Bank Branch Expansion and Poverty Reduction: A Comment

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In a recent paper, Burgess and Pande (2005, p. 781) study the effects of bank branch expansion on poverty in India. They begin with the following observation:

> "We show *The timing and nature of these trend* that between 1977 and 1990 rural branch expansion was relatively higher in financially less developed states. The reverse was true before 1977 and after 1990.*reversals point to their being caused by the introduction and removal of the 1:4 branch licensing policy* … Our research design assumes that other state-specific economic and policy variables which affect poverty outcomes did not exhibit similarly timed trend reversals." [Emphasis added.]

The authors summarize their key finding as follows:

> "This paper's main finding is that branch expansion into rural unbanked locations in India significantly reduced rural poverty. We show that this effect was, at least partially, mediated through increased deposit mobilization and credit disbursement by banks in rural areas."

Quantitatively, evaluated at the sample average, the authors find that that rural branch expansion in India can explain a 17 percent reduction in the headcount ratio. Alternatively, opening a bank branch in an additional rural location per 100,000 persons lowers aggregate poverty by 4.10 percentage points.

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This is an intriguing set of conclusions. Can a simple rule linking the number of rural branches to the number of urban branches yield so significant a reduction in poverty? Prima-facie, the result seems implausible. A careful scrutiny of the policy as well as actual branch expansion points in the same direction. The recent paper by Kochar (2005) adds further to the doubts about the authors' findings.

1 The History of the *Ratio* Rule of Rural Branch Expansion

The first question we must ask is whether the period 1977-90, singled out by the authors because of what they describe as 1:4 branch licensing policy, was truly exceptional in terms of the branch expansion *policy*. The answer is in the negative. My detailed description below explains that what the authors call a 1:4 rule was actually a 1:2 rule. But more importantly, a more demanding rule in terms of rural branch expansion had existed between February 1970 and September 1971 and a slightly less demanding one continued until January 1, 1977 when the 1:2 rule was adopted.

Though Burgess and Pande give a general description of the efforts by the Reserve Bank of India (RBI) at rural bank branch expansion following the bank nationalization in 1969, they seem unaware that India has had a policy of linking urban branch expansion to rural branch expansion starting *well before* the bank nationalization.[1] They also view the policy introduced on January 1, 1977 as something fundamentally new. To quote them (p. 781),

[1] Burgess and Pande seem to view rural bank branch expansion program as an entirely post-nationalization phenomenon. Thus they state, "Nationalization in 1969 brought the 14 largest commercial banks under the direct control of the Indian Central Bank. *Following this*, the Central Bank launched an ambitious branch expansion program, which sought both to expand the rural bank branch network and equalize individual access to banks across Indian states." [Emphasis added.] (p. 781)

> "To ensure that targeted rural unbanked locations received bank branches, the Central Bank introduced a *new* branch licensing policy in 1977. It mandated that a bank can obtain a license to open a branch in an already banked location only if it opened branches in four unbanked locations. This 1:4 licensing policy was aimed at forcing banks wishing to expand in already banked locations to open branches in unbanked locations." [Emphasis added.]

Yet, in reality, the link between rural and urban branches in India had existed as far back as the early 1960s. Recognizing the urgent need for the extension of banking services to areas not served by any commercial banks, the RBI began to require the Indian commercial banks to observe a ratio of 2:1 between banked and unbanked branches beginning in July 1962.

Later, following its poor showing in the 1967 elections, the Congress adopted a 10-point program that included seizing the "social control" of the banks. A key element in this policy was to ensure an even expansion of the available credit over different areas and income strata of the population. As a consequence, the branch licensing policy came up for discussion at the first meeting of the National Credit Council in April 1968. The earlier norm of 2:1 between banked and unbanked center was modified to 1:1.

Later, in considering the program of expansion of branches in urban centers, the RBI kept in view the need to distribute more equitably the burden on banks of opening branches between the rural and semi-urban centers on the one hand and the urban centers on the other. Accordingly, in February 1970, the RBI decided to adopt a rule of 1:2 between banked and unbanked centers in the case of banks that had more than 60% of their offices in rural and semi-urban centers; in the case of other banks the ratio was set at 1:3.

