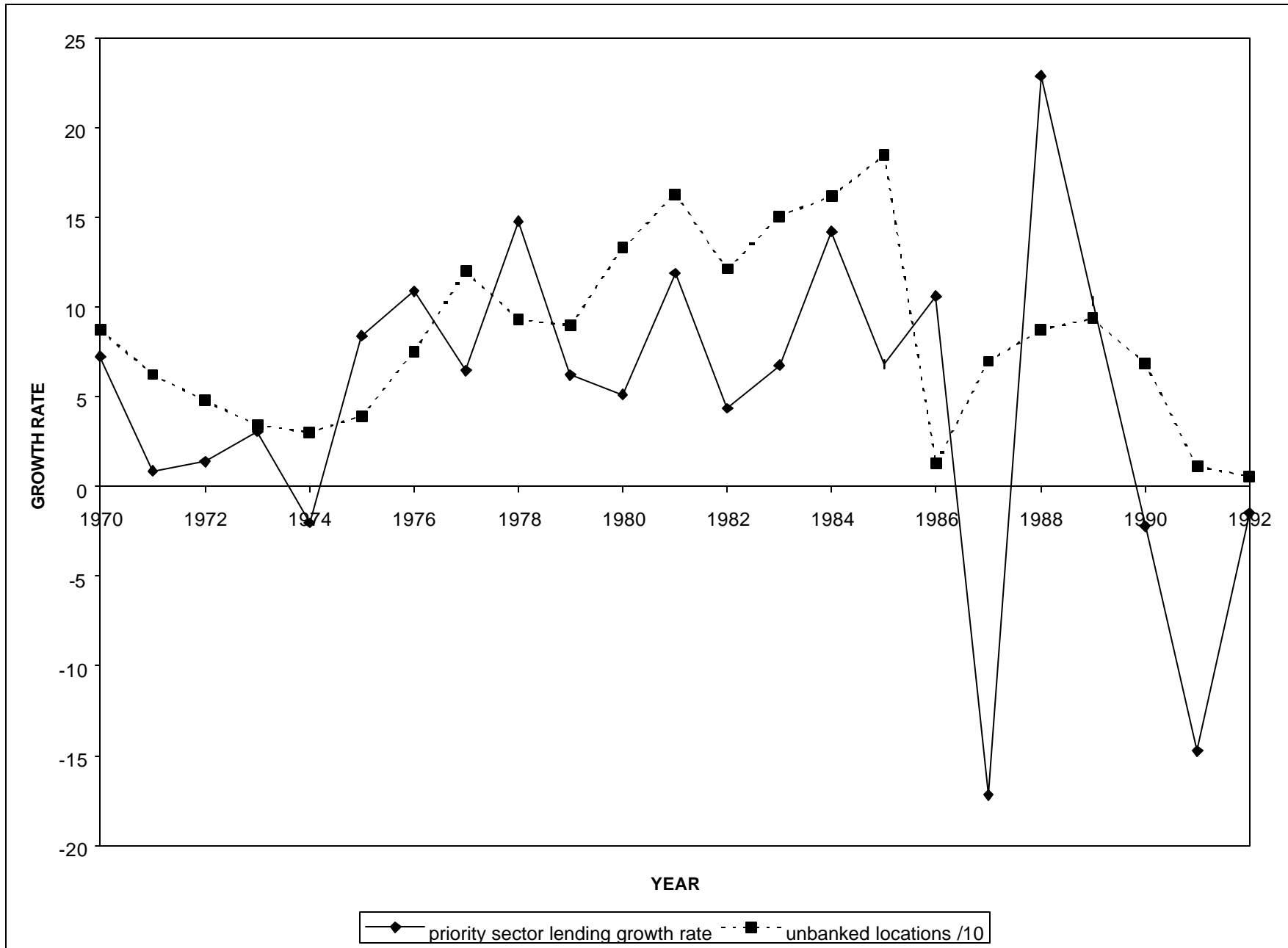
FIGURE VI: CHANGE IN PRIORITY SECTOR LENDING AND UNBANKED LOCATIONS
BANKED, PER YEAR FOR 16 STATES

Note: 1. unbanked locations/10 is the average change in number of unbanked locations banked in a year, where the average is for the 16 Indian states. This number is reported in 10s of number.
2. Priority sector lending growth rate is the average annual change in real per capita priority sector lending, where the average is for the 16 Indian states.