In September 1971, the requirement of banks to open the requisite number of offices in rural or semi-urban areas to get an entitlement for opening urban offices *including* those at metropolitan and port towns, was relaxed so that more offices in metropolitan/ port towns might be opened. According to the revised norms, a bank that had 60% or more of its offices in rural and semi-urban areas was eligible for opening one office *each* in an urban and a metropolitan port town for every two offices opened in rural and semi-urban areas; and in other cases it would be for every three offices in rural and semi-urban centers. This changed the rule to (1+1):2 for banks with 60 percent branches in the rural and semi-urban areas and (1+1):3 for other banks.

On January 1, 1977, the RBI adopted the rule whereby a bank had to open 4 offices in unbanked rural centers to get an entitlement to open one office in a metropolitan / port town and one office in a banked center. The RBI was open, however, to banks asking for an entitlement of a banked center in lieu of an entitlement to metropolitan / port town. *Thus, the 1:4 rule mentioned by Burgess and Pande was actually a (1+1):4 rule* and no more demanding than the 1:2 and 1:3 rule in place between February 1970 and September 1971. The (1+1):2 and (1+1):3 rule in place between September 1971 and January 1, 1977 was only slightly less demanding. The bottom line is that contrary to the assumption made by Burgess and Pande, January 1, 1977 did not represent as sharp a break from the prior period in terms of the branch expansion *rule*.

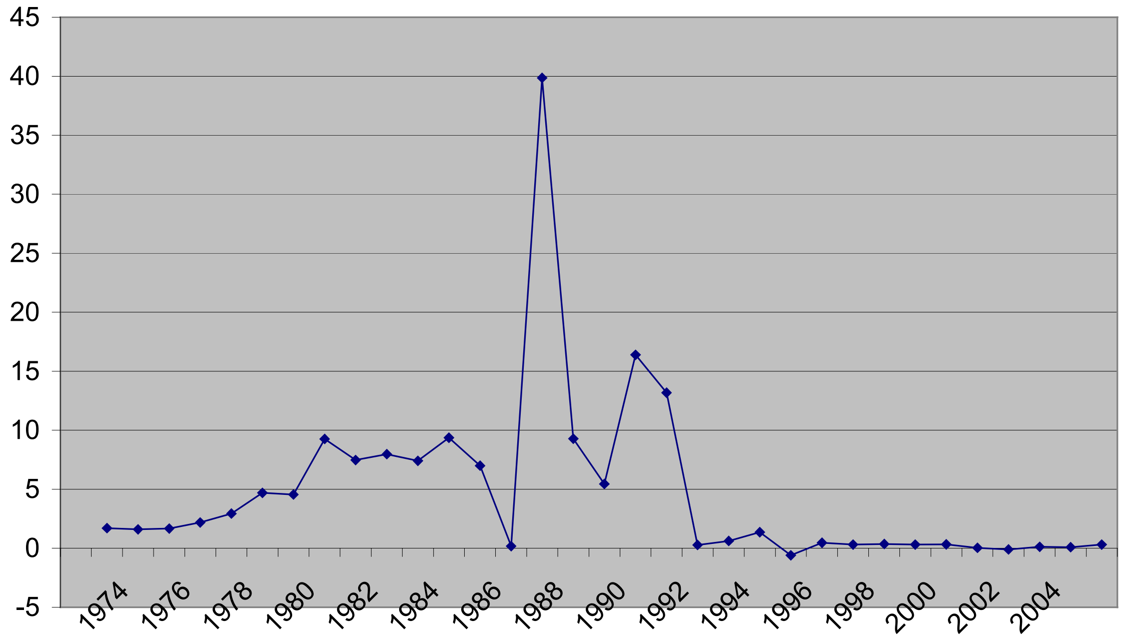
2 The Actual Branch Expansion During 1972-05

The next question we must ask is whether the actual branch expansion followed the rules adopted by the RBI at various points. For if the branch expansion itself exhibited a drastically different pattern than would be dictated by the rules, something else is perhaps at work and the rules cannot be credited with the outcomes including that relating to poverty.