Table I: The share of rural household debt held by different creditors (percentage)

| | | Creditor | | | | |
| | | Institutional sources | | | Non-institutional sources | | |
Year	Banks	Cooperatives	Government	Relative and friends	Moneylenders	Others
1951						
Cultivators	0.9	3.1	3.3	14.2	69.7	8.8
All households	1.1	4.6	3.1	14.4	68.6	8.2
1961						
Cultivators	0.3	11.4	6.7	5.2	61.9	14.5
All households	0.3	10.4	6.6	5.8	60.9	16.0
1971						
Cultivators	2.6	22.0	7.1	13.1	36.1	19.1
All households	2.4	20.1	6.7	13.8	36.9	20.1
1981						
Cultivators	29.5	29.8	3.9	8.7	16.1	12.0
All households	28.6	28.6	4.0	9.0	16.9	12.9
1991						
Cultivators	31.6	21.2	5.2	5.8	15.7	20.5
All households	29.0	18.6	5.7	6.7	15.7	24.3

Notes: (i) A 'cultivator' household is one with an operational land holding of area 0.005 acres or above. (ii) Only interest-free non-institutional loans are included under loans from relatives and friends. (iii)Source: for 1951 'All India Rural Credit Survey'; for all subsequent years the 'All India Debt and Investment Surveys'.

TABLE II: BANK BRANCH EXPANSION AND PRIORITY SECTOR LENDING: POLICY RULES

Year	Bank Branch expansion		Priority sector
	Rules	Targets	
1970	Lead bank scheme initiated. Banks can open banks in banked to unbanked locations in the ratio 1 :2 in rural areas if the bank has 60% rural branches, 1:3 otherwise	All towns with pop>10,000 to be banked by end 1970. Target of 1350 new branches of which 1186 in unbanked locations	
1971	Calcutta exempt from licensing requirement		
1972	Licensing rule relaxed to allow building in metropolitan and urban locations. In such locations the target population per bank office lowered from 10,000 to 5,000. Banks with more than 60% rural/ semi-urban branches can open 1 urban and 1 metro branch	Target for 1972-1974 5000 branches of which 1500 each in 1972 & 1973	Description of priority sector formalised
	for every 2 in rural/semi-urban areas, otherwise for every 3.		
1975	Emphasis on unbanked and underbanked areas, especially those of "underbanked" states	Target of 5000 branches from 1975-1977	Target set at a third of total bank credit to priority sectors, to be achieved by March 1979
1977	New licensing rule: banks can open 1 in banked location for 4 in unbanked locations	Target set for 1977-1979. Each unbanked CDB to be banked by 1978	
1978	Limited licensing to allow consolidation		
1979	Focus on areas with population per branch > national average (20,000). Priority to states with population per bank branch higher than national average	6500 branches in unbanked centres between 1979-1981. All CDB to have a branch by June 1979	Target not achieved (priority sector lending 30.3% vs 33.3% target). Target to be achieved by March 1980
1980			Sub-targets set: 40% of priority sector to go to agriculture. 50% of agricultural credit to go to "weaker sections" . 12.5% of small industry credit to go to weaker sections
1982	Emphasis on rural/semi-urban and less accessible areas of states	17,000 population per office, special considerations for hilly/tribal areas. Target set for 1982-1985	
1985	Rural branch to be within 10 km of each other. 400m between branches in towns/residential areas	17,000 per branch in rural and semi-urban locations; 10,000 in hilly/tribal areas	
1986	Limited licensing to allow consolidation		
1987			Target for agricultural lending raised to 17% of total credit. To be fulfilled by March 1989

| 1989 | Service Area Approach: rural service area to cover 200 sq. km. and 15-20 villages (CDB). Lead banks to identify areas where the 15-20 village rule is exceeded. Service Area Approach is additional to licensing rules. | Target for agricultural lending raised to 18%. Priority sector lending compulsory for foreign banks: 10% by March 1989, 12% by March 1990, 15% by March 1992 |
| 1990 | Future expansion to depend on need, business potential and financial viability of location. Emphasis on consolidation Licenses extended to March 1991 and then to March 1992 | |

Notes: We enter the year a policy circular was passed as falling in that year if it was past pre-November, and as the next year otherwise. Weaker sections are defined as small farmers holding less than 5 acres, landless labourers and tenants, borrowers in related activities with credit limits of less than 10,000 Rs.CDB stands for community development block.

<div align="center">TABLE III: SUMMARY OF MAIN VARIABLES</div>

State	Non-agri output share	Unregd manuf output share	Non-agri labor share	Real agri wage	Rural squ poverty gap	Rural gini	Number banks in unbanked locations	Number banks in banked locations	Priority sector bank lending	Non-priority sector bank lending
Andhra	57.060	0.047	0.092	4.906	4.739	29.398	0.005	0.004	95.038	126.081
Pradesh	(7.654)	(7.654)	(7.654)	(7.654)	(7.654)	(7.654)	(7.654)	(7.654)	(7.654)	(7.654)
Assam	53.690	0.023	0.224	5.503	3.544	20.082	0.005	0.003	23.506	54.359
	(8.643)	(0.008)	(0.158)	(1.072)	(0.913)	(1.335)	(0.004)	(0.002)	(15.985)	(41.463)
Bihar	53.139	0.048	0.082	4.504	8.421	25.969	0.010	0.004	28.054	46.196
	(7.317)	(0.021)	(0.015)	(0.972)	(2.047)	(2.072)	(0.008)	(0.002)	(16.566)	(44.301)
Gujarat	66.341	0.052	0.192	4.637	5.255	27.550	0.004	0.004	99.389	183.566
	(7.043)	(0.009)	(0.071)	(0.809)	(2.027)	(2.931)	(0.002)	(0.002)	(40.669)	(101.069)
Haryana	48.053	0.050	0.291	-	2.244	28.174	0.008	0.006	138.132	97.757
	(7.962)	(0.016)	(0.046)	-	(0.820)	(2.866)	(0.005)	(0.003)	(71.816)	(82.362)
Jammu &	58.375	0.043	0.637	-	2.158	24.452	0.001	0.001	58.251	96.315
Kashmir	(6.972)	(0.010)	(0.067)	-	(1.249)	(2.322)	(0.001)	(0.000)	(36.135)	(65.413)
Karnataka	58.835	0.063	0.124	3.926	6.390	29.308	0.006	0.005	108.183	201.545
	(6.640)	(0.018)	(0.009)	(0.637)	(1.151)	(1.907)	(0.003)	(0.003)	(52.551)	(92.520)
Kerala	63.268	0.064	0.339	6.975	6.799	33.036	0.019	0.020	85.159	167.371
	(5.700)	(0.009)	(0.021)	(1.278)	(3.760)	(2.333)	(0.009)	(0.010)	(46.502)	(114.107)
Madhya	54.891	0.046	0.076	3.990	7.256	30.850	0.003	0.002	45.722	65.230
Pradesh	(7.477)	(0.007)	(0.006)	(0.900)	(2.093)	(1.748)	(0.002)	(0.001)	(28.940)	(50.110)
Maharashtra	76.088	0.063	0.114	3.607	6.971	31.571	0.004	0.005	106.115	496.140
	(4.122)	(0.007)	(0.011)	(0.827)	(1.519)	(4.480)	(0.003)	(0.002)	(42.499)	(220.213)
Orissa	50.519	0.038	0.121	4.190	6.827	28.019	0.005	0.002	38.521	61.931
	(10.789)	(0.009)	(0.028)	(0.955)	(2.788)	(1.765)	(0.004)	(0.001)	(28.893)	(51.691)
Punjab	50.710	0.056	0.201	8.365	1.377	29.443	0.012	0.011	193.168	175.971
	(4.791)	(0.007)	(0.011)	(0.936)	(0.723)	(1.845)	(0.006)	(0.005)	(104.046)	(196.225)
Rajasthan	49.759	0.050	0.391	5.226	6.909	34.571	0.003	0.002	45.443	62.589
	(6.604)	(0.008)	(0.115)	(0.647)	(2.121)	(5.012)	(0.002)	(0.001)	(27.449)	(43.511)
Tamil Nadu	72.491	0.091	0.148	4.149	6.779	30.269	0.008	0.007	113.265	246.290
	(6.939)	(0.020)	(0.035)	(0.606)	(1.728)	(2.240)	(0.005)	(0.004)	(63.114)	(99.130)
Uttar	51.673	0.052	0.160	5.473	4.222	28.712	0.009	0.005	50.892	73.823
Pradesh	(6.906)	(0.006)	(0.016)	(1.038)	(0.983)	(1.751)	(0.007)	(0.003)	(26.014)	(66.346)
West Bengal	66.426	0.065	0.200	6.864	5.743	27.749	0.012	0.011	58.644	297.571
	(5.183)	(0.018)	(0.028)	(1.789)	(2.696)	(2.141)	(0.009)	(0.006)	(28.608)	(104.255)
TOTAL	58.255	0.053	0.213	5.165	5.361	28.709	0.007	0.006	80.531	153.458
	(10.754)	(0.019)	(0.156)	(1.664)	(2.800)	(4.144)	(0.007)	(0.006)	(64.569)	(153.327)
No.observations	365	368	287	322	367	367	368	368	351	351

Standard deviations are in parentheses. See the Data Appendix for detail on construction and source of variables. The data are for sixteen major states, 1970-1992.