If the RBI rules on branch expansion were effective at the level of the bank, they should surely be effective at the aggregate level. Therefore, the natural starting point for addressing the question is the national branch expansion data. The data on the branch expansion by the scheduled commercial banks, which account for 90 percent or more of the bank branches, are readily available from the RBI website for the period 1972-05. Using these data, I compute the *incremental* ratio of rural plus semi-urban branches to urban plus metropolitan branches for the years 1973-05. These ratios are shown in Figure 1.

From the figure, the actual ratio of rural plus semi urban branches to urban and metropolitan branches bears virtually no relationship to the prescribed ratios in virtually any period except perhaps 1973-76. This period was subject to the 2:(1+1) and 3:(1+1) rule and the observed ratios ranged from 1.7 to 2.2. After the RBI switched to the 4:(1+1) rule on January 1, 1977, the ratio climbed up steadily to 10 in 1980, fluctuated between 5 and 10 from 1980 to 1985 and then fluctuated even more wildly. During 1977-90, with the exception of 1986 when the ratio fell to 0.2, it remained above the prescribed limit throughout. Of course, the ratio collapsed in 1991 and rose above 1 only once (to 1.4 in 1994) during the fourteen-year period from 1992 to 2005.

Figure 1: Ratio of rural plus semi urban branches to urban plus metropolitan branches



It is, thus, evident that the bank-branch expansion far exceeded the prescribed ratio of (1+1):4 during 1977-90. There are two possible explanations for this outcome. First, banks saw large profit opportunities in rural banking and went after rural branch expansion well beyond what would have been required by the (1+1):4 rule. But given that the ratio entirely collapsed after the RBI withdrew its various interventions aimed at branch expansion in 1991, this explanation is unlikely to be valid. Additionally, the fact that the health of the banks in the early 1990s was quite poor undercuts this hypothesis. Second, the government and the RBI had additional objectives that required a far faster expansion of the rural and semi-urban branches than its own stipulated ratio would have yielded and, therefore, it actively sought to expand the network. This is indeed a plausible explanation.

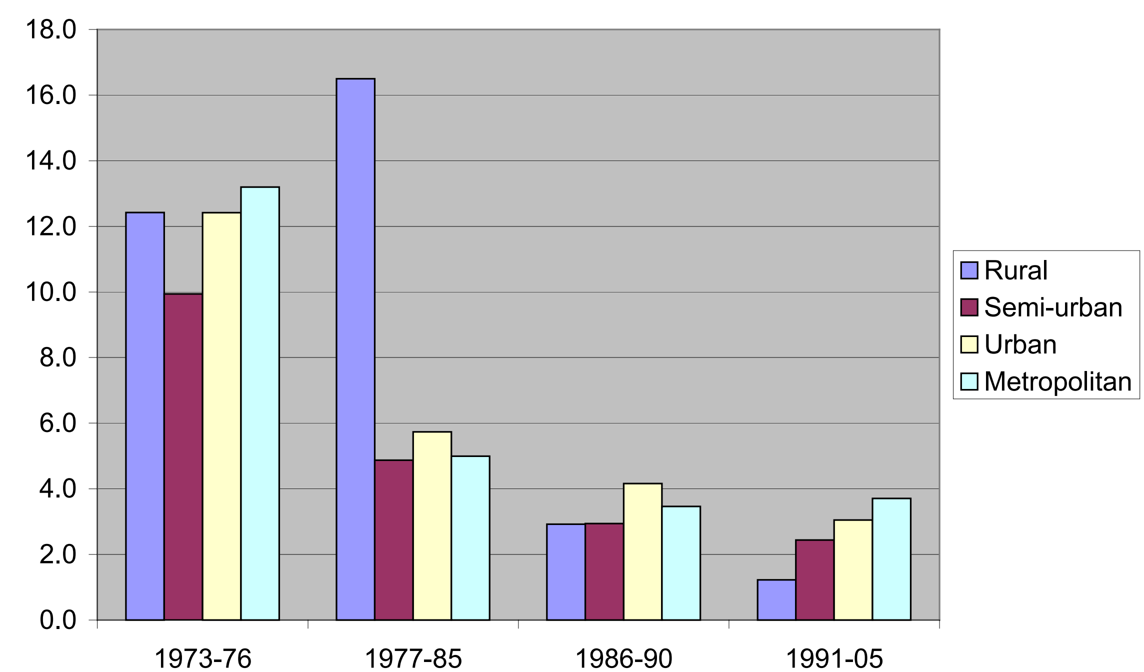
Kochar (2005) offers a detailed discussion of the efforts by the Government of India and the RBI during the 1980s to expand rural branches as a means of bringing credit to the rural areas. Her discussion makes it clear that the bank branch expansion was but one part of the government's wide-ranging anti-poverty program. A key anti-poverty program known as the Integrated Rural Development Program (IRDP), which had been pilot tested in 1978-79, was extended to all the blocks of the country in October 1980. The program aimed at increasing the asset base of the rural poor through the instrumentality of subsidized credit. The budget allocations under the IRDP during the Sixth Five Year Plan (1980-85) exceeded that on general education as well as health.