All output variables are expressed in real terms. Bank lending variables are expressed in real per capita terms.

	Log state agricultural output per capita		Log state non-agricultural output per capita		Log non-agricultural output as share of total output		Log unregistered manuf output as share of total output	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Lagged dependent variable	0.110	0.112	0.341***	0.333***	0.318***	0.328***	0.497***	0.576***
	(0.079)	(0.079)	(0.062)	(0.623)	(0.054)	(0.056)	(0.068)	(0.063)
Log number banks opened in unbanked locations since 1970, per sqkm	-0.049 (0.046)		0.059** (0.027)		0.056*** (0.020)		0.364*** (0.085)	
Log number banks opened in banked locations since 1970, per sqkm		-0.012 (0.051)		0.060** (0.269)		0.019 (0.023)		-0.029 (0.078)
R-squared	0.885	0.884	0.975	0.975	0.949	0.947	0.832	0.816
Number of observations	343	343	343	343	345	343	345	345

Robust standard errors are reported in parentheses. See the Data Appendix for details on the construction and sources of variables. The data are for the sixteen main states, and t
 period 1970-1992. We have a total of 368 possible observations. Deviations from this are accounted for by missing data. The output variables are expressed in real per capita te
 The lagged dependent variable is lagged 2 periods. All regressions include as additional controls: log real state development expenditure per capita, log of
population, state and year dummies and four location variables. These are (i)number of locations with population 2,000-10,000 (ii) number of locations with population
10,000-20,000 (iii)number of locations with population 20,000-50,000 and (iv) number of locations with population>50,000. All location variables are normalized by land
area, and entered in logs. * indicates significance at 10%, ** significance at 5% and *** significance at 1%.

TABLE V: BANK PLACEMENT AND STRUCTURAL CHANGE IN EMPLOYMENT

	Log non agricultural rural labor		Log agricultural rural labor		Log ratio of rural non-agri labor to total labor		Log real agricultural wages	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Lagged dependent variable	0.787***	0.769***	0.483***	0.510***	0.661***	0.662***	0.345***	0.391***
	(0.086)	(0.088)	(0.072)	(0.075)	(0.100)	(0.103)	(0.060)	(0.609)
Log number banks opened in unbanked locations since 1970, per sqkm	0.014 (0.079)		-0.160*** (0.038)		0.153* (0.078)		0.134*** (0.032)	
Log number banks opened in banked locations since 1970, per sqkm		-0.182 (0.112)		0.055 (0.043)		-0.188 (0.120)		-0.014 (0.029)
R-squared	0.963	0.964	0.991	0.990	0.937	0.927	0.934	0.931
Number of observations	262	262	267	267	262	262	320	320

Robust standard errors are reported in parentheses. See the Data Appendix for details on the construction and sources of variables. The data are for the sixteen main states, and the period 1970-1992. We have a total of 368 possible observations. Deviations from this are accounted for by missing data. The employment variables are normalized by land area. The lagged dependent variable is lagged 2 periods. All regressions include as additional controls: log real state development expenditure per capita, log of population, state and year dummies and four location variables. These are (i)number of locations with population 2,000-10,000 (ii) number of locations with population 10,000-20,000 (iii)number of locations with population 20,000-50,000 and (iv) number of locations with population>50,000. All location variables are normalized by land area, and entered in logs. * indicates significance at 10%, ** significance at 5% and *** significance at 1%.

TABLE VI: BANK PLACEMENT AND POVERTY

	Squared poverty gap		Rural squared poverty gap		Urban squared poverty gap		Rural-urban poverty difference	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Lagged dependent variable,	0.481***	0.498***	0.478***	0.499***	0.369***	0.364***	0.302***	0.338***
	(0.082)	(0.081)	(0.081)	(0.082)	(0.083)	(0.082)	(0.073)	(0.073)
Log number banks opened in unbanked locations since 1970, per sqkm	-0.921** (0.409)		-1.075** (0.474)		-0.297 (0.275)		-1.012** (0.469)	
Log number banks opened in banked locations since 1970, per sqkm		0.295 (0.481)		0.370 (0.541)		-0.083 (0.350)		0.495 (0.509)
R-squared	0.917	0.915	0.904	0.901	0.902	0.902	0.703	0.698
Number of observations	343	343	343	343	343	343	343	343

Robust standard errors are reported in parentheses. See the Data Appendix for details on the construction and sources of variables. The data are for the sixteen main states, and the period 1970-1992. We have a total of 368 possible observations. Deviations from this are accounted for by missing data.

The lagged dependent variable is lagged 2 periods. All regressions include as additional controls: log real state development expenditure per capita, log of population, state and year dummies and four location variables. These are (i)number of locations with population 2,000-10,000 (ii) number of locations with population 10,000-20,000 (iii)number of locations with population 20,000-50,000 and (iv) number of locations with population>50,000. All location variables are normalized by land area, and entered in logs. * indicates significance at 10%, ** significance at 5% and *** significance at 1%.

TABLE VII: BANK PLACEMENT AND INEQUALITY

	Overall gini		Rural gini		Urban gini		Rural-urban gini difference	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Lagged dependent variable	0.386***	0.394***	0.409***	0.415***	0.324***	0.317***	0.379***	0.377***
	(0.055)	(0.055)	(0.057)	(0.579)	(0.063)	(0.063)	(0.054)	(0.054)
Log number banks opened in unbanked locations since 1970, per sqkm	-1.087**		-1.306*		0.234		-1.610	
	(0.529)		(0.690)		(0.767)		(1.081)	
Log number banks opened in banked locations since 1970, per sqkm		-0.048		-0.190		0.828		-0.888
		(0.649)		(0.823)		(0.855)		(1.371)
R-squared	0.863	0.861	0.823	0.821	0.641	0.641	0.595	0.592
Number of observations	343	343	343	343	343	343	343	343

Robust standard errors are reported in parentheses. See the Data Appendix for details on the construction and sources of variables. The data are for the sixteen main states, and the period 1970-1992. We have a total of 368 possible observations. Deviations from this are accounted for by missing data.

The lagged dependent variable is lagged 2 periods. All regressions include as additional controls: log real state development expenditure per capita, log of population, state and year dummies and four location variables. These are (i)number of locations with population 2,000-10,000 (ii) number of locations with population 10,000-20,000 (iii)number of locations with population 20,000-50,000 and (iv) number of locations with population>50,000. All location variables are normalized by land area, and entered in logs. * indicates significance at 10%, ** significance at 5% and *** significance at 1%.

TABLE VIII: PRIORITY SECTOR LENDING AND STRUCTURAL CHANGE IN OUTPUT

	Log state agricultural output per capita		Log state non-agricultural output per capita		Log non-agricultural output as share of total output		Log unregistered manuf output as share of total output	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Lagged dependent variable	0.124	0.122	0.264***	0.225***	0.271***	0.248***	0.509***	0.518***
	(0.091)	(.091)	(0.062)	(0.065)	(0.058)	(0.060)	(0.067)	(0.067)
Log priority sector lending per capita	0.031		0.155***		0.084***		0.119	
	(0.045)		(0.032)		(0.019)		(0.080)	
Log non-priority sector lending per capita		0.040		0.180		0.088***		0.004
		(0.039)		(0.033)		(0.015)		(0.050)
R-squared	0.881	0.881	0.976	0.978	0.950	0.951	0.902	0.901
Number of observations	328	328	328	328	328	328	330	330

Robust standard errors are reported in parentheses. See the Data Appendix for details on the construction and sources of variables. The data are for the sixteen main states, and the period 1970-1992. We have a total of 368 possible observations. Deviations from this are accounted for by missing data. The output and priority sector lending variables are expressed in real per capita terms. The lagged dependent variable is lagged 2 periods. All regressions include as additional controls: log real state development expenditure per capita, log of population, state and year dummies and four location variables. These are (i)number of locations with population 2,000-10,000 (ii) number of locations with population 10,000-20,000 (iii)number of locations with population 20,000-50,000 and (iv) number of locations with population>50,000. All location variables are normalized by land area, and entered in logs. * indicates significance at 10%, ** significance at 5% and *** significance at 1%.

TABLE IX: PRIORITY SECTOR LENDING AND STRUCTURAL CHANGE IN EMPLOYMENT

	Log non agricultural rural labor		Log agricultural rural labor		Log rural non-agricultural labor share		Log real agricultural wages	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Lagged dependent variable	0.731***	0.791***	0.518***	0.521***	0.628***	0.687***	0.363***	0.379***
	(0.091)	(0.082)	(0.072)	(0.072)	(0.101)	(0.092)	(0.061)	(0.061)
Log priority sector lending per capita	0.290***		-0.058		0.311***		0.094***	
	(0.095)		(0.043)		(0.091)		(0.034)	
Log non-priority sector lending per capita		-0.015		0.023		0.033		0.082***
		(0.064)		(0.033)		(0.053)		(0.033)
R-squared	0.965	0.963	0.990	0.990	0.941	0.936	0.932	0.932
Number of observations	262	262	267	267	262	262	306	306