The government probably realized that the (1+1):4 rule could only guarantee the rural-urban *mix* of the bank branches, not their rapid expansion. Indeed, in so far as the rural branches were unprofitable, they could reduce the incentive to expand even urban branches and in many cases turn the banks away from opening new branches altogether.

Therefore, alongside the IRDP, the government also launched what is called the Bank Licensing Program (BLP) whose objective was to bring the population per branch in each district to a specified target (Kochar 2005). This program had three phases. In the first BLP spanning January 1979 to December 1981, the population target per branch was set at 20,000. For the second and third BLPs, implemented between April 1982 and March 1985 and between April 1985 and March 1990 respectively, the target was lowered to 17,000.

Implementation of the program involved states identifying deficit districts—districts with higher population per branch than the specified target—and then drawing up a detailed district-by-district program of branch expansion for each state in consultation with the RBI. Later in April 1989, the government introduced a new Service Area Approach (SAA) aimed at the consolidation of banking. The SAA assigned each block of 15 to 25 villages to a bank. Adding this requirement to the population target raised the number of branches to be opened under the third BLP from 5,360 to 6,814.

Figure 2: Growth Rates of Branches of Scheduled Banks by Region



But this is not the end of the story of the 4: (1+1) rule. Though the observed incremental ratios of rural plus semi urban branches to urban plus metropolitan branches suggest something special about the 1980s (though not precisely about 1977-90, which is the period Burgess and Pande regard as special), *growth* in the rural bank branches tells an altogether different story. This is shown in Figure 2, which depicts the annual average growth rates of rural, semi urban, urban and metropolitan bank branches during four different periods: 1973-76, 1977-85, 1986-90 and 1991-05. A quick look at this figure reveals that the 12.4 percent growth in the rural branches during 1973-76 more closely resembled the growth during 1977-85 than 1991-05. Moreover, the period 1986-90, which Burgess and Pande include in their period of rapid expansion of the rural branches, more closely resembles the period 1991-05. In comparison to 16.5 percent annual growth during 1977-85, rural branches grew only 2.9 percent during 1986-90. This is not drastically different from the average annual growth of 1.2 percent during 1991-05.

The key results of Burgess and Pande rest on their observation that 'between 1977 and 1990 rural branch expansion was relatively higher in financially less developed states' while 'the reverse was true before 1977 and after 1990.' But it is the period 1972-85 that was characterized by rapid branch expansion. That is, the period of rapid branch expansion does not fully coincide with the period of rapid expansion in financially less developed states or with the period of rapid reduction in poverty. At one end, we have 1972-76 as the period of rapid overall branch expansion with relatively slower expansion in financially less developed states and no perceptible reduction in poverty. At the other end, we have 1986-90 as the period of very slow overall branch expansion with relatively faster expansion in financially less developed states and substantial reduction in poverty.