Robust standard errors are reported in parentheses. See the Data Appendix for details on the construction and sources of variables. The data are for the sixteen main states, and the period 1970-1992. We have a total of 368 possible observations. Deviations from this are accounted for by missing data. The priority sector lending variables are expressed in real per capita terms. The lagged dependent variable is lagged 2 periods. All regressions include as additional controls: log real state development expenditure per capita, log of population, state and year dummies and four location variables. These are (i)number of locations with population 2,000-10,000 (ii) number of locations with population 10,000-20,000 (iii)number of locations with population 20,000-50,000 and (iv) number of locations with population>50,000. All location variables are normalized by land area, and entered in logs. * indicates significance at 10%, ** significance at 5% and *** significance at 1%.

	Squared poverty gap		Rural squared poverty gap		Urban squared poverty gap		Rural-urban poverty difference	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Lagged dependent variable	0.462***	0.487***	0.462***	0.489***	0.375***	0.376***	0.313***	0.346***
	(0.083)	(0.084)	(0.084)	(0.085)	(0.085)	(0.084)	(0.075)	(0.076)
Log priority sector lending per capita	-0.687**		-0.803**		0.004		-1.026***	
	(0.349)		(0.397)		(0.274)		(0.410)	
Log non-priority sector lending per capita		0.006		0.141		-0.338		0.430
		(0.311)		(0.363)		(0.218)		(0.342)
R-squared	0.914	0.913	0.900	0.899	0.902	0.902	0.708	0.703
Number of observations	328	298	328	328	328	328	328	328

Robust standard errors are reported in parentheses. See the Data Appendix for details on the construction and sources of variables. The data are for the sixteen main states, and the period 1970-1992. We have a total of 368 possible observations. Deviations from this are accounted for by missing data. The priority sector lending variables are expressed in real per capita terms. The lagged dependent variable is lagged 2 periods. All regressions include as additional controls: log real state development expenditure per capita, log of population, state and year dummies and four location variables. These are (i)number of locations with population 2,000-10,000 (ii) number of locations with population 10,000-20,000 (iii)number of locations with population 20,000-50,000 and (iv) number of locations with population>50,000. All location variables are normalized by land area, and entered in logs. * indicates significance at 10%, ** significance at 5% and *** significance at 1%.

TABLE XI: PRIORITY SECTOR LENDING AND INEQUALITY

	Overall gini		Rural gini		Urban gini		Rural-urban gini difference	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Lagged dependent variable	0.393***	0.403***	0.420***	0.431***	0.361***	0.356***	0.407***	0.411***
	(0.059)	(0.057)	(0.062)	(0.059)	(0.065)	(0.063)	(0.057)	(0.055)
Log priority sector lending per capita	-0.765		-1.031		0.636		-1.728	
	(0.568)		(0.683)		(0.911)		(1.117)	
Log non-priority sector lending per capita		0.473		1.235**		-1.463*		2.688***
		(0.449)		(0.557)		(0.777)		(0.965)
R-squared	0.863	0.863	0.824	0.825	0.652	0.656	0.612	0.619
Number of observations	328	328	328	328	328	328	328	328

Robust standard errors are reported in parentheses. See the Data Appendix for details on the construction and sources of variables. The data are for the sixteen main state and the period 1970-1992. We have a total of 368 possible observations. Deviations from this are accounted for by missing data. The priority sector lending variables are expressed in real per capita terms. The lagged dependent variable is lagged 2 periods. All regressions include as additional controls: log real state development expenditure per capita, log of population, state and year dummies and four location variables. These are (i) number of locations with population 2,000-10 (ii) number of locations with population 10,000-20,000 (iii)number of locations with population 20,000-50,000 and (iv) number of locations with population>50,000 All location variables are normalized by land area, and entered in logs. * indicates significance at 10%, ** significance at 5% and *** significance at 1%.

TABLE XII: BANK PLACEMENT AND OUTCOMES: INSTRUMENTING WITH LOCATION PATTERNS AND POLICY RULES

	Log non-agricultural output share		Log unreg manufacturing output share		Log rural non-agricultu labor share		Log real agricultural wages	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Lagged dependent variable	0.301***	0.298***	0.497***	0.546***	0.713***	0.681***	0.301***	0.354***
	(0.053)	(0.056)	(0.065)	(0.063)	(0.076)	(0.096)	(0.059)	(0.059)
Log number banks opened in unbanked locations since 1970, per sqkm	0.0593** (0.026)		0.370*** (0.118)		0.059 (0.108)		0.171*** (0.051)	
Log number banks opened in banked locations since 1970, per sqkm		0.070 (0.043)		-0.133 (0.111)		-0.201 (0.132)		0.012 (0.059)
Overidentification test p-value	0.96	0.97	0.84	0.85	0.91	0.93	0.99	0.99
R squared	0.94	0.94	0.81	0.8	0.95	0.95	0.92	0.92
Number of observations	343	343	345	345	262	262	320	320

Robust standard errors are reported in parentheses. See the Data Appendix for details on the construction and sources of variables. The data are for the sixteen main states, and the period 1970-1992. We have a total of 368 possible observations. Deviations from this are accounted for by missing data. The output variables are expressed in real per capita terms. The lagged dependent variable is lagged 2 periods. All regressions include as additional controls: log real state development expenditure per capita, log of population, state and year dummies and four location variables. These are (i) number of locations with population 2,000-10,000 (ii) number of locations with population 10,000-20,000 (iii) number of locations with population 20,000-50,000 and (iv) number of locations with population>50,000. The set of instruments are the interaction of the 1969 value of the four location variables interacted with dummies for years in which policy rules for bank expansion and/or priority sector lending changed. These years are: 1970, 1971, 1972, 1975, 1977, 1978, 1979, 1980, 1982, 1985, 1986, 1987, 1989 and 1990 (see Table II for details). Location variables are always normalized by land area, and entered in logs. * indicates significance at 10%, ** significance at 5% and *** significance at 1%.

TABLE XIII: BANK PLACEMENT AND OUTCOMES: INSTRUMENTING WITH LOCATION PATTERNS AND POLICY RULES

	Rural squared poverty gap		Urban squared poverty gap		Rural gini		Urban gini	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Lagged dependent variable	0.485***	0.530***	0.409***	0.392***	0.439***	0.443***	0.322***	0.303***
	(0.079)	(0.076)	(0.076)	(0.077)	(0.055)	(0.057)	(0.065)	(0.066)
Log number banks opened in unbanked locations since 1970, per sqkm	-1.909***		0.270		-2.081**		3.344**	
	(0.660)		(0.53)		(1.035)		(1.236)	
Log number banks opened in banked locations since 1970, per sqkm		-1.875		1.262*		1.299		1.167
		(1.346)		(0.677)		(1.113)		(1.295)
Overidentification test p-value	0.99	0.99	0.58	0.80	0.96	0.93	0.86	
R squared	0.90	0.89	0.90	0.90	0.81	0.81	0.66	0.67
Number of observations	328	328	328	328	328	328	328	328

Robust standard errors are reported in parentheses. See the Data Appendix for details on the construction and sources of variables. The data are for the sixteen main states, and the period 1970-1992. We have a total of 352 possible observations. Deviations from this are accounted for by missing data. The income and priority sector lending variables are expressed in real per capita terms. The lagged dependent variable is lagged 2 periods. All regressions include as additional controls: log real state development expenditure per capita, log of population, state and year dummies and four location variables. These are (i)number of locations with population 2,000-10,000 (ii) number of locations with population 10,000-20,000 (iii)number of locations with population 20,000-50,000 and (iv) number of locations with population>50,000. The set of instruments are the interaction of the 1969 value of the four location variables interacted with dummies for years in which policy rules for bank expansion and/or priority sector lending changed. These years are: 1970, 1971, 1972, 1975, 1977, 1978, 1979, 1980, 1982, 1985, 1986, 1987, 1989 and 1990 (see Table II for details). Location variables are always normalized by land area, and entered in logs. * indicates significance at 10%, ** significance at 5% and *** significance at 1%.