3 The Identification Issue

Kochar (2005, p. 2) raises serious questions about the identification strategy of Burgess and Pande arguing that 'it is flawed because the expansion of the banking network during this period went hand-in-hand with the government's broader anti-poverty programs, including the IRDP, making it impossible to distinguish the effect of the expansion of the banking network from that of government subsidies and other IRDP inputs.' Kochar also presents evidence showing a close correlation between the real total expenditures on the IRDP and the expansion of the banking infrastructure between 1980 and 1990. Because of their very nature, both programs focused more heavily on the initially poor states. Kochar concludes that 'it is almost impossible to separate the effect of the expansion of the banking infrastructure on outcomes such as poverty from that of the Government's anti-poverty programs, since the branch expansion program was designed to go hand-in-hand with the IRDP program.' Surprisingly, Burgess and Pande make no mention of the IRDP.

Kochar adopts an alternative identification strategy and studies the relationship between poverty reduction and banking infrastructure at the level of the district, which is also the level at which the bank expansion strategy (as opposed to the rural-urban mix of the branches) was implemented under the BLP. Contrary to Burgess and Pande, Kochar (2005, p. 2) reports her key results as follows:

> "The IV [instrumental variable] and IV-FE [fixed effect] results are broadly consistent. They reveal that an increase in the number of banks benefited the non-poor, with little significant effect on the poor. This result remains robust across all the different classifications of the poor, with the sole exception of the positive and significant effect of banks on scheduled castes in the IV regressions. The IV-FE regression, however, suggests no significant effect of the number of banks on scheduled castes, despite their significant effect on members of other castes."

4 Policy Implications

The arguments presented above raise very serious doubts about the validity of the positive link between bank branch expansion and poverty reduction claimed by the Burgess and Pande. But even if we were to accept their conclusion at its face value, there remains the issue whether it offers an argument in favor of a return to the 1980s strategy of rural bank branch expansion to eradicate poverty. There are at least two reasons why such a conclusion is not warranted.

First, we must still ask precisely what led to the growth in the bank branches. To be sure the ratio rule was not behind it. I have argued that it is also unlikely that the expansion was driven by profitability. Instead, it was probably the BLP, itself a part of the IRDP and other anti-poverty programs, which drove the expansion. Assuming this latter to be the case, we must take into account the extra cost of branch expansion beyond what would have been justified on grounds of profitability and compare this cost to the cost of the best alternative policy available for the same poverty reduction to arrive at the optimal poverty reduction strategy.

In other words, we must still ask if an alternative strategy would not have yielded the same poverty reduction at a lower cost. For example, would the same poverty reduction not have been more sustainable and less costly if the bank branch expansion policies had been directed at maximizing growth and the immediate relief to the poor had been brought through direct fiscal measures? In so far as such reduction came from credits that were eventually defaulted, the eventual outcome was indeed a fiscal transfer. But branch expansion was surely a costly vehicle for affecting such transfers. Moreover, poverty reduction so achieved may not have been sustainable.

Second, even if we accept the unlikely conclusion that the bank branch expansion provided the least costly strategy for poverty reduction in the 1980s, it is highly doubtful that we can achieve the same outcome in the future. The returns to increased density of bank branches are bound to diminish rapidly. After a point, new branches would get business only by taking away customers from the existing branches and raises costs without yielding extra poverty reduction. Now that a substantial network of bank branches in the rural as well as urban areas already exists, it makes even more sense to let the bank branch expansion and credit respond to profit opportunities and subsidize these activities only highly selectively when a clear need for them is identified.

The recognition of very low returns to further branch expansion was probably the reason the government decided to discontinue its branch expansion programs starting in the early 1990s despite the fact that it continued its priority-sector lending program. Contrary to the figures presented in Burgess, Pande and Wong (2005, Figure 1), according to the Reserve Bank of India (2005, Charts 3-5) priority sector lending has continued to account for 40 percent or more of the net bank loans for the domestic public and private sector banks and for 32 percent or more of the net bank credit for foreign banks, as per RBI regulations.

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