TABLE XIV: Descriptive Statistics for NSS sample

	Entire sample			1983		1987		1993	
	All	Indebted	No-debt	Indebted	No-debt	Indebted	No-debt	Indebted	No-debt
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Households	74,990	26,544	48,446	10,798	16,074	8,503	18,033	7,243	14,339
Number of loans		34,885	–	15,175	–	10,917	–	8,793	–
Demographics									
Household head age	41.31	41.50	41.20	41.40	41.20	41.70	40.90	41.40	41.40
	(13.01)	(12.68)	(13.19)	(12.99)	(13.49)	(12.66)	(13.10)	(12.24)	(12.95)
Proportion married	0.84	0.87	0.82	0.86	0.80	0.87	0.82	0.88	0.83
Household size	4.69	4.94	4.55	5.04	4.60	5.01	4.58	4.72	4.44
	(2.16)	(2.11)	(2.18)	(2.20)	2.27	(2.10)	(2.20)	(1.96)	(2.04)
Household child share	0.39	0.42	0.38	0.42	0.39	0.42	0.38	0.40	0.37
Household women share	0.31	0.30	0.31	0.29	0.31	0.29	0.31	0.30	0.32
Economic characteristics									
Proportion literate	0.33	0.32	0.31	0.30	0.28	0.32	0.31	0.36	0.35
Mean monthly per	320.08	323.01	318.45	306.32	301.14	333.10	324.61	336.19	330.31
capita expenditure	(165.80)	(168.99)	(164.11)	(171.41)	(164.78)	(175.46)	(170.53)	(154.90)	(153.18)
Borrowing									
Total amount owed		977.05	–	920.10	–	1153.20	–	855.18	–
		(1569.61)		(1466.59)		(1871.90)		(1319.05)	
Amount owed to banks		167.85	–	116.78	–	242.10	–	156.84	–
		(661.40)		(565.16)		(789.34)		(620.67)	
Amount owed to		262.37	–	262.21	–	272.19	–	251.08	–
moneylenders		(934.89)		(824.12)		(1113.74)		(856.96)	
Amount owed for		543.74	–	544.76	–	609.08	–	465.48	–
consumption		(1189.37)		(1042.62)		(1495.16)		(963.60)	
Amount owed for		347.91	–	308.41	–	447.93	–	289.80	–
investment		(1028.44)		(987.65)		(1147.90)		(926.24)	

Notes: These data refer to the rural labor sample of the quinquennial unemployment and employment surveys undertaken by the Indian National sample survey for the years of 1983, 1987 and 1992. See Data Appendix for details on sample design and variable construction.

	Log total amount owed per capita		Log amount owed to banks per capita		Log amount owed to money lender per capita	
	(1)	(2)	(3)	(4)	(5)	(6)
Log number banks opened in unbanked locations since 1970, per 100 sqkm	-0.603* (0.3349)		0.354*** (0.117)		-1.019*** (0.1820)	
Log number banks opened in banked locations since 1970, per 100 sqkm		-0.430** (0.2130)		-0.203* (0.117)		0.066* (0.037)
R-squared	0.05	0.05	0.02	0.02	0.05	0.05
Number of observations	74,904	74,986	74,904	74,986	74,904	74,986

Notes: Robust standard errors adjusted for clustering at the village level are in parentheses. Other regression controls
are: age of household head, age of household head squared, dummy for whether household head is literate,
household size, household share of adult women and household share of children. Regressions include state and year
dummies. The amount owed variables refer to the total household outstanding loans expressed in real per capita terms.
* indicates significance at 10%, ** at 5% and *** at 1%

	Log total real amount borrowed for consumption per capita			Log total real amount borrowed for investment per capita		
	(1)	(2)	(3)	(4)	(5)	(6)
Log number banks opened in unbanked locations since 1970, per sqkm	-0.811** (0.298)			0.421** (0.17)		
Log number banks opened in banked locations since 1970, per sqkm		-0.2340 (0.112)			-0.150** (0.180)	
Source of debt:						
Bank			0.589*** (0.050)			4.426*** (0.060)
Cooperative institution			1.153*** (0.062)			3.65*** (0.069)
Moneylender			4.081*** (0.036)			0.843*** (0.034)
Relative and friends			3.777*** (0.039)			0.694*** (0.034)
R-squared	0.04	0.03	0.37	0.03	0.05	0.39
Number of observations	74,904	74,986	74,986	74,904	74,986	74,986

Notes: Robust standard errors adjusted for clustering at the village level are in parentheses. Other regression controls are: age of household head, age of household head squared, dummy for whether household head is literate, household size, household share of adult women and household share of children. The four source of debt variables are dummy variables which equal one if household has borrowed from that source. Regressions include state and year dummies.
* indicates significance at 10%, ** at 5% and *** at 1%

TABLE XVII: BANK PLACEMENT AND HOUSEHOLD EXPENDITURE

	Log mean per capita expenditure	
	(1)	(2)
Log number banks opened in unbanked locations since 1970, per sqkm	0.246*** (0.059)	
Log number banks opened in banked locations since 1970, per sqkm		-0.0080 (0.047)
R-squared	0.16	0.16
Number of observations	74,313	74,395

Notes: Robust standard errors adjusted for clustering at the village level are in parentheses. Other controls in regressions are:age of household head, age of household head squared, dummy for whether household head is literate, household size, household share of adult women and household share of state and year dummies. The expenditure used children. All regressions include is the real household consumption expenditure over the last thirty days expressed in per capita terms.
* indicates significance at 10%, ** at 5% and *** at 1